Sun Protection in Primary Schools: Applying the Health Promoting Schools Framework to Explore the SunSmart Phenomenon

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Certificate of Authorship

I hereby declare that this submission is my own work and to the best of my knowledge and belief, understand that it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgement is made in the thesis [or dissertation, as appropriate]. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fully acknowledged. I agree that this thesis be accessible for the purpose of study and research in accordance with normal conditions established by the Executive Director, Library Services, Charles Sturt University or nominee, for the care, loan and reproduction of thesis, subject to confidentiality provisions as approved by the University.

Bradley Wright

13/11/2017
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Abstract

Despite the presence of numerous national skin cancer prevention programs, Australia has one of the highest rates of skin cancer in the world (Australian Institute of Health and Welfare [AIHW], 2016; Volkov, Dobbinson, Wakefield & Slevin, 2013). It has been established by the World Health Organization ([WHO], 2003) that preventative measures are more likely to reduce the burden of skin cancer than curative measures, particularly in relation to health and economic costs. As such, primary schools have been identified by a number of leading health and cancer prevention organisations, such as the WHO (2003) and the Cancer Council (Montague, Borland & Sinclair, 2001), as appropriate sites to target skin cancer prevention programs. Their potential as health promoting contexts lies in their ability to create lifelong sun protection behaviours and subsequently lower children’s future risk of skin cancer.

The SunSmart Program is a resource that supports primary schools’ adoption of the Health Promoting Schools (HPS) concept as a framework for skin cancer prevention efforts (Montague et al., 2001). As advised by the HPS concept, the SunSmart Program advises the coordinated integration of sun protection practices within all facets of schooling, including curriculum, policy and the home environment (Cancer Council NSW [CCNSW], 2015). While previous studies relating to SunSmart have focused on specific elements, such as policy comprehensiveness (Jones, Beckman & Rayner, 2008) or hat-wearing behaviour (Dudley et al., 2017), the holistic implementation of the SunSmart Program within a school community has not been previously examined.

Therefore, the aim of this study was to provide the most in-depth, exploratory investigation of the SunSmart Program that had been conducted. The HPS concept was adopted as a methodological framework to investigate the application of the SunSmart Program in two case study sites (Stake, 2003), while phenomenology was overlayed as the theoretical framework to explore stakeholders’ understanding of the SunSmart phenomenon. The dual application of these frameworks ensured a comprehensive examination of the case study schools, and gave meaning to participants’ decisions and reported behaviour (Babbie, 2016). Interviews were conducted with a number of students, staff, and community members from the two case study schools, and relevant school documents were collected, to determine how
SunSmart was perceived, implemented and experienced. The interview data were analysed using thematic analysis techniques, while the school documents were analysed using a combination of content and thematic analysis techniques.

The findings of this research indicated that the enactment of the SunSmart Program within a school community is heavily dependent on the community’s contextual features, specifically whether their interpretations of the SunSmart phenomenon align with their perceived needs, desires and priorities. The influence of these contextual features on school procedure outweighed documented policy, which was found to have little influence on attitudes, perceptions or reported behaviours. Overall, it was evident that the enactment of the SunSmart Program in the two case study sites supported their existing practices relating to sun protection but did not facilitate a holistic approach to sun protection, as advised by the HPS framework.

The implications for these findings are substantial for the future of health promotion in schools. Firstly, it was evident that students’, staff members’ and community members’ perceptions and experiences of the SunSmart phenomenon affected their motivations to enact the SunSmart Program within their school setting. Therefore, future efforts to enhance the enactment of the SunSmart Program in NSW primary schools should focus on these areas. Secondly, the unique methodology adopted by this research provided a comprehensive insight into the contextual features that impact schools’ enactment of a health promotion program. Future school-based health promotion research could employ this methodology to support the understanding of contextual features that may impact health promotion efforts. A deeper understanding of these features could support the development of a context-specific health promotion initiative, which would likely improve the opportunities for successful health promotion in schools.
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<td>Australian Bureau of Statistics</td>
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<td>ACARA</td>
<td>Australian Curriculum, Assessment and Reporting Authority</td>
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<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
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<tr>
<td>BOSTES</td>
<td>Board of Studies, Teaching and Educational Standards NSW</td>
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<tr>
<td>BOM</td>
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<td>CCNSW</td>
<td>Cancer Council NSW</td>
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<td>CSU</td>
<td>Charles Sturt University</td>
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<td>NSWDE</td>
<td>Department of Education</td>
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<td>ES1</td>
<td>Early Stage 1</td>
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<td>GP</td>
<td>General practitioner</td>
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<td>GWS</td>
<td>Greater Western Sydney</td>
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<td>GSPS</td>
<td>Grove Street Public School</td>
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<td>HPS</td>
<td>Health Promoting Schools</td>
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<td>HGPS</td>
<td>Henry Gilbert Public School</td>
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<td>HREC</td>
<td>Human Research Ethics Committee</td>
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<td>ICSEA</td>
<td>Index of Community Socio-Educational Advantage</td>
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<td>IPA</td>
<td>Interpretative Phenomenological Analysis</td>
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<td>KLA</td>
<td>Key Learning Area</td>
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<td>NAPLAN</td>
<td>National Assessment Program – Literacy and Numeracy</td>
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<td>NHMRC</td>
<td>National Health and Medical Research Council</td>
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<td>NHPA</td>
<td>National Health Priority Areas</td>
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<td>NSW</td>
<td>New South Wales</td>
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<td>NGO</td>
<td>Non-government organisation</td>
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<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>NMSC</td>
<td>Non-melanoma skin cancer</td>
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<td>NESA</td>
<td>NSW Education Standards Authority</td>
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<tr>
<td>OSHC</td>
<td>Out of school hours care</td>
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<td>P&amp;C</td>
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<td>UV</td>
<td>Ultraviolet</td>
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Introduction

The school setting represents an ideal context for the promotion of health. There are opportunities for environmental and organisational management, the development of health-related knowledge and skills, and also the ability to reach a large proportion of young people (Langford et al., 2015; World Health Organization [WHO], 1997). Investment in the health of young people throughout their schooling experiences can enhance their educational achievements, quality of life, economic productivity, and also their likelihood of becoming lifelong advocates of health for others (Suhrcke & De Paz Nieves, 2011; St Leger, 2004; WHO, 1997). Thus, health promotion within the school setting has the potential to not only improve students’ lives, but also the lives of their families and communities.

Organisations within the health sector have identified the potential of the school setting as an avenue for health promotion action, and have subsequently developed programs to support schools’ implementation of comprehensive health promotion practices. Within Australia, one of the most sustained and broadly implemented school-based health promotion programs is the SunSmart Program, which is a skin cancer prevention support resource. However, evidence suggests there is a disconnect between intended and enacted procedure relating to SunSmart practices. This thesis aims to provide a better understanding of health promotion procedures within the school setting by thoroughly investigating the implementation of the SunSmart Program.

This chapter will provide context for this thesis by firstly detailing the background of the SunSmart Program. The nature and extent of skin cancer in Australia will be described, and previous efforts to address the health issue will be reviewed. Secondly, the limitations of previous studies that have attempted to examine the SunSmart Program will be discussed, which influenced the design of this research. Finally, the significance of this research for health promotion procedures, specifically skin cancer prevention efforts, will be explained.
Skin Cancer in Australia

Skin cancer is the most diagnosed cancer in Australia each year (Australian Institute of Health and Welfare [AIHW], 2016). There are two distinct categories of skin cancers; melanoma and non-melanoma skin cancers (NMSC), which are distinguished by their origins within particular cells of the skin (AIHW, 2016). Melanoma is more likely than NMSC to spread to a secondary site on the body, and is the more deadly form of skin cancer (AIHW, 2016). In 2012, the incidence of melanoma in Australia surpassed 11 times the global average (AIHW, 2016), and between 1982 and 2007, melanoma incidence had increased 151% in males and 46% in females (AIHW, 2017). Unlike melanoma and other cancers, cases of NMSC are not required to be reported to cancer registries, thus the incidence of the disease is difficult to precisely determine (AIHW, 2016). However, studies have used general practitioner (GP) workloads, hospital admissions and mortality rates to estimate the incidence of NMSC increased over 50% in males and females between 1994 and 2007 (AIHW, 2008; AIHW, 2012a). Based on these trends, the incidence of both types of skin cancer are expected to increase beyond 2017 (AIHW, 2017).

In 2017, the AIHW released the Cancer in Australia 2017 report, which included the most current statistical data, projections and trends of the disease. While the report indicated that the number of deaths caused by skin cancers is relatively low compared to the incidence of the disease and other types of cancers, the mortality rate of melanoma increased over 30% between 1982 and 2007, and represented the third greatest increase in mortality rate of all cancers (AIHW, 2017). Additionally, the treatments associated with skin cancer have been found to cause distress and disfigurement in patients, and there are also substantial financial costs involved (AIHW, 2016; Hill & Dixon, 1999). Doran et al. (2015) used a range of data sources to estimate that the direct and indirect cost of skin cancer within the Australian state of New South Wales (NSW) during 2010 was $536 million.

The National Health Priority Areas (NHPA) initiative was originally devised to highlight the areas that contribute most to the burden of illness among the population, particularly where a concerted effort could achieve significant improvements in health status, as indicated by the first report on the NHPAs (AIHW, 1997). The establishment of the NHPAs supported the allocation of funding from national, state and local governments for cost efficient and cost-
effective health promotion initiatives (Dewar, 2000). Originally, the AIHW (1997) established five NHPAs: cardiovascular health, cancer control, injury prevention and control, mental health, and diabetes (AIHW, 1997). There were seven types of cancers to be targeted within the cancer control NHPA, including melanoma and NMSC (AIHW, 1997). While the specific diseases and illnesses established as NHPAs have varied since the concept was devised (now including asthma, arthritis and musculoskeletal conditions, obesity, and dementia), skin cancer has continued to remain a focal point of the cancer control NHPA for the past 20 years (Dewar, 2000; National Health and Medical Research Council [NHMRC], 2017). Not only does this emphasise the importance of addressing the significant burden of this disease, but it also establishes possible financial resources as the NHPAs are provided a substantial proportion of government funding (NHMRC, 2017).

**Defining the problem**

The statistics presented in the previous section highlight the prevalence of skin cancer among the Australian population, as well as the associated health and economic costs. In light of these statistics, it is important to recognise that skin cancer is predominantly the result of lifestyle behaviours and therefore largely preventable (AIHW, 2016). While family history and genetic susceptibility play a role in an individual’s lifelong risk of skin cancer, the disease is predominantly the result of overexposure to the ultraviolet (UV) radiation transmitted in sunlight (AIHW, 2012b). Furthermore, individuals with lighter skin pigmentation are more susceptible to the risks of harmful sun exposure compared to individuals with darker skin pigmentation (Lucas, McMichael, Armstrong & Smith, 2008). Due to geographical factors, such as distance to the equator, distance to the sun and ozone depletion, Australia experiences a disproportionately larger exposure to UV radiation compared to other countries (Gies et al., 2004; WHO, 2003). Considering a large proportion of the Australian population comprises individuals with light skin pigmentation, the amalgamation of these factors has had a considerable impact on the incidence of skin cancer among the Australian population (Jablonski & Chaplin, 2012).

As a result of these predominantly unmodifiable risk factors, it is necessary that Australians be more mindful and vigilant of their exposure to sunlight. It has also been established that the prevention of skin cancer is more cost effective than curative measures and more likely
to reduce the burden of the disease (AIHW, 2012b; Doran et al., 2015; WHO, 2003). Subsequently, there have been multiple programs and interventions implemented in Australia to increase skin cancer prevention efforts by promoting sun protection behaviours. However, the effectiveness of these programs and interventions is the subject of debate. While some researchers suggest continued skin cancer prevention efforts have had a beneficial impact on sun protection behaviours (Dobinson, Volkov & Wakefield, 2015; Makin, Warne, Dobinson, Wakefield & Hill, 2012), there is evidence that further improvement is necessary. In addition to statistics presented in the previous section which detailed the increasing incidence of skin cancer, multiple studies have shown that Australians’ sun protection behaviours are far from ideal (McLoone et al., 2014; Potente, Coppa, Williams, & Engels, 2011; Volkov et al., 2013).

**Australian skin cancer prevention programs and interventions**

In order to reduce individuals’ exposure to UV radiation, skin cancer prevention strategies and programs have traditionally encouraged the adoption of a number of sun protection practices; applying sunscreen, seeking shade when possible, and wearing protective clothing, sunglasses and a hat (McCarthy, 2004; Montague et al., 2001; WHO, 2003). In addition to the encouragement of these practices, skin cancer prevention strategies have often targeted young people, specifically children, due to the potential to influence their lifelong risk of skin cancer. Evidence has shown that, while sunburn at any age increases the risk of melanoma (Dennis et al., 2008), heavy exposure to UV radiation during childhood results in an increased lifetime risk of developing skin cancer (Armstrong & Kricker, 2001; Whiteman, Whiteman & Green, 2001). This prediction is concerning given children are likely to spend more time outdoors than other age groups (Berneburg & Suber, 2009). Hill and Dixon (1999) also explain that the development of habitual sun protection behaviour from a young age can result in lifelong skin cancer prevention efforts, and is also more effective than having to correct poor behaviours later in life.

One of the most well-known and sustained skin cancer prevention programs that targeted children was the *Slip! Slop! Slap!* campaign (Marks, 2004; Montague et al., 2001). The *Slip! Slop! Slap!* campaign was a sun protection awareness program launched in 1980 by Cancer
Council Victoria\(^1\) (Montague et al., 2001). The media-based campaign was primarily aimed at children and parents, and consisted of an animated character named “Sid the Seagull” who encouraged the audience to *slip* on a shirt, *slop* on sunscreen and *slap* on a hat (Montague et al., 2001). The popularity of *Slip! Slop! Slap!* established the foundations for sun protection campaigning within Australia and resulted in the development of numerous sun protection programs, campaigns and interventions since the 1980s, including the SunSmart Program (Giles-Corti et al., 2004; Montague et al., 2001; NSW Government, 2012).

**The SunSmart Program**

In a broader context, the term “SunSmart” refers to Cancer Council’s multi-faceted skin cancer prevention campaign, which aims to prevent and minimise the adverse effects of UV exposure (Cancer Council Victoria, 2013; Montague et al., 2001). The SunSmart campaign has adopted a number of strategies to promote sun protection among the Australian population, such as mass media advertising as well as structural and environmental change (Dobbinson et al., 2015). Specific strategies that have been implemented by the SunSmart campaign include the *SunSmart Workplace Program*, which assists organisations to reduce UV exposure as a workplace hazard; the *UV Alert*, which is a smartphone app that advises sun protection practices based on real-time UV index readings; and the 2007 *Dark Side of Tanning* campaign, which was designed to challenge pro-tanning attitudes via a series of graphic advertisements portraying the development of skin cancer (Cancer Council Victoria, 2013; Cancer Council Victoria, 2017b; Perez et al., 2015). However, this thesis focuses on the SunSmart Program for primary schools, which is a sun protection support resource that comprises a specific component of the SunSmart campaign. Therefore, all future references to the term “SunSmart” within this thesis will refer to the school-based resource unless stated otherwise.

While the SunSmart Program is designed to influence the behaviours of all individuals within a school community, it specifically targets students (Makin et al., 2012; Montague et al., 2001). Implementing the SunSmart Program in a school setting involves a partnership with

\(^1\) During the 1980s, Cancer Council Victoria was known as the Anti-Cancer Council of Victoria (ACCV). In 2002, the organisation was rebranded as The Cancer Council Victoria. In 2008, the “the” prefix was dropped from the title (Cancer Council Victoria, 2017a).
the Cancer Council. The process of schools joining the SunSmart Program and partnering with the Cancer Council has been referred to as an “accreditation” (Montague et al., 2001, p. 291; Turner, Harrison, Buettner & Nowak, 2014a, p. 368) and also a “membership” (Dono, Ettridge, Sharplin & Wilson, 2014, p. 2; Sharplin, Smith & Roth, 2012, p. 1). Thus, throughout this thesis, these terms will be used interchangeably to refer to the partnership process between schools and the Cancer Council.

Originally launched by Cancer Council Victoria in 1988 as a more structured follow-up to the *Slip! Slop! Slap!* campaign, the SunSmart Program included mass-media advertising and was designed to be implemented in a range of settings, including workplaces, educational settings and sport and recreational settings (Montague et al., 2001). In 1993, SunSmart became an accreditation program for Victorian educational settings, specifically childcare centres and primary schools, and has been introduced to each Australian state and territory (Makin et al., 2012; Montague et al., 2001). By 2008, the National SunSmart Schools Program was active in all Australian states and territories, whereby each state/territory-based Cancer Council branch manages the operation of SunSmart in their region (Cancer Council NSW [CCNSW], 2015; Jones et al., 2008).

There is evidence that the number of schools registered as members of the SunSmart Program has grown consistently. Jones et al. (2008) reported that 19% of Australian primary schools were members of the SunSmart Program in 1998, which increased to 43% by 2001. However, NSW primary schools were not included in the sample for these SunSmart-membership statistics as the Program wasn’t active in the state at the time of the research (Jones et al., 2008). The National SunSmart Schools Program was adopted in NSW in 2008 (Sharplin et al., 2012), and has since been implemented in a large proportion of NSW primary schools. The *Cancer Council NSW Annual Report 2015/2016* indicated that, as of 2016, 81% of NSW primary schools were members of the SunSmart Program, which represented an increase from 65% of NSW primary schools in 2012 (CCNSW, 2016, p. 16). Due to the sustained advertising, support and implementation of the *Slip! Slop! Slap!* campaign and SunSmart Program, Marks (2004, p. 45) stated that, “nearly every person in Australia now knows about these programs and identifies with them in one way or another.”
To obtain membership to the SunSmart Program, schools must adopt certain procedures (CCNSW, 2015). While registration is free and voluntary, it requires approval from the school principal and a parent representative (CCNSW, 2015). Following approval from these representatives, schools are required to develop and implement a sun protection policy which addresses the recommendations of the SunSmart Program. These recommendations include:

i) scheduling outdoor activities outside peak UV radiation times and considering sun protection when planning outdoor activities/excursions;  
ii) providing shade in areas where students gather, and encouraging students to use the shade;  
iii) encouraging students to either wear sun safe hats or play in the shade;  
iv) integrating sun safe clothing in the school uniform;  
v) providing and encouraging the application of sunscreen during appropriate timeframes;  
vi) requesting staff to role-model the use of hats, sunscreen and shade;  
vii) implementing sun protection education programs for all year levels;  
viii) promoting sun protection information to the school community, consulting them about future plans for shade, and encouraging they role-model sun safety;  
ix) encouraging the use of sunglasses;  
and x) ensuring the school’s sun protection policy is regularly reviewed by the staff and student parent body (CCNSW, 2015). These 10 recommendations align with the Health Promoting Schools (HPS) framework, which is a holistic model for health promotion in the school setting that encompasses links between the curriculum, the school ethos, and partnerships with local community groups and health agencies (Rosas, 2017; Williams, Jones, Caputi & Iverson, 2012). Chapter Two presents a thorough explanation of the HPS concept, including its alignment with the SunSmart Program, and an analysis of previous studies that have investigated its practical application. Furthermore, Chapter Three explains how and why the HPS framework was applied as the methodological framework of this research.

While sun protection programs and interventions, such as SunSmart, have been effective in raising awareness for skin cancer prevention, the skin cancer prevention behaviours of the Australian population have not maintained consistent improvement (AIHW, 2016; Volkov et al., 2013). Literature suggests the disconnect between skin cancer prevention knowledge and behaviour is the result of a number of factors (AIHW, 2011; Hamilton, Cleary, White & Hawkes, 2016; Potente et al., 2011). Misunderstandings associated with skin cancer prevention, in addition to the social and physical environment relating to this health issue,
are the most commonly identified barriers (Hamilton et al., 2016; Potente et al., 2011). Previous reviews of health promotion programs have focused on the assessment of one or more of these factors, predominantly by evaluating the degree to which these factors altered knowledge, attitudes or behaviour (Dono et al., 2014; Giles-Corti et al., 2004; Harrison, Garzón-Chavez & Nikles, 2016; Turner, Harrison & Bates, 2016). While these reviews have established that there is a disconnect between skin cancer prevention knowledge and behaviour, they have had difficulty explaining why it occurs and how it can be resolved. This lack of understanding justifies the requirement for research to focus on the underlying motivations which affect individuals’ sun protection knowledge, attitudes and/or behaviours. In doing so, future skin cancer prevention programs will be able to address these motivations and therefore be more likely to positively influence sun protection efforts.

Effective health promotion requires the planning and coordination of multiple components, such as education, policy and partnerships, and is dependent on the targeted audience’s interactions and experiences with these components (McIsaac, Mumtaz, Veugelers & Kirk, 2015; Rowling, 1996; Scriven & Hodgins, 2012). Therefore, in order to understand the impact of a skin cancer prevention program on individuals’ attitudes, knowledge and behaviours, it is necessary to examine how the SunSmart Program addresses the interrelated components of health promotion and how individuals interact with these components. As such, the focus of this thesis is to investigate the holistic components of this skin cancer prevention program, and explore how and why individuals are motivated to interact with these components.

**Exploring the problem**

The focus of this thesis is to investigate the holistic components of the SunSmart Program, and also explore how and why individuals within the target audience are motivated to interact with these components. As these individuals have an ability to affect and be affected by the implementation of the SunSmart Program, they were recognised as *key stakeholders* (Scriven & Hodgins, 2012). The selection of key stakeholders for this research will be explained in Chapter Three. Unlike previous research, this study will recognise “SunSmart” as an aspect of social reality, known as a phenomenon. The exploration of individuals’ perceptions of the SunSmart phenomenon will examine how past experiences influenced the construction of meaning, and how individuals’ experiences and perceptions impacted their interactions with
the phenomenon. Thus, this research will provide a thorough account of the SunSmart Program and also detail how and why the phenomenon influences sun protection attitudes and behaviours.

The HPS concept is a framework for health promotion programs/interventions which are implemented in schools, and will form a focus of this research due to the alignment with the recommendations of the SunSmart Program. The second chapter of this thesis will thoroughly detail the HPS concept by examining its background, structure and evidence of its practical application. The relationship between the HPS concept and the SunSmart Program will also be more thoroughly illustrated in the second chapter. Chapter Three explains how the HPS concept will be used as the methodological framework for the thesis, particularly recognising how it informed the selection of participants, the design of the interview schedule, and the analysis of data.

In order to provide a thorough insight into the phenomenon of the SunSmart school, the following research questions were developed:

**Research questions**

1. What do key stakeholders understand by the term “SunSmart”?
2. What experiences have informed key stakeholders’ understandings of the SunSmart phenomenon?
3. What motivations do key stakeholders have for enacting SunSmart behaviour?
4. How can SunSmart schools be further supported to implement the Health Promoting Schools framework?

**Significance**

There is an abundance of research that examines school-based skin cancer prevention programs (Brady, Miller & Hussain, 2005; Buller & Borland, 1999; Emmons et al., 2008; Geller Rutsch, Kenausis & Zhang, 2003; Reinau, Meier, Gerber & Suber, 2014). Considering the longevity and broad-reach of the SunSmart Program, it is not surprising that it has been the focus of multiple studies and evaluations (Dono et al., 2014; Jones et al., 2008; Sharplin et al.,
This literature has detailed how the SunSmart Program has influenced specific areas of sun protection within school communities, such as the examination of the comprehensiveness of sun protection policies (Dono et al., 2014; Jones et al., 2008; Turner et al., 2014a) and hat-wearing behaviours (Dudley et al., 2017; Turner et al., 2014b). However, these studies have not recognised the holistic nature of school health promotion. Literature has indicated that the most effective and sustainable school health promotion programs adopt a coordinated and whole-school approach that integrates: i) health education; ii) a supportive environment; and iii) links to the broader school community so that it is specific to the needs of those situated within the community (Emmons et al., 2008; Geller et al., 2003; Giles-Corti et al., 2004; Olson et al., 2007). Although the design of the SunSmart Program suggests that these components are addressed, there is no evidence indicating that this is the case. An in-depth review of this literature will be provided in the second chapter of this thesis.

While the SunSmart Program is arguably one of the most sustained and recognisable primary school health promotion programs in Australia (Marks, 2004), no research has been conducted to investigate how it is experienced or interpreted by all key stakeholder groups within a particular context. The perspective of these stakeholders is essential to understanding the world from their point of view, which subsequently gives meaning to their decisions and behaviour (Babbie, 2016). Therefore, considering previous research has been unable to explain how or why the enactment of the SunSmart Program in primary schools influences behaviour (Dudley et al., 2017; Turner et al., 2014b), there is a clear need to explore the perceptions of individuals within these contexts so that their behaviour can be better understood. This research applied the holistic framework of the HPS approach to explore how individuals from all stakeholder groups within a school community understood and experienced the SunSmart phenomenon. Additional sources of data were included to provide insight into the contextual features of the school community, such as relevant school policy documents, newsletters published by the school and statistics pertaining to the school community demographics. Furthermore, this research was conducted in two case study sites in order to examine how and why these research variables interact and subsequently
influence the enactment of the SunSmart Program. The magnitude of this study will provide the most thorough and in-depth investigation of the SunSmart Program.

The findings of this research have implications for health, education, society and the economy. Understanding *how* and *why* the interconnected contextual features of the school community influence the enactment of the SunSmart Program has the potential to assist the Cancer Council to determine the future direction of the Program and set priority areas for improvement. Given the broad reach of the SunSmart Program in Australian primary schools, improving its capacity to positively influence the sun protection practices of students, school staff and school community members would likely have a considerable impact on skin cancer prevention efforts within Australia. The extensive financial costs and physical impairment associated with the incidence and prevalence of skin cancer in Australia have already been established, and more effective preventative measures would likely resolve a large proportion of this burden (AIHW, 2012b; Doran et al., 2015; WHO, 2003).

There are also broader implications for this research beyond the scope of skin cancer prevention. A large proportion of school-based health promotion research is concerned with implementing and testing an intervention without fully recognising or addressing the unique needs and resources of individual school communities (Langford et al., 2015). This is a flawed approach to health promotion, which will be discussed thoroughly in Chapter Two. As this study focused on the unique contextual features of individual school communities, the methodology was created for the purpose of this research and has not been previously adopted in other health promotion studies. Considering the depth of insight that was produced and the comprehensive recommendations that were derived as a result, it is evident that the methodology has potential for future health promotion research. In particular, it would be suitable for future studies to adopt such a methodology as an exploratory lens *prior* to the development of an intervention. This would ensure an intervention can be developed to address the specific needs and resources of the context in which it is to be implemented, which would likely increase its potential effectiveness.
Thesis overview

In order to explore the SunSmart phenomenon within the context of multiple school communities, data have been gathered by interviewing students, school staff, parents and community members, and analysing policy and communication documents from two SunSmart schools. In order to compare the findings from each of the schools, the sites were purposively sampled to ensure the demographics of the school communities were distinct. These data provide a rich and detailed account of:

i) How the SunSmart Program is implemented within school communities,

ii) What the SunSmart phenomenon means to key stakeholders within school communities,

iii) Where these stakeholders have sourced their understanding of the SunSmart phenomenon; and,

iv) How sun protection practices are facilitated or constrained.

This investigation of the SunSmart phenomenon will help influence the design and implementation of future primary school sun protection programs. This thesis consists of six chapters which address the aims of this research.

Following this introduction, Chapter Two will present a review of health promotion literature, specifically relating the skin cancer prevention efforts in Australia and school-based approaches for health promotion. The concepts of health and health promotion are defined, followed by a critique of the HPS framework, including evidence of its application and evaluation within the school setting. The alignment between the SunSmart Program and the HPS framework is then thoroughly detailed, followed by the issues pertaining to the implementation of the SunSmart Program in primary schools. The selection of research methodology traditionally adopted to review the SunSmart Program will then be critiqued in order to inform the design of this study.

Chapter Three presents the research design of the thesis. The selection of the HPS approach as the methodological framework will be justified and the use of phenomenology as the
theoretical framework will be explained. This chapter will also clarify why interviews and artefacts were selected as the primary data collection methods of the research, and describe how these data were analysed using qualitative analysis techniques. Given the conceptual subjectivity of the research, the validity, reliability and generalisability of the findings will also be thoroughly discussed.

Chapters Four and Five present the results of the case studies. Each of these chapters will detail the findings of data collected from one of the school sites. Data were collected from artefacts and interviews with key stakeholders. Relevant policy documents and newsletters published by each school site were collected and analysed using a combination of content and thematic analysis techniques to explore the documented procedures of each school. Additionally, there were a total of 51 students, 13 school staff, and 42 community members interviewed across both school sites to examine their perceptions of the SunSmart phenomenon.

Chapter Six provides a discussion of the results and concludes the study by detailing how the findings of this research impact the SunSmart phenomenon. Phenomenology and the HPS framework were used as dual lenses to compare the context of each school site, specifically in regards to location, size, population demographics, documented procedure, communication with the surrounding community, and reported enactment of the SunSmart Program. Furthermore, the implications of key stakeholders’ perceptions and interpretations of the SunSmart phenomenon are explained using relevant literature. The thesis is concluded by proposing recommendations for schools as to how their development and implementation of the SunSmart Program could be further supported. Furthermore, recommendations point to relevant health promotion agencies, specifically CCNSW, as to how they can further assist schools to implement the health promotion strategies, such as the SunSmart Program. While these recommendations are specific to the features and characteristics of the case study schools, they could be adopted by other primary schools, or possibly other organisations within the health sector, to support health promotion practices in school settings.
Chapter Two: Literature Review

Introduction

The purpose of this chapter is to present the literature relating to the promotion of health, specifically the approaches which can be used to promote skin cancer prevention efforts. The Health Promoting Schools (HPS) concept, which was introduced in the first chapter and forms an integral aspect of this thesis, will be critically reviewed. Key characteristics of the HPS concept’s background and structure will be explained, international and Australian research pertaining to the HPS concept will be examined, and the application of the HPS concept to skin cancer prevention efforts and the SunSmart Program will be analysed. Finally, this chapter will also critique the issues relating to HPS research, which inform the design of this thesis.

Health promotion

Defining health

The concept of health was defined by the World Health Organization (WHO), in 1946, as “a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity” (Nutbeam, 1998a, p. 351). Unlike previous definitions of health, the 1946 WHO definition of health emphasised the optimisation of health outcomes, rather than concentrating solely on the avoidance of ill-health, known as disease prevention (Breslow, 1999). While the definition originated over 50 years ago, when the Constitution of the World Health Organization was developed, there have been suggestions it remains “the most encompassing and engaging” definition of health (Potvin & Jones, 2011, p. 244).

However, there has also been criticism surrounding the 1946 WHO definition of health, specifically due to its narrow perspective which emphasises the biomedical perspective of the individual and overlooks the human capacity to cope and function with life’s dynamic physical, emotional and social challenges (Huber et al., 2011). As a result, recent definitions of health have attempted to address the underlying features of health, such as an individual’s ability to adapt and self-manage in the face of life’s dynamic and varied challenges (Huber et al., 2011; Turunen, Sormunen, Jourdan, von Seelen & Buijs, 2017). These definitions emphasise the
influence of the physical and sociocultural environments on personal and collective health,
and have played a large role in how the health of individuals and populations has been
addressed (Stokols, Grzywacz, McMahan & Phillips, 2003; Turunen et al., 2017).

The socio-ecological approach has been identified as a suitable perspective for acknowledging
the dynamic and varied challenges that affect health. Unlike the individualistic focus of the
WHO’s 1946 definition of health, the socio-ecological perspective uses ecological thinking to
understand how health is impacted by the various systems and environments experienced
within a particular context (McLaren & Hawe, 2005). Emphasis is placed on the scale and
complexity of interactions between the social, institutional, and cultural contexts of people
and their environments (Stokols, 1992). Thus, the socio-ecological perspective recognises that
people’s behaviour is influenced by their intrapersonal characteristics, such as knowledge and
attitudes, in addition to the context of their lives, such as the social norms in their community
(Schölmerich & Kawachi, 2016). As the socio-ecological approach represents a comprehensive
perspective of health, efforts to increase the health of individuals, communities and
populations have adopted the approach as a framework for health promotion (McLaren &
Hawe, 2005; Stokols et al., 2003).

Defining health promotion

In 1978, the International Conference on Primary Health Care was held to develop a strategy
for improving the health of individuals and populations, and resulted in the Declaration of
Alma-Ata (WHO, 1978). This was the first international attempt at such a level to propose
strategies to improve health, and education was specifically identified as a necessary focus
for the prevention and control of health problems (Potvin & Jones, 2011; St Leger, 1999;
WHO, 1978). The Declaration of Alma-Ata also established the Health for All philosophy,
which emphasises health as a fundamental human right for all people to lead a socially and

Since the 1980s, the promotion of health has become more highly regarded and increasingly
relevant. One of the most influential milestones for health promotion efforts was the
formation of the Ottawa Charter for Health Promotion, which occurred during the 1986 First
International Conference on Health Promotion (Colquhoun, 1997; WHO, 1986). The principles
and strategies presented at this conference contributed to the reconceptualisation of the concept of health, and have had a lasting impact on the development and implementation of health promotion initiatives, including the development of the HPS framework (Colquhoun, 1997; Potvin & Jones, 2011). Consistent with literature, the Ottawa Charter for Health Promotion will be subsequently referred to as the Ottawa Charter.

There were a number of notable concepts which were defined and advocated during the First International Conference on Health Promotion, which were largely consistent with the socio-ecological perspective. Firstly, health promotion was defined as “the process of enabling people to increase control over, and to improve, their health” (Nutbeam, 1998a, p. 351). Secondly, the prerequisites for health were established, which include education, food, peace, resources and income, and play an important role in the contextualisation of health promotion (WHO, 1986). Perhaps most importantly, the Ottawa Charter developed an easily understood framework for health promotion action (Kickbusch, 2003; Potvin & Jones, 2011; St Leger, 1999; WHO, 1986). This framework includes five interrelated key action areas to improve the health of populations:

1. Building health public policy: the development of healthy public policy in all sectors and at all levels;

2. Creating supportive environments: supporting health in a range of environments, including those for work, living and leisure;

3. Strengthening community action: community action to set priorities, make decisions, and to plan and implement health promotion strategies;

4. Developing personal skills: the development of personal and social skills beneficial for health, particularly health literacy, and;

5. Reorienting health services: the objectives of health services should promote health, rather than only provide clinical/curative services.

The development of these definitions, concepts and strategies redefined how the concept of health was perceived and approached. Building on the 1946 definition of health, the Ottawa Charter emphasised the perception of health from an abstract state of being to a vital
resource for daily life, and also gave prominence to the social conditions which act as substantial influences on the health of individuals and populations (Breslow, 1999; Kickbusch, 2003; Potvin & Jones, 2011). The Ottawa Charter established legitimacy for health promotion advocates (Colquhoun, 1997), and also garnered support for the socio-ecological perspective of health. The prerequisites for health and the five action areas of health promotion, as outlined by the Ottawa Charter (WHO, 1986), emphasised the interplay between environmental resources and the lifestyles of those who inhabit the area.

Although the Ottawa Charter’s five action areas for health promotion have remained unchanged, subsequent international conferences for health promotion have continued to add and refine the principles for health promotion practice (Keleher, 2016). For instance, the 1988 Adelaide Conference clarified the importance of healthy public policy, while the 1997 Jakarta Declaration established the priorities for health promotion in the 21st Century (Keleher, 2016). More recently, the 2005 Bangkok Charter highlighted the changing context of globalisation and the need for commitment from countries to achieve health for all, which was strengthened during the 2013 Helsinki Conference that established guidance for countries to implement Health in All Policies (Keleher, 2016).

Consequently, the definition of health promotion has also evolved from its initial inception. Howat et al. (2003, p. 84) developed the following definition of health promotion by adapting universally accepted components of existing definitions to provide a more holistic description and clarification of the concept:

_Health promotion can be regarded as a combination of educational, organisational, economic and political actions designed with consumer participation, to enable individuals, groups and whole communities to increase control over, and to improve their health through attitudinal, behavioural, social and environmental changes._

Howat et al.’s (2003) definition of health promotion is highly regarded as both behavioural and structural perspectives have been clearly and succulently embedded, and the influence of social determinants on health have been concisely articulated (Jancey, Barnett, Smith, Binns & Howat, 2016). Nonetheless, the emergence of the concept of health promotion, established by the Declaration of Alma-Ata and the Ottawa Charter, represented a shift from
concentrating on the modification of individual risk factors to addressing the determinants of health (Kickbusch, 2003). As a result, governments began to be held accountable for the health of their populations, rather than just the health services they provided (Kickbusch, 2003). Furthermore, the subsequent prominence of health promotion during this period led to a considerable adjustment in skin cancer prevention strategies both in Australia and internationally, which will be discussed later in this chapter (Potvin & Jones, 2011). The Ottawa Charter also led to the emergence of two health promotion approaches; the population approach and the settings approach (Potvin & Jones, 2011). The latter of these approaches provided the conceptual foundation of the SunSmart Program.

Approaches to health promotion

The population approach and the settings approach represent the two predominant approaches which form the basis of health promotion strategies (Potvin & Jones, 2011). As these approaches were derived from the principles of the Ottawa Charter, there is a clear alignment between their frameworks (Dooris, 2004). Nonetheless, there are still notable differences in their structure which must be recognised when considering which approach is most suitable for a specific circumstance. Throughout this section, these approaches will be explained, their relevance to this thesis will be established, and examples of their application will be analysed.

Population approach

As the name suggests, a health promotion strategy which adopts a population approach aims to have a positive impact on a population that is defined by a specific characteristic, such as age, gender or geographic location (Bauman & Nutbeam, 2014; WHO, 2012). The WHO (2012) indicates population-wide strategies can reduce the burden of non-communicable diseases, and are also financially viable due to cost efficiency and their potential ability to generate revenue via taxation policy.

The Ottawa Charter was a catalyst for shifting the focus of population-wide health interventions from individual behaviour to the determinants beyond the control of the individual, such as income, education, gender, genetics, social support networks, social justice, and physical environment (i.e. shelter, sustainable resources, peace, etc.) (Bauman &
Nutbeam, 2014; WHO, 1986). These determinants and their associated contexts need to be addressed for a population approach to be effective (Bauman & Nutbeam, 2014). Considering the sheer number of determinants and the degree in which they can interact, such strategies can be challenging to implement and sustain (Bauman & Nutbeam, 2014; Jacka, Mykletun & Berk, 2012).

As the population approach is based on the principles of the Ottawa Charter, it adopts a similar framework for health promotion strategies. The WHO (2012) indicates a population approach should include:

i. Structures to support policies and interventions, such as funding, monitoring health statistics, implementing standards and guidelines, and developing partnerships;

ii. Population-wide policies and initiatives, such as subsidies on health-related goods and social marketing campaigns, and;

iii. Community-based interventions.

The *Slip! Slop! Slap!* campaign, which was detailed in the first chapter of this thesis, represents an example of how the population approach has been applied within Australia as a strategy to address skin cancer. During the 1960s and 70s, there was increasing evidence which highlighted the correlation between overexposure to sunlight and skin cancer (Montague et al., 2001). Due to the public’s interest in harmful sun exposure and health promotion during 1980s, VicHealth partnered with Cancer Council Victoria to invest funding and resources to support the broad implementation of the *Slip! Slop! Slap!* campaign (Montague et al., 2001). A mass-media social marketing approach was funded to address the Australian population’s traditional opposition to sun protection, particularly their desire for a tan. In order to re-adjust these cultural and social norms, Cancer Council Victoria built a “community of concern” by raising awareness and educating people about the dangers of skin-tanning (Montague et al., 2001, p. 295).

Since the 1980s, the state-based Cancer Councils have lobbied governments to improve the standards of sunscreen production and promote the accessibility of sun protection items by lowering taxes and integrating subsidies (Montague et al., 2001). It is of note that the
continued lobbying action of Cancer Council NSW (CCNSW) resulted in the New South Wales (NSW) Government banning all commercial tanning beds in the state by the end of 2014 (Sinclair, Makin, Tang, Brozek & Rock, 2014).

As evidenced thus far, the *Slip! Slop! Slap!* campaign involved structures to support policy and interventions, and population-wide policies and initiatives, which represent two of the integral elements of a population approach described by the WHO (2012). The third element of a population approach refers to community-based interventions (WHO, 2012). A community comprises a specific group of people who share commonalities (e.g. values, cultures and/or norms) and often live in a defined area (Nutbeam, 1998a). During the late 1980s, a number of communities requested support to develop sun-safe policies and programs to be implemented in their settings, such as schools, workplaces, and sport and recreation centres (Montague et al, 2001). In order to integrate communities into skin cancer prevention efforts, Cancer Council Victoria developed an additional program to work alongside the *Slip! Slop! Slap!* campaign. This program adopted a settings approach, and will be detailed in the following section.

**Settings approach**

While the population approach is suitable for large scale implementation, it does not have the specificity necessary to address distinct contextual factors of individual communities. As expressed by the socio-ecological approach, the distinct environmental and sociocultural contexts of particular individuals, groups or communities can have a substantial impact on health outcomes (Stokols et al., 2003), and therefore must be addressed when implementing a health promotion strategy. Thus, the settings approach was designed to accommodate these distinct factors. The premise of the settings approach is the recognition that health, as an outcome, is produced *outside* of health services; it is produced in the everyday settings in which individuals live their lives (Dooris, 2004; Stokols, 1992). Therefore, health should be fully integrated into all aspects of settings where people live their everyday lives in order to improve the outcome, rather than investing strictly on health services which primarily deal with curative measures (WHO, 1986).
A setting is “the place or social context in which people engage in daily activities in which environmental, organisational and personal factors interact to affect health and wellbeing” (Nutbeam, 1998a, p. 362). It is easiest to understand settings as usually having physical boundaries and an organisational structure, such as schools, worksites, hospitals, and cities (Nutbeam, 1999). Regardless of the scale, the integration of health within a setting typically requires a strategy which addresses the associated cultures, structures, processes and routine life (Dooris, 2004). A settings approach requires the creation of supportive environments, the integration of health promotion into daily activities, and the development of partnerships across other settings and the wider community in order to implement consistent practices (Dooris, 2004). Furthermore, an initiative adopting the settings approach should be proactive for the health issues raised by the community, rather than reacting to the health issues promoted by outside agencies (Rowling & Jeffrey, 2006). The HPS concept, which is a central element of this thesis, is an example of the settings approach as it involves the implementation of policies, programs and practices within the school community context to improve the health of all those within the context, such as students, staff, families and community members (Nutbeam, 1998a).

Cancer Council Victoria initially developed the SunSmart Program as a community-based extension of the Slip! Slop! Slap! campaign, which provided support for a number of settings, including child-care centres, schools, workplaces, and sport and recreation centres, to develop and implement sun-safe policies (Montague et al., 2001; Sinclair, Dobinson & Montague, 2000). Sun protection policies for these settings involved mandated sun protective clothing, increasing the provision of shade, and encouraging hat and sunscreen use (Montague et al., 2001). In 1993, the SunSmart Program developed into an accreditation program for primary schools, and later early childcare centres (Montague et al., 2001). However, the SunSmart Program was not introduced to NSW until 2006 (Sharplin & Roth, 2012). The SunSmart accreditation process requires schools to demonstrate they have a written sun protection policy and encourage practices which comply with SunSmart accreditation criteria, as established by the Cancer Council (CCNSW, 2015; Dono et al., 2014). As mentioned in Chapter One, the variation of the SunSmart Program which targets primary school settings forms the focus of this research.
There are multiple challenges that face initiatives which adopt the settings approach for health promotion purposes. Dooris (2004, p. 58) emphasises the importance of moving beyond ill-conceived approaches which only adopt fragments of the healthy settings approach, to the “fully-developed scenario,” whereby a holistic system of practice is integrated. Contrasting this belief, Whitelaw et al. (2001) argues that there is no ideal form of practice associated with the settings approach due to the need to address unique contextual factors. Given the variation among different settings, the influences which may impact everyday life, and the scale in which an initiative can be implemented, the settings approach is clearly a complex one (Whitelaw et al., 2001).

Nonetheless, multiple frameworks have been developed to support the application of the settings approach in a variety of contexts. The healthy cities framework advocates the continued creation and improvement of physical environments, social environments and community resources to create a city which supports the healthy and productive lifestyles of all those situated within the context (Nutbeam, 1998a). Similarly, the healthy universities framework details the long-term organisational development required between high-level leadership and multi-stakeholder involvement to support the health and wellbeing of the entire university community (Dooris & Doherty, 2010).

It is not a coincidence that educational settings have been the focus of many health promoting settings’ approaches and frameworks. Upon review of the action areas of the Ottawa Charter, an ideal settings approach develops individuals’ knowledge and skills, creates a supportive physical and social environment, inspires community action, and integrates partnerships with health services (WHO, 1986). Unlike other contexts that have been the focus of the settings approach, such as nightclubs and prisons, educational settings are situated to address all of these action areas as they encompass opportunities for education, organisational reform, community involvement and partnerships with health services (Dooris, 2004).

Furthermore, in relation to the focus of this thesis, the selection of the primary school setting as a context to focus skin cancer prevention efforts has been recommended by a number of influential governments and organisations, such as the NSW Government and the WHO. The NSW Government’s Skin Cancer Prevention Strategy identified children, adolescents and adult males as priority populations, in addition to educational settings, workplaces, communities,
healthcare services and recreation services as priority settings (NSW Government, 2012). A closer review of these settings indicates that the primary school setting not only represents an educational setting for students, but also a workplace for staff, a link for the community, and can integrate partnerships with healthcare and recreation services, thus representing multiple priority settings identified by the NSW Government (2012). The WHO (2003) specifically identified schools as ideal settings to focus skin cancer prevention efforts due to their potential to impact students’, teachers’ and the wider community’s harmful ultraviolet (UV) radiation exposure. Furthermore, the WHO has explicitly advocated the HPS framework as a holistic approach to promoting health in schools (Langford et al., 2015).

The Health Promoting Schools (HPS) concept

The HPS concept was introduced in the first chapter of this thesis and its selection as the methodological framework of this research will be explained in Chapter Three. This section aims to provide a thorough explanation of the HPS concept, in particular its relevance to skin cancer prevention strategies and SunSmart, and also analyse previous studies that have examined the practical application of the HPS framework. A review of previous research will not only illustrate the complex features of the HPS concept, but also inform the focus and methodology of this thesis.

The HPS framework adopts the settings approach to assist the development and implementation of comprehensive health promotion strategies in school settings. In doing so, it aims to positively influence the health-related knowledge, attitudes and behaviours of all school community members. Furthermore, the HPS framework adopts the principles of the socio-ecological approach as it implements comprehensive, multilevel initiatives to promote the health of those situated within the setting (Lee & Stewart, 2013). While precisely defining a HPS has been the subject of debate (Cushman, 2008; Langford et al., 2015), the following definition provided by Nutbeam (1998a, pp. 357-358) serves as a concise overview:

A health promoting school can be characterized as a school constantly strengthening its capacity as a healthy setting for living, learning and working ... It strives to improve the health of school personnel, families and community members as well as students,
and works with community leaders to help them understand how the community contributes to health and education.

The HPS concept is most simply recognised by the three interconnected components which comprise its structure, as illustrated by Figure 2.1. The components of the HPS framework include: i) curriculum, teaching and learning; ii) school ethos, organisation and environment; and iii) partnerships and services (Rowling, 1996).

Figure 2.1: The interrelated components of the HPS framework (adapted from Queensland Health & Education Queensland, 2005)

Similar to defining a HPS, the development and formation of the HPS approach is also debated. Although the use of comprehensive school curriculum programs to target health can be traced back to the 1950s (Alfrey & Brown, 2013; St Leger, 1999), Young (2005) indicates the HPS concept was developed and refined at a 1986 European symposium titled ‘The Health Promoting School.’ Following this symposium, the WHO began promoting the concept as ‘The Healthy School’ in an attempt to align the title of the concept with the Healthy Cities approach, but the ‘Health Promoting School’ title proved more popular and subsequently prevailed (Young, 2005). As with the population approach and other settings approaches, the
principles introduced and refined by the Declaration of Alma Ata and the Ottawa Charter were major influences in shaping the framework of the HPS concept (St Leger, 1999; Young, 2005). By the mid- to late-1990’s, the HPS framework became prominent within Australia as a number of influential groups and organisations recognised its potential impact for the health of school communities. During this period, the NSW Department of Health and the NSW Department of School Education, as well as a number of non-government organisations (NGOs), invested a substantial amount of time and resources in an effort to promote and circulate the HPS concept to different interest groups (Rowling, 1996; NSW Department of School Education, 1996). Subsequently, a large proportion of the seminal research relating to the conceptualisation of the HPS framework and its potential impact within Australian schools was published during this timeframe (Booth & Samdal, 1997; Colquhoun, 1997; St Leger, 1998). As the HPS framework has remained the same since this period, contemporary literature is more concerned with researching the practical application of the approach (Nordin, 2016; Turunen et al., 2017). Nonetheless, since its inception, the HPS concept has been adopted in countries around the world, including Switzerland, Germany, China, Japan, Singapore, Hong Kong, the United States of America (USA) New Zealand and Australia (Colquhoun, 1997; Langford et al., 2015; St Leger, 1999; Young, 2005).

The framework of the Health Promoting Schools (HPS) approach

While the three components of the HPS approach can be separated for ease of understanding, it is essential that all three are collectively integrated within a school-based health promotion initiative (Cushman, 2008). The integration of these three components is designed to support a complex and multifactorial approach to health promotion in school settings. There is evidence to suggest that a holistic health promotion strategy, such as the HPS approach, is far more effective than purely curriculum-based approaches, which had been traditionally used as a means of addressing health in schools (Busch, De Leeuw, Zuithoff, Van Yperen & Schrijvers, 2015; Lee, 2009; West, Sweeting & Leyland, 2004). Nonetheless, curriculum-based approaches still possess a function within the HPS approach, as evident by the curriculum, teaching and learning component of the HPS framework. As this thesis aims to explore the application of the HPS approach, this section of the thesis will explain how each of the components should be implemented within schools, and also examine previous research.
relating to HPS implementation in order to highlight the most commonly identified benefits and challenges associated with each component.

**Curriculum, teaching and learning**

The curriculum, teaching and learning component encompasses all health-related education, teaching and learning programs provided by the school (Cushman, 2008; Rowling, 1996). As advised by the Ottawa Charter, the component aims to improve students’ health-related knowledge and skills (Cushman, 2008). The integration of health as a topic within the curriculum is not a new recommendation, nor was it originally developed by the HPS approach. However, it is important to recognise the difference between holistic health education, as advised by the HPS framework, and traditional health education (Langford et al., 2015). Traditional health education refers to the categorisation of all health-related issues within the formal health education subject area (Tones, 2005). Within the NSW primary school system, the Personal Development, Health and Physical Education (PDHPE) subject represents the formal health education subject area, and is one of the mandatory Key Learning Areas (KLA) for all NSW students (Board of Studies NSW, 2007). Research into school-based health interventions have also been known to adopt isolated health education workshops (Geller et al., 2003; Hunter et al., 2010; Reinau et al., 2013; Roetzheim et al., 2011), which aligns with traditional health education. Conversely, the HPS framework advises health to be incorporated into all subject areas of the curriculum to emphasise the holistic nature of health (NSW Department of School Education, 1996; Rowling, 1996; Young, 2005). For example, within NSW primary schooling, this could include the integration of health into KLAs other than PDHPE, such as English, Mathematics and/or Science (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2016).

The importance of health education is highlighted by Tang et al. (2008, p. 71) who stated “achieving school participation and promoting literacy are fundamental to public health.” Tang et al. (2008) are referring to health literacy, which is an essential outcome of the curriculum, teaching and learning component (Nutbeam, 2008). The concept of health

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2 The Board of Studies NSW has since been recognised as the Board of Studies, Teaching and Educational Standards NSW (BOSTES) and, as of 1 January 2017, the NSW Education Standards Authority (NESA).
literacy refers to an individual’s empowerment over their own health, which encompasses their understanding of health as well as their confidence and capacity to apply this understanding (Alfrey & Brown, 2013; Nutbeam, 2008; Peralta & Rowling, 2017). Thus, health literacy is critical for the empowerment of individuals and communities as it enables them to positively adjust their own lifestyles and living conditions, and meet the complex demands of health in contemporary society (Kickbusch & Maag, 2008; Nutbeam, 2008).

It is worthwhile distinguishing the three levels of health literacy, each of which characterise an individual’s capacity to practically apply health-related knowledge and skills, and therefore have significant implications for their level of empowerment (Nutbeam, 2008). **Functional** health literacy represents the first level of health literacy and is characterised by the application of skills necessary to function in everyday life, while **interactive** health literacy involves more advanced cognitive and literacy skills that support active participation in everyday life as well as the ability to apply new information to changing circumstances (Nutbeam, 2008). The most advanced level of health literacy, referred to as **critical** health literacy, involves the ability to critically analyse information that can then be used to exert greater control over life events (Nutbeam, 2008).

The link between schools and the provision of health literacy is evident, especially considering a school’s primary purpose is to impart knowledge (St Leger, 2001). Studies have shown teachers are aware of the correlation between healthy students and higher academic achievement, thereby validating health literacy as an important educational outcome (St Leger, 1999; Mohammadi, Rowling & Nutbeam, 2010). Although the health-related decisions and behaviour of primary-aged children are largely dependent on adults (e.g. parents/guardians, other family members, teachers, etc.), their impending transition into adolescence represents a period of increased autonomy in relation to health behaviour. Subsequently, it is important that their health literacy is at an adequate standard prior to this transition so that they are capable of making informed health-related decisions. Considering the correlation between low health literacy and poor health, the emphasis on early intervention among younger children so that they become health-literate and subsequently healthier adults is justified (Kickbusch & Maag, 2008; Manganello, 2007; Peralta & Rowling, 2017).
However, developing students’ health literacy is a difficult challenge as it requires consideration of the content and how it is delivered (Tones, 2005). Traditional approaches to health education typically involve the classroom-based transfer of health-related facts and figures, under the presumption students will use these to improve their health-related behaviours (Quay & Peters, 2008). These approaches generally do not provide the learning opportunities necessary for young people to develop critical health literacy (Peralta & Rowling, 2017; Peralta, Rowling, Samdal, Hipkins & Dudley, 2017). Rather, the development of critical health literacy among students requires a dynamic process of health education, whereby learning opportunities are embedded in the ethos of the school (Peralta et al., 2017).

The integration of health education holistically across learning areas, throughout the school day, and in the social environments where students live facilitates deep thinking, critical thought, interaction, and participation, which are essential attributes for the development of critical health literacy (McCuaig, Carroll & MacDonald, 2014; Nutbeam, 2008; Peralta et al., 2017; Ryan, Rossi, Hunter, Macdonald & McCuaig, 2012). Consequently, Turunen, Tossavainen, Jakonen, and Vertio (2006) suggest that a HPS can take several years to develop students’ critical health literacy as a result of this complex pedagogical approach to health education.

In light of the complexity associated with developing health literacy, there is evidence to suggest that teachers are inadequately prepared to achieve this outcome (Alfrey & Brown, 2013; St Leger, 2001; St Leger, 2004). The development of health literacy requires an extensive commitment from teachers to be knowledgeable of major health issues, as well as look beyond their own values, beliefs and life experiences, to recognise and address what is needed for the school community (Alfrey & Brown, 2013; St Leger, 2001). However, previous reviews of the HPS approach have shown that teachers who had no previous training or experience delivering health education, or limited interest in the health area, were reluctant to involve students in the development of teaching objectives, content and methods (McIsaac et al., 2015; Nordin, 2016). Brady et al. (2005) conducted a case study of a NSW primary school to investigate how the HPS approach could improve sun safety among the community by examining the culture and climate of the school site and determine the impact of the HPS framework. They found teachers were unprepared to address the complexity and sensitivity
associated with some health areas (Brady et al., 2005). These issues can be resolved by developing partnerships between schools and health agencies, which typically possess a better understand of health-related content (Peralta et al., 2017). The potential for these partnerships will be discussed further when detailing the third section of the HPS concept; 

*partnerships and services.*

Literature indicates that the interconnected multi-component strategy of the HPS approach facilitates the development of health literacy by linking the teaching programs provided within the curriculum with other health promotion activities in the school (Rowling, 1996; St Leger, 1999). A review of a health literacy education unit, conducted by McCuaig et al. (2013) found that the development of health literacy requires positive student engagement with authentic assessment tasks and learning experiences, specifically those that are contextually relevant to students’ experiences, knowledge, capacities and concerns. For instance, students’ knowledge and understanding of health promotion strategies should be developed within the curriculum, followed by the provision of opportunities to devise ways in which their school could develop and implement policies, or how local services/resources could be utilised, in order to address a health issue pertinent to their community. The relevance of such teaching programs promotes health literacy by providing students with an opportunity to apply their knowledge of health, and also promotes community collaboration by ensuring students and families are involved in relevant decision making, problem solving and critical thinking (Nutbeam, 2008; Peralta et al., 2017; St Leger, 1999; Turunen et al., 2006). Furthermore, this strategy clearly integrates aspects from multiple components of the HPS approach, which has been previously identified as an essential feature of the approach.

The demand on teachers to develop students’ health literacy is a significant expectation given the substantial amount of dedication and commitment, and the complex teaching methods, required (St Leger, 1998). Nonetheless, the principles of health literacy justify why typical health education alone is unlikely to improve the health outcomes of individuals/populations; they require an opportunity to apply their knowledge to develop confidence in these skills (Nutbeam, 2008). While evidence shows that teachers are aware of the importance of health within the curriculum, they often feel constrained by the competing demands of other areas
of the curriculum and their profession (Mohammadi et al., 2010). These competing elements will be explored in the following section.

**School ethos, organisation and environment**

Commonly referred to simply as “school ethos,” this component of the HPS framework relates to the influences on the culture and climate of the school community, such as the physical and social environment (St Leger, 1999). The focus of this component refers to the creation of supportive environments, which aligns with the guidelines for health promotion action, as developed by the Ottawa Charter (WHO, 1986). While the physical environment is relatively easy to objectify as it generally includes visible elements, such as the safety of school buildings or the shade available for sun protection, the social environment of the school is one of the more difficult features of the HPS approach to classify as it is influenced by numerous subjective factors (Booth & Samdal, 1997; Cushman, 2008; Marshall et al., 2000).

School ethos is influenced by organisational structure, policies, practices, health services available (e.g. school counselling or skin cancer screening) and daily activities in schools, which impacts students’ and staff members’ connectedness to their school (Booth & Samdal, 1997; Cushman, 2008). The quality and quantity of interactions between school staff, students, parents and the community play a role in the values and beliefs of individuals within these populations, and impact the social environment (NSW Department of School Education, 1996). Without social and environmental support, the health-related knowledge and attitudes of an individual are unlikely to sufficiently improve their health (Tones, 2005). It is worthwhile reiterating the interrelationship between components of the HPS framework when envisaging school ethos. As explained by Ackermann (1997, pp. 31-32), “we know that learning through the planned classroom curriculum goes hand in hand with learning from the wider school setting – the hidden, parallel curriculum...” Thus, the essence of the school ethos is to ensure health is promoted throughout all facets of the school setting so the health-related values and beliefs covered in the curriculum are supported and reinforced, rather than opposed.

Collaboration between all members of the school community, including staff, students and parents, is crucial for a positive and productive school ethos. The values and beliefs of the
school are more likely to be supported if they represent the perspectives of all school community members (Booth & Samdal, 1997). This concept is referred to as ownership, and is consistently identified as a significant feature of the health promoting school (Gugglberger & Dür, 2011; Macnab, Gagnon & Stewart, 2014; Rowling & Jeffreys, 2006; St Leger, 1998). Inchley, Muldoon and Currie (2007) found that a sense of ownership motivated key stakeholders’ commitment to a HPS initiative, whereas a lack of ownership provoked reluctance to engage with the initiative. A positive collaborative environment cultivates a sense of ownership, and requires trust, open communication, information sharing, joint decision making, critical reflection, and encouragement to challenge and debate ideas (Turunen et al., 2006).

Policy represents one of the most common features of school ethos, and health promotion initiatives in general, as it informs the guidelines of day-to-day activities within a setting (Booth & Samdal, 1997; Rowling & Jeffreys, 2006; Tones, 2005). As with other elements that contribute to a positive and supportive school ethos, the development and implementation of school policy should involve collaboration among all school community stakeholders. For this specific reason, Colquhoun, Goltz and Sheehan (1997, p. 205) suggest that “the process of policy development may be more important than the actual policy itself.” In addition to collaborative development, the most effective policies are those which are clearly written, well-communicated, and consistently enforced (Booth & Samdal, 1997). The consistent reinforcement of policy should also establish the authentic integration of health attitudes and behaviour which permeates all aspects of school life so that it isn’t merely perceived as a supplementary feature of school procedure (Macnab et al., 2014).

However, research has shown that the application of comprehensively supported school policy can be challenging for school communities. Case studies of the HPS framework in practice have highlighted the communication procedures that occur in school communities, specifically the overflow of information obtained by the school administration and subsequent prioritisation of what is communicated and disseminated to the school community (Brady et al., 2005; Keshavarz, Nutbeam, Rowling & Khavarpour, 2010). Consequently, as this constrained the information provided to the school community, including explanations of school policy, it was evident that individuals within the school
community misinterpreted school rules and enacted them to different degrees (Keshavarz et al., 2010).

**Partnerships and services**

As identified by the Ottawa Charter, one of the main components of health promotion action involves recognising and sharing the responsibility to address the health-related needs of the community via the collaborative efforts of individuals, community groups, health professionals, health service institutions and governments (WHO, 1986). The school ethos component promotes collaboration among stakeholders of the school community to enhance their sense of ownership, and subsequent investment in the success of a HPS initiative. The *partnerships and services* component further promotes such collaborative efforts by involving a number of stakeholder groups, including: i) parents and community members; ii) local and national government and non-government agencies; and iii) the regulatory body of the education sector. Clearly, this component aims to strengthen community action and further assist the creation of supportive environments.

**Parents and community members**

School community partnerships can involve different roles and responsibilities, depending on the strengths and resources of each individual and stakeholder group, in order to maximise their input. Parental support of a HPS initiative can include fundraising, advocating the HPS initiative via role-modelling, assisting the development of policy and curriculum resources to reflect the needs of the community, and supporting the knowledge, values and skills provided at school in the home environment (Booth & Samdal, 1997; Colquhoun, 1997; McIsaac et al., 2015; Rowling & Jeffreys, 2006). In doing so, the integration of families and the community into the school context results in these parties sharing the responsibility for students’ health, and also supports the establishment of a holistic, supportive and healthy learning environment, which addresses the action areas of the Ottawa Charter (Cushman, 2008; NSW Department of School Education, 1996; WHO, 1986). Given the breadth of evidence indicating HPS initiatives have little chance of success if parental involvement and commitment is not ensured (Glanz, Saraiya & Wechsler, 2002; Inchley et al., 2007; Marshall et al., 2000; McIsaac et al., 2015; St Leger, 1999; Reinau et al., 2014; Turunen et al., 2006; Williams et al., 2012),
these partnerships are perhaps the most important influences on HPS effectiveness and sustainability.

In light of the influence of the partnerships between school and community, it is important that the efforts to establish these partnerships are sincere and authentic (Cushman, 2008; Henderson & Mapp, 2002; NSW Department of School Education, 1996). Cushman (2008, p. 237) further iterates that simply using parents and community members to “rubber stamp decisions” is “the worst case scenario.” Thus, it is concerning that schools often struggle to develop and maintain collaborative partnerships with their local community (Brady et al., 2005; Giles-Corti et al., 2004; Hunter et al., 2010; Inchley et al., 2007; NSW Department of School Education, 1996; St Leger, 1998; St Leger, 1999). Literature has indicated that parents have a limited knowledge and understanding of the common issues facing their children’s health and wellbeing, which can be compounded in some school communities comprising a number of ethnic groups, thus requiring the school to provide education to students and also support the learning of parents (Cushman, 2008; Turunen, Tossavainen & Vertio, 2005). Similarly to the provision of health literacy for students, teachers are often unwilling to invest the necessary time and energy to support parental integration (Gugglberger et al., 2011; Marshall et al., 2000).

Subsequently, parental involvement is often undervalued and underused (Rowling, 1996). As detailed in the previous section, research has shown communication between schools and parents is often prioritised and health-related issues are not fully disseminated due to the excessive information flow in schools (Keshavarz et al., 2010). Parents are often expected to understand school policies and procedures by association, which Colquhoun (2005, p. 45) describes as “acting like sponges and soaking up these rules.” In regards to focus of this thesis, a review of Australian children’s sun exposure and sun protection found that children’s sun protection behaviour were strongly associated with their parents’ behaviours (Dobbinson et al., 2011), which indicates parental support of the SunSmart Program is essential.

*Local and national government and non-government agencies*

Partnerships between schools and external organisations, such as government agencies, health services and non-government organisations (NGOs) that specialise in a particular
health area, can support school-based health promotion initiatives by facilitating the implementation of best practice across settings, increasing stakeholder commitment so that policy agendas within and beyond the school community can be influenced, and sharing resources to save time, energy and funding (Scriven & Hodgins, 2012). Additionally, these partnerships can increase the accessibility of expert health advice by assisting the delivery of health education and/or services in the school setting, or improving the school community’s access to local health services, such as those relating to prevention, screening, referral, or critical incident care (Booth & Samdal, 1997).

However, similar to the limited integration of parental involvement, there is evidence that partnerships between schools and health services could also be improved. In particular, there is concern that the misaligned expectations and understandings of the health and education sectors can have a negative impact on the partnerships between schools and health services (Ridge et al., 2002; Scriven & Hodgins, 2012). Additionally, these sectors can often exhibit competing organisational imperatives and/or conflicting professional cultures, which further hinders the potential for effective partnerships (Scriven & Hodgins, 2012).

While personnel from health agencies typically have a greater knowledge of health-related issues than school staff, which makes them suitable to support the health education and/or services available within school communities, this has led to the health knowledge of school staff being devalued (Rowling, 1996; St Leger, 2001). Partnerships between these two groups have predominantly consisted of the transfer of health-related information and materials from health services to schools, thus making schools a “client” of health services rather than collaborative partners (St Leger, 1998, p. 232). As is often the case in schools, NGOs disperse resource kits to schools associated with their particular interest area and expect teachers to successfully integrate these resource kits with little or no training provided (St Leger, 2004). Given the education sector and health sector have distinct differences in language and terminology misunderstandings between the two fields are common (Young, 2005). Furthermore, research has shown that teachers who had no previous training or experience delivering health education were less likely to provide opportunities for students to enhance their health literacy (McIsaac et al., 2015; Nordin, 2016).
Without mutual agreements of shared responsibility, partnerships between schools and health agencies have limited potential for success (Scriven & Hodgins, 2012; St Leger, 2004). While personnel from health agencies may know more about health or specific health issues, the school personnel are generally more knowledgeable of the context of the students and community, specifically the needs and resources (Rowling, 1996). Given the focus of a HPS initiative should address the context of the school community, this situates school personnel as key stakeholders to identify objectives or approaches for HPS implementation. Without equal power and a shared vision between schools and health services, the partnership agenda can be distorted (Scriven & Hodgins, 2012).

Furthermore, the education and health sectors are influenced by the political landscape, which controls the allocation of funds and resources to these fields (Colquhoun, 2005; Colquhoun, 1997; Rowling, 1996; Rowling & Rissel, 2000; St Leger, 1999; Signal, 1998; Tang et al., 2008; Young, 2005). Evidence shows that schools are more likely to focus on initiatives which will result in external funding (Marshall et al., 2000). While funding is a vital resource for health promotion efforts, the bias generated from funding tied to specific health-issues limits the potential for a holistic, community-driven approach (Marshall et al., 2000). Further, funding-based initiatives usually require evidence of a measurable impact within a short period of time, which conflicts the principles of the HPS concept (Rowling, 1996). Consequently, it has been suggested that an effective health promotion initiative can gain support from key interest groups by aligning with the political landscape, but should also be adaptable if necessary to react to funding and/or resource redistribution (Colquhoun, 2005; Signal, 1998). It is worth recognising that these sectors can in-turn influence the political landscape. As previously mentioned, consistent lobbying by CCNSW influenced the NSW Government to ban commercial tanning beds in the state (Sinclair et al., 2014), thus highlighting the impact of lobbying governments.

To improve collaborative efforts between health services and schools, consultation should occur between the two regarding the design of health-related initiatives so that available knowledge, skills and resources can be effectively implemented, and the partnership is mutually beneficial (St Leger, 1998; Scriven & Hodgins, 2012). The culture and climate of a school environment is determined by a number of localised, interrelated factors, as concluded
by Brady et al. (2005) following their investigation of the HPS initiative within a NSW primary school. Thus, it is crucial to recognise the unique context of each individual school setting when preparing a HPS initiative.

The regulatory body of the education sector

Teachers have indicated that the perceived demands of bureaucracy are a major influence on their ability to implement the HPS framework (Brady et al., 2005; St Leger, 1999). Literature indicates a number of aspects of the HPS approach are hindered by teachers’ perceptions of time constraints, such as their investment in developing students’ health literacy and partnerships with the parent body. These factors are reportedly a result of the formalised expectations placed on schools (Brady et al., 2005; St Leger, 1999). Previous studies that have explored teachers’ perceptions of the HPS approach have found expectations set by the NSW Department of Education3 (NSWDE), together with the limited time and resources available, meant that teachers had to prioritise areas of the curriculum, which often resulted in many requirements being rushed and subsequently less effective. The health-related curriculum was one such area (Brady et al., 2005; Keshavarz et al., 2010).

The principles of the settings approach are somewhat responsible for the impact of school bureaucracy. The same principles which led to the development of the HPS concept also resulted in schools being identified as a convenient venue to integrate initiatives targeting a number of societal issues. In addition to health, St Leger and Nutbeam (2000a) identify the competing interests of school-based initiatives that have targeted respectful relationships, technology, bullying, alienation, and the environment. Subsequently, teachers have indicated they feel responsible for fixing society’s issues (Brady et al., 2005; Ridge et al., 2002; St Leger, 1998). This issue is concerning, given that evidence has shown health promotion programs are unlikely to be effective when schools/teachers feel pressured to implement them as they do not feel ownership over the program (Durlak & DuPre, 2008; Northfield, St Leger, Marshall, Sheehan & Maher, 1997).

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3 The NSW Department of Education (NSWDE) has been previously titled the Department of Education and Youth Affairs, the Department of Education, Training and Youth Affairs, the Department of School Education, the Department of Education and Training, and the Department of Education and Communities.
Schools are expected to address a large number of initiatives and interventions, which can be overwhelming for teachers and limit their desire to adopt a HPS approach (St Leger & Nutbeam, 2000b). Rowling (1996, p. 524) comments that teachers are often in “survival mode” when attempting to cope with the demands of their profession. Considering school teachers are key stakeholders for school-based innovation and change (St Leger & Nutbeam, 2000b), providing resources and time to supplement their involvement is crucial. However, rather than being supported to develop a healthy school environment, it seems that the multiple and competing interests of the school bureaucracy are opposing this objective. It is likely that this would have a considerable impact on the ethos of a school community, as the bureaucracy is attempting to control the culture and climate of the school, rather than allowing students, staff and community members to establish their own ethos, which could constrain perceived ownership.

**Contextualising the Health Promoting Schools (HPS) approach within the school setting**

The previous section examined research pertaining to the integration of the three components of the HPS approach. However, it is perhaps more important to consider the context in which the approach is to be implemented. A systematic review of over 500 studies showed that the community context is crucial to the effectiveness and sustainability of a health promotion program (Durlak & DuPre, 2008; Tooher et al., 2017), which has been evidenced among other HPS case studies (Inchley et al., 2007; McIsaac et al., 2015). While the components of the HPS approach provide a comprehensive guideline for the holistic implementation of school-based health promotion programs, it is necessary to reiterate they are designed to be tailored to suit the needs and available resources of individual school communities (McIsaac et al., 2015). The core principle of the HPS concept is to empower school communities to take ownership of their health, and in order to do so, the school community needs to be proactive about the issues which face them and the resources that are available (Macnab et al., 2014; Rowling & Jeffreys, 2006). Influences associated with the community context include school size, resources (personnel and funding), the sociocultural status of the community, politics, policy, and the interests, abilities and motivations of the school community (Durlak & DuPre, 2008; Keshavarz et al., 2010; McIsaac et al., 2015).
Consequently, these influences can greatly magnify the difficulty designing and implementing change within the school setting, whereby even a simple health promotion intervention can translate into a complex change initiative (Rosas, 2017). As such, St Leger (2004) advises that expectations of the outcomes derived from a HPS initiative need to be reasonable and developed in consideration of these factors.

As detailed thus far, it is evident that the HPS concept is the culmination of many specific and interacting elements. Rosas (2017, p. 301) expertly articulates the holistic and integrated approach of the HPS concept, stating school health promotion initiatives should be “conceptualized as a configuration of interacting, interdependent parts connected through a web of relationships that form a whole greater than the sum of its parts.” These elements, which operate on an individual, professional, procedural and policy level, must all be sufficiently addressed within the distinct context of the school community for a HPS to be developed (Rosas, 2017). This is clearly a difficult task, given the complexity of interactions that are necessary to establish health promotion as an embedded feature of daily school life, and the limited understandings of the HPS concept among school staff (Mohammadi et al., 2010; St Leger, 1998). A previous study which explored the perceptions of school staff found that, while many staff recognise the importance of health promotion in schools for students, they were less likely to see the benefits of a HPS for parents, staff and the wider community (Mohammadi et al., 2010). It was also established that some staff had negative perceptions of the HPS concept, which they perceived as another label or tag coined by outside agencies, and argued as to whether the label was worthwhile (Mohammadi et al., 2010).

As a result of the complexity associated with implementing the HPS concept, there has been extensive research conducted in the past decade to determine the most effective approaches and strategies for implementation. Rowling and Samdal (2011) have produced one of the most significant contributions to this research by establishing eight core components that are essential for the practical implementation of the HPS concept. These components, as well as the theoretically-based rationale that led to their establishment, have been endorsed within subsequent HPE literature (Macnab, 2014; McIsaac et al., 2015; Nordin, 2016; Peralta et al., 2017). The eight core components established by Rowling and Samdal (2011) include:
1. Preparing and planning for school development: The first step in the implementation process is extensive. Existing school policies, goals, structures and practices supporting the aims of HPS concept need to be identified in order to support the anchoring of the approach to the pre-existing school organisation. Additionally, a careful process of involvement and decision making needs to be planned so that the voices of all relevant school community stakeholders are heard.

2. Policy and institutional anchoring: The development and/or review of local, state or national policies can provide a strategy for action, as well as support, through the provision of financial, organisational and technical resources.

3. Professional development and learning: Increasing teachers’ capacity to participate can be achieved two-fold: i) ongoing teacher professional development that focuses primarily on knowledge and competency development; and ii) teacher professional learning that focuses on knowledge, attitudes, skills, aspirations and behaviour.

4. Leadership and management practice: A range of features pertaining to the implementation of the HPS concept require leadership; policy development, pedagogy, curriculum development, and partnership formation with parents and service providers. As such, schools should adopt a distributed leadership approach that integrates students, teachers and other educational personnel, parents and caregivers, as well as outside service providers.

5. Relational and organisational support context: This component emphasises the integrated approach of the HPS framework. Relational pedagogy should be adopted to align the content of learning experiences with the features of the school community beyond the classroom, while physical and organisational structures within the school should be reviewed so that they reflect the principles of the school’s HPS vision.

6. Partnership and networking: The collaborative partnership between school and community should adopt comprehensive, integrated approaches so that each party complements each other. However, it’s important to be aware of the difficulties associated with effective partnership building as it requires stakeholder readiness, an
enlightened vision, financial support, geographic space, creative leadership, effective working relationships, training, time and new multi-faceted roles for professionals.

7. Student participation: A student-centred approach, whereby students are actively engaged in the governance and decision-making in the school, supports help young people to learn that they can make a difference for themselves and for others, and subsequently enhances their empowerment.

8. Sustainability: Rather than approach the implementation as a time-limited project, efforts should be made to facilitate the long-term anchoring of the initiative via continued professional learning and development, monitoring progress and adapting if necessary.

These eight components highlight the complexity of HPS implementation, specifically the need to recognise and address a variety of contextual features (Rowling & Samdal, 2011). Although the “HPS” title is often applied to any health promotion program within a school setting, the comprehensive design of the framework differentiates it from other initiatives that use a more generalised approach to health promotion in schools (Cushman, 2008; Rowling, 2005). The vast majority of health promotion programs aim to have a measurable impact on health, but their overall aims, objectives and procedures can often inhibit their potential for success (Rowling, 2005). For instance, ad-hoc health promotion strategies that are implemented quickly in an attempt to influence short-term behaviour usually do not have a clear vision and do not integrate a collaborative approach, therefore lacking community ownership and resulting in an ineffective and/or unsustainable initiative (Lee, 2009). Based on the differences between school health promotion approaches, Cushman (2008) recognises that the number of interventions and programs implemented within a school to address health does not necessarily eventuate as a HPS, unless these programs have been integrated into everyday life and adopted as a result of a collaborative effort involving the entire school community.

The Health Promoting Schools (HPS) approach and the SunSmart Program

The first chapter of this thesis detailed the structure of the SunSmart Program, while the background and origins of SunSmart have been previously outlined in this chapter. In
summary, the SunSmart Program is a free, membership-driven resource designed to support the development of sun protection practices and procedures within the primary school setting (Jones et al., 2008). Within NSW, approximately 80% of primary schools are accredited members of the SunSmart Program (CCNSW, 2016), which reflects the broad reach of the program. The purpose of this section is to provide insight into the SunSmart Program’s alignment with the HPS approach, specifically how the benefits and challenges associated with the HPS approach impact SunSmart. Previous research of the SunSmart Program will also be analysed to address the practical implications of its theoretical underpinnings.

The alignment between SunSmart and HPS framework has already been identified by other researchers, including Williams et al. (2012, p. 60), who stated “the SunSmart Program is consistent with the [HPS] approach.” Both SunSmart and the HPS framework were founded on the principles of the Ottawa Charter and the settings approach to health promotion (Montague et al., 2001). This has resulted in all five action areas of the Ottawa Charter, and all three components of the HPS framework being addressed by the SunSmart Program. Table 2.1 details the alignment between the Ottawa Charter, the HPS framework and the SunSmart Program.
Table 2.1: The alignment between the Ottawa Charter, the HPS framework and the SunSmart Program

<table>
<thead>
<tr>
<th>The Ottawa Charter for Health Promotion</th>
<th>The HPS framework</th>
<th>The SunSmart Program</th>
</tr>
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<tbody>
<tr>
<td>Developing personal skills</td>
<td>Curriculum, teaching and learning</td>
<td>Supporting sun protection within the curriculum</td>
</tr>
<tr>
<td>Building healthy public policy</td>
<td>School ethos, organisation and environment</td>
<td>Recommendations for school sun protection policy which addresses scheduling of activities, shade, hats, clothing, sunscreen and staff role-modelling</td>
</tr>
<tr>
<td>Strengthening community action</td>
<td>Partnerships &amp; services</td>
<td>Recommendations to inform and encourage participation from the school community</td>
</tr>
<tr>
<td>Creating supportive environments</td>
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<tr>
<td>Reorienting health services</td>
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(CCNSW, 2015; NSW Department of School Education, 1996; WHO, 1986)

Within the SunSmart Program’s 10 recommendations for primary school sun protection policy there are specifications for sun protection within the curriculum (CCNSW, 2015). In NSW, this recommendation is strengthened by the inclusion of sun protection as an educational component within the PDHPE KLA (Board of Studies NSW, 2007). While sun protection does not represent a large component of the PDHPE K-6 syllabus document (Board of Studies NSW, 2007), there are specific syllabus outcomes which require students to be taught how to keep healthy and safe in relation to sun protection. These outcomes include being able to make decisions regarding the most effective sun protection practices for specific circumstances, understand how sun exposure can impact health, and explain the positive and negative effects of sunscreen (Board of Studies NSW, 2007). Furthermore, sun protection is a content area of the PDHPE KLA within all Stage levels of education4 (Board of Studies NSW, 2007). In order to support sun protection education, CCNSW (2015) provides all NSW SunSmart-accredited schools with sun protection teaching and learning resources.

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4 Stage levels refer to the categorisation of student year levels in order to simplify the organisation of subject outcomes; Early Stage 1 refers to Kindergarten, Stage 1 includes Years 1 and 2, Stage 2 includes Years 3 and 4, and Stage 3 includes Years 5 and 6 (Board of Studies NSW, 2007).
Previous studies have indicated that sun protection education is more likely to be addressed by SunSmart schools than non-SunSmart schools (Turner et al., 2014a), and that the free teacher resources provided with program membership are perceived as one of the benefits of joining the SunSmart Program (Sharplin et al., 2012). However, while Sharplin et al. (2012) found that 79% of Australian primary schools reportedly incorporated sun protection education into the curriculum of all year levels, there is limited evidence indicating how the content is delivered to students. As content delivery is a vital factor for developing health literacy, this variable requires further consideration.

The SunSmart Program also advises schools to implement a number of comprehensive, yet flexible procedures to address the ethos, organisation and environment of their setting. These procedures specifically include scheduling outdoor activities outside of peak UV radiation periods, enforcing hat-wearing policy, encouraging and providing sunscreen to students and staff, integrating sun-safe clothing into the school uniform, encouraging staff and community to role-model sun protection practices, and developing a plan with the school community regarding the provision of shade (CCNSW, 2015). This final recommendation is particularly notable as it exhibits the principles of the HPS approach and the Ottawa Charter. The cost of shade is often identified as one of the major barriers to sun protection health promotion (Parisi & Turnbull, 2014), so CCNSW advises SunSmart schools to address the issue by developing partnerships to strengthen community action.

The third component of the HPS approach, partnerships and services, is addressed by the SunSmart Program in a number of ways. Firstly, school-community partnerships are encouraged in a number of ways, including: i) requiring a parent representative to endorse the initial SunSmart-accreditation process of the school; ii) advising that the school regularly inform the community of SunSmart practices; iii) encouraging the community to role-model sun protection practices; iv) advising collaboration with the community regarding future plans for sun protection (i.e. shade provision); and v) recommending the parent body is included within the review process of sun protection policy (CCNSW, 2015). Secondly, the partnership between a SunSmart-accredited school and CCNSW has a number of benefits, namely the aforementioned sun protection education teaching resources, the recommendations for sun protection policy, and various resources to promote SunSmart membership (such as a metal
sign, a certificate, flyers and posters) (CCNSW, 2015; Sharplin et al., 2012). The SunSmart Program is also designed to consider contextual factors of individual schools which may make implementation challenging. The following statement is included in the SunSmart Program’s sun protection policy document:

We recognise each school faces different challenges and may not be able to implement all recommendations immediately... The SunSmart team can help you identify the recommendations your school is currently implementing and those you can plan to implement in the future. (CCNSW, 2015, n. p.)

Thirdly, in 2013, the NSWDE released the Sun Safety for Students guidelines, which detail the strategies the NSWDE advises for primary schools to address sun safety concerns associated with student health and wellbeing. These guidelines closely reflect the practices of the HPS approach as they involve: i) the teaching of sun safety across year levels and strategies to increase the understanding of staff and community members; ii) the inclusion of sun safety within the School Plan, school policies, procedures and resources; and iii) the development of a comprehensive range of sun safe strategies via the collaborative efforts of students, staff and other community members (NSWDE, 2013). Furthermore, the Sun Safety for Students guidelines explicitly recommend NSW primary schools to become members of the SunSmart Program (NSWDE, 2013). Thus, the SunSmart Program supports partnerships with parents and the local community, health services and the regulatory body of the education sector. However, research suggests the practical application of the SunSmart Program within primary schools does not align with this comprehensive framework, which will be explored in the following section.

Implementation of the SunSmart Program

Despite the clear alignment between the conceptual structure of the SunSmart Program and the HPS approach, there is evidence that the practical application of the SunSmart Program is not achieving the holistic and consistent implementation emphasised by the HPS framework (Dudley et al., 2017; Sharplin et al., 2012). This section draws on the methodologies and results of previous studies to provide insight into the practical application
of the SunSmart Program, and examine how the elements associated with the application of the HPS framework impact the SunSmart Program.

**Hat-wearing behaviours**

Hat-wearing guidelines represent a substantial component of sun protection policy. Jones et al. (2008) found that 99.4% of Australian SunSmart schools’ (n=366) sun protection policy included hat-wearing guidelines, while Dono et al. (2014) found that 96% of Australian primary schools’ (n=857) sun protection policies included consequences for not wearing a hat. Furthermore, these reviews have shown SunSmart schools are more likely than non-SunSmart schools to enforce sun protective hats during the summer school terms within their sun protection policies (Jones et al., 2008; Turner et al., 2014a).

Evidence indicates that the extensive promotion of hat-wearing behaviours compared to other sun protection practices is likely due to the relative simplicity of enforcing hat-wearing behaviour opposed to other sun protection behaviours. For instance, the financial costs associated with sunscreen and shade have been identified as a barrier to these practices (Parisi & Turnbull, 2014; Sharplin et al., 2012). Additionally, sunscreen application is actively avoided by many Australians of all ages due to perceptions that it is greasy, messy and can cause physical discomfort, such as stinging eyes (Hamilton et al., 2016; Hatmaker, 2003; McLoone et al., 2014; Potente et al., 2011). In addition to these factors, hat-wearing behaviour is also favoured due to the perceived sun protection that is provided. Turner et al. (2014a) emphasise the importance of hats due to the protection provided to chronically sun-exposed areas of the face, ears, neck and scalp, where melanoma often develops.

However, while hat-wearing behaviour is a predominant component of SunSmart schools’ sun protection policy, objective measures of students’ and adult role models’ hat-wearing behaviours indicates the policy component is not being fully enforced. Turner et al. (2014a) observed the hat-wearing behaviours of students and adult role models during and immediately before and after school hours in QLD SunSmart schools (n=23). They found that while students’ hat-wearing behaviour were high during school hours, their hat-wearing behaviour before and after school hours were substantially less (Turner et al., 2014b). This trend was also observed among adult role models within the study. Similarly, the
observational research conducted by Dudley et al. (2017) in NSW SunSmart schools (n=20) found that only 60% of students wore sun-safe hats during recess and lunch periods, while less than half of adult role models wore any hat during recess and lunch periods. While the samples of these studies only include a small percentage of the total number of registered SunSmart schools, the results nonetheless suggest that SunSmart membership does not necessarily equate to the development of holistically enacted hat-wearing behaviour.

The distinction between the hat-wearing behaviours exhibited by students, staff and individuals within the broader school community could be influenced by the type of hat-wearing policy guidelines that are enforced in individual school settings. The SunSmart Program (CCNSW, 2015, n. p.) recommends “students who do not have a sun-safe hat are asked to play in the shade or a suitable area protected from the sun.” This action is a suggestion that is also advised by the Sun Safety for Students guidelines, which encourages a “No Hat, Stay in the Shade,” policy (NSWDE, 2013, p. 2). These policy guidelines indicate that students are relocated to shaded areas to compensate for their lack of adherence to wearing a protective hat. However, other studies have advised hat-wearing policy guidelines that imply different consequences. There have been a number of studies that have detailed the implementation of a “No Hat, No Play” policy to address hat-wearing behaviours (Boe & Tillotson, 2006; Emmons et al., 2008; St Leger, 1999; Turner et al., 2014a). Hamilton et al. (2016) studied parents’ perceptions of their children’s sun protection behaviours and found that many parents were familiar with the No Hat, No Play rule, and believed it provided a strong motivation for children to adopt sun protection behaviour. In order to support their children’s compliance with sun protection guidelines, such as the No Hat, No Play rule, parents provided spare hats in a number of consistent locations to increase availability (Hamilton et al., 2016).

While hat-wearing policy guidelines are a commonly featured and recognised aspect of school’s sun protection policy, the differences in phrasing of hat-wearing policies represents a potentially significant influence on sun protection behaviour. The Sun Safety for Students guidelines state that sun safety should be “promoted as a health and safety issue rather than a matter of discipline” (NSWDE, 2013, p. 1). While the “No Hat, Play in the Shade” guideline implies the substitution of one sun protection practice for another, thus focusing on health
and safety, the “No Hat, No Play” guideline suggests students are punished for not wearing their hat by prohibiting their opportunities to play.

Nonetheless, considering the distinction between the reported inclusion and prioritisation of hat-wearing behaviour within SunSmart schools’ sun protection policy and the objective observations of hat-wearing behaviour within these settings, it is evident there is a disconnect between policy documentation and policy implementation. This is an area that has not been previously researched, and has been explicitly advised by previous literature as focus for further investigation (Dudley et al., 2017).

**Sun protection health literacy**

While the sun protection health literacy of individuals situated within the context of SunSmart-accredited school communities has not been previously examined, there is evidence that the health literacy of Australians in regards to sun protection could be improved. In general, Australians are aware of sun protection methods, especially compared to individuals from other countries (Gillespie, Watson, Emery, Lee & Murchie, 2011; Hamilton et al., 2016; Smith, Bauman, McKenzie & Thomas, 2005; Stanton, Janda, Baade & Anderson, 2004). However, there are a number of barriers which limit their application of these methods, including common misconceptions and misunderstandings associated with skin cancer prevention, and Australian cultural norms.

Research associated with the use of sunscreen has produced conflicting results. While some studies provide evidence that sunscreen is frequently identified and reportedly used as a sun protection practice (Boe & Tillotson, 2006; Stanton et al., 2004; Volkov et al., 2013), other studies indicate sunscreen application is avoided (Hamilton et al., 2016; Hatmaker, 2003; McLoone et al., 2014; Potente et al., 2011). While it has been established sunscreen is often avoided due to perceptions of greasiness, messiness and potential discomfort (Hatmaker, 2003; McLoone et al., 2014; Potente et al., 2011), Hamilton et al. (2016) found that parents were concerned about the long-term effects of exposing their children to the chemicals in sunscreen, which were perceived as potentially dangerous. Regardless of the frequency of use, these studies indicated that sunscreen application could be improved. Studies which report sunscreen use as a common sun protection measure usually indicate application
effectiveness is limited. It has been reported that the effectiveness of sunscreen is often reduced due to insufficient amounts being applied, infrequent application and exposure to water and/or sweat which washes away the sunscreen (Boe & Tillotson, 2006; Stanton et al., 2004; Volkov et al., 2013).

A common misunderstanding about skin cancer prevention involves the amount of sun exposure necessary for health and wellbeing. Vitamin D is a nutrient primarily absorbed via sun exposure, and is required for skeletal development, immune function and blood cell formation (Berwick et al., 2005; WHO, 2003). Thus, some sun exposure is necessary to obtain sufficient levels of vitamin D but too much sun exposure can increase the risk of skin cancer. While sun exposure recommendations have been made available so that individuals can obtain sufficient vitamin D levels without compromising skin health (Samanek et al., 2006), studies have shown Australians have a lack of understanding regarding optimal sun exposure for vitamin D absorption (Djaja et al., 2016; Janda, Kimlin, Whiteman, Aitken & Neale, 2007; Youl, Janda, & Kimlin, 2009; Vu, van der Pols, Whiteman, Kimlin & Neale, 2010).

The common misunderstandings of skin cancer prevention and the limited application of sun protection behaviours exhibited by many Australians may be partially due to inadequate educational opportunities. As the development of health literacy requires extensive and dynamic learning experiences, many health literacy advocates have recommended early intervention so that young people have the benefit of structured schooling to develop their health literacy capabilities (Kickbusch & Maag, 2008; Manganello, 2007; Peralta & Rowling, 2017). However, there is evidence that most school-based health literacy programs provide insufficient opportunities for young people to develop a critical level of health literacy (Benham-Deal and Hodges, 2009; Chinn, 2011; McCuaig et al., 2014; Sykes, Wills, Rowlands & Popple, 2013).

Despite the important contribution that teachers have in promoting health in schools, there is limited evidence available, internationally and within Australia, regarding the quality of school-based health promotion training opportunities provided to pre-service teachers during their initial teacher training (Nordin, 2016; Shepherd et al., 2016). The SunSmart Program does offer a free online training program for pre-service and current teachers, titled Generation SunSmart, which includes interactive modules that focus on skin cancer, sun
protection strategies and elements of the HPS framework (Cancer Council Western Australia, 2013). However, while the Generation SunSmart modules support the implementation of sun protection policy in the school setting, they do not include any training opportunities to enhance teachers’ capabilities to design and deliver learning experiences that would enhance students’ critical health literacy (Cancer Council Western Australia, 2013; Peralta & Rowling, 2017). Consequently, there is little evidence to suggest teachers are adequately prepared to deliver learning experiences that enhance students’ health literacy.

In addition to the limited support provided for the development of health literacy in schools, research has shown that health care professionals and the media perpetuate vitamin D misconceptions. Health care professionals from Australia and New Zealand have been found to advise patients to increase their sun exposure for vitamin D absorption despite already reaching optimal levels (Bonevski et al., 2012; Reeder, Jopson & Gray, 2012). As sufficient vitamin D absorption had been obtained, this advice could needlessly increase their patients’ risk of skin cancer. In addition to the misleading advice from health professionals, an analysis of news coverage in Australia between 1993 and 2006 found that the subject of vitamin D in the media was associated with negative depictions of sun protection (Scully, Wakefield, & Dixon, 2008). Scully et al. (2008) suggested this negative media depiction resulted in a proportion of teenagers and adults gaining excessive sun exposure without sun protection.

Considering the development of critical health literacy requires health education to be embedded holistically throughout the communities individuals live (Peralta & Rowling, 2017), the incorrect information and advice conveyed by health professionals is highly concerning.

Cultural influences

There are cultural expectations within Australian society which act as a motivation for potentially harmful sun exposure. Australian culture has traditionally encouraged sun tanning practices (McLoone et al., 2014; Montague et al., 2001). Boe and Tillotson (2006, p. 140) suggested that the idealising of a “healthy tan” by society, particularly the fashion industry, is a substantial barrier to sun protection behaviour. In particular, adolescence has been identified as an age period where individuals are more likely to engage in sun tanning behaviours due to their desire for social acceptance (Boe & Tillotson, 2006; Hill & Dixon, 1999; White et al., 2015). Multiple studies have concluded Australian adolescents’ desire for a
suntan often compromises sun protection efforts (McLoone et al., 2014; Potente et al., 2011; Volkov et al., 2013). In addition to the desire for suntan, there are culturally influenced negative perceptions of specific sun protection practices. Volkov et al. (2013, p. 68) found that males in particular were affected by gender differences associated with sunscreen application, highlighting the perception of a participant who stated “blokes don’t use cosmetics.” In addition to sunscreen, protective hats and clothing have been perceived as unattractive and impractical (Hatmaker, 2003; Potente et al., 2011), and children have been found to prefer hats they perceive as fashionable rather than those that promote sun protection (Hamilton et al., 2016).

The desire for social acceptance is so strong that it can influence adolescents regardless of their positive intentions for sun protection. Vitols and Oates (1997) found that there was a significant decrease in adolescents’ intention to engage in sun protection if their peers challenged their sun protection behaviours. Additionally, children have been found to oppose sun protection directives from their parents if they observe other children, family or friends not adopting the behaviour (Hamilton et al., 2016). While there have been notable improvements in this area, such as declining pro-tanning attitudes, the banning of solariums and increasing sun protection attitudes over the past 15 years (Montague et al., 2001; Sinclair et al., 2014; Volkov et al., 2013), it is concerning that social acceptance can act as a stronger motivation than wellness for many adolescents (Potente et al., 2011).

**Partnership between SunSmart schools and the Cancer Council**

As previously detailed, HPS initiatives funded by an NGO typically involve the dispersal of a resource kit, and often teachers are expected to implement these kits without any training on how to use them effectively (St Leger, 2004). The SunSmart Program is managed by an NGO (Cancer Council) and predominantly involves the distribution of a sun protection policy package and a number of promotional resources (CCNSW, 2015). While CCNSW (2015) indicates that it aims to provide support for SunSmart schools to develop a plan to address all recommendations for sun protection policy, there is evidence to suggest that this partnership could be improved.
A survey of Australian primary schools revealed some notable findings regarding the support provided by the Cancer Council. Although 68% of Australian SunSmart schools sampled for the survey (n=312) indicated whole school policy development was a benefit of SunSmart membership, only 19% of schools indicated a review of their school’s sun protection policy by Cancer Council was a benefit (Sharplin et al., 2012, p. 47). This suggests the feedback provided by the Cancer Council is not fully appreciated by SunSmart schools. It is worth recognising that the most commonly reported benefit of joining the SunSmart Program was the provision of a SunSmart school sign to display, which was identified by 78% of the sample (Sharplin et al., 2012, p. 47), and indicates the partnership was client-based rather than collaborative as it consisted of the transfer of health-related materials from health services to schools (St Leger, 1998).

The literature reviewed throughout this section provides insight into the application of the SunSmart Program. However, by viewing the SunSmart Program within the context of the HPS framework rather than as a sun protection intervention, a number of commonly overlooked factors become apparent. Namely, previous studies conducted to examine the SunSmart Program have predominantly focused on one aspect of the HPS framework, such as policy comprehensiveness (Dono et al., 2014; Jones et al., 2008) or hat-wearing behaviours (Dudley et al., 2017; Turner et al., 2014a). While these studies provide useful insights into these individual aspects, they do not provide a holistic representation of the SunSmart school. This recognition reflects the broader difficulty associated with researching the HPS concept, which informs the design of this thesis.

**Researching the Health Promoting Schools (HPS) approach**

Building evidence of effective HPS practice was identified by the WHO as one of the five key challenges for progressing the understanding of health promotion within the school environment (Tang et al., 2008). Although the WHO conducted a meta-analysis of 67 trials of the HPS approach to examine the characteristics of effective HPS implementation, it was concluded the quality of evidence included in these studies was low-moderate due to challenges associated with methodology, the use of self-reporting data, the high participant dropout rate and obtaining longitudinal research (Langford et al., 2015). These issues reflect the difficulty of studying the holistic nature of the HPS concept.
Langford et al. (2015) explained that their meta-analysis only included studies that had adopted Randomised Control Trial (RCT) research methodology. A RCT involves identifying a measureable outcome (i.e. a specific behaviour, knowledge or practice), designing an intervention to target the outcome, and then measuring the outcome in a number of settings pre- and post-implementation to determine the effect of the intervention (Rowling & Jeffreys, 2006). The methodology of a RCT is reflective of a scientific framework for research, which has predominantly been used in an attempt to evaluate the HPS approach (Keshavarz et al., 2010; Rowling & Jeffreys, 2006). Bauman and Nutbeam (2014) recognise that organisations within the health sector, such as the WHO, are drawn to evidence-based research as it justifies the investment of time, effort and resources required to implement and sustain a health promotion initiative. However, while the RCT is one of the most effective methodologies for measuring statistical deviations among quantifiable outcomes, the appropriateness of this approach for evaluating the HPS framework has received criticism among the health promotion community (Joyce, Dabrowski, Aston & Carey, 2017; Rowling & Jeffreys, 2006). As stated by Nutbeam (1999, p. 101), “we should reject the clumsy and crude application of evaluation methods that have been designed for static forms of medical intervention, and promote the application of research methods that are relevant to the complexities of contemporary health promotion.” This statement is supported by Colquhoun (2005, p. 42) who recommends research into HPS needs to acknowledge the “messiness or complexities of school communities,” and Rowling (2005), who criticised the use of the scientific model to evaluate HPS initiatives as it is unable to answer social or educational questions. Providing evidence of success for multi-level, complex health promotion interventions is a challenging task, and cannot be easily achieved despite the development of evidence-based review guidelines (Nutbeam, 1999).

While it has been established that a scientific approach is useful for medical investigations, there are suggestions it is unable to measure the intricacies of the social, educational and environmental perspectives of the HPS concept (Colquhoun, 2005; Joyce et al., 2017; Rowling, 2005). These arguments are predicated on the recognition that the school context is incredibly complex, which is a view that has been clearly established throughout this chapter. Reiterating the factors which influence the application of a HPS initiative, it would be
impractical to attempt to use scientific research methodologies to measure the underlying, or “hidden,” curriculum of a school community, such as the social environment, the capabilities of school staff, the stress of perceived time constraints, or the quality of partnerships with health services and community stakeholders. Furthermore, scientific evaluations of the HPS approach may overlook influential variables that are beyond the scope of the intervention, such as adjustments in school size, resources, physical and/or social environment, the stability and/or socioeconomic status of the community, and the quantity and quality of interactions between the school, home and health sector (Keshavarz et al., 2010; Rowling & Jeffreys, 2006). The Ottawa Charter recognises health promotion as a process, not an outcome (Nutbeam, 1998b; WHO, 1986). Therefore, a review of a HPS should not only focus on the health-related knowledge and behaviours of the population within the school setting, but also the degree to which the population was empowered to take control over their health.

In addition to neglecting the complexities of the school context, the scientific method of evaluating a HPS usually aims to measure the desired outcomes within a short period of time (Langford et al., 2015; Rowling & Jeffreys, 2006). This approach contradicts the principles of the HPS framework, which favour lifelong health advocacy rather than short-term change (Nutbeam, 1998b). As the development of a HPS requires extensive planning and goal-setting, rushing such an approach can minimise the potential for collaboration to occur within and beyond school communities (Keshavarz et al., 2010; NSW Department of School Education, 1996; Rowling, 1996). This viewpoint is reiterated by St Leger (2004, p. 408), who critiques short-term approaches to health promotion by stating “we expect young people to have at least 10 years of formal education, and preferably more, to equip them for their futures. A 3-month intervention designed to improve nutritional outcomes will make little or no difference.” Evidence has shown that health promotion initiatives which aim to induce short-term behaviour change are not usually sustainable (Hunter et al., 2010), and the behaviour dissipates once the initiative is removed (Buller & Borland, 1999; Milne et al., 2006).

When considering these factors, it is apparent that understanding how school-based health promotion initiatives work does not come from solely measuring impact factors, outputs or outcomes, as these only arise in specific circumstances. Too often researchers have
attempted to establish a clear relationship between an intervention/program and a health-related outcome through a single study, without recognising or appreciating the myriad of determents that influence behavioural factors, such as combination of education, environment or policy (Bauman & Nutbeam, 2014; Nutbeam, 1998b). The principles of evidence-based research and RCTs imply that a health promotion strategy has the potential to replicate results equally across a number of school settings, thus ignoring individual contextual elements (Joyce et al., 2017; Rowling & Jeffreys, 2006). However, the HPS approach is designed as a framework to address the distinct needs and resources of the community, and therefore necessitate the contextualisation of a health promotion initiative. While there is a place for scientific rigour within the implementation and evaluation procedures of health promotion programs, it is essential that the complexity of the context is taken into consideration. It would be an oversight to completely discredit experimental research as it can support assessments of policy, financial investment and environmental changes (Bauman & Nutbeam, 2014). Such assessments can complement the broader, more holistic measurement of success at the organisational level that supports sustained change (Inchley et al., 2007). But the importance of also understanding the impact of the social, cultural and economic climate cannot be understated (Bauman & Nutbeam, 2014). Consequently, in order to unite the two opposing perspectives of health promotion research, Bauman and Nutbeam (2014) established a model for planning and evaluating health promotion interventions that reconciles complexity and scientific rigour. Their model for adopts a contemporary approach consisting of four phases: i) pre-program planning; ii) planning; iii) implementation; and iv) impact and outcomes (Bauman & Nutbeam, 2014). These first and second phases require an assessment of the current problem and its determinants in order to understand how it can be resolved, stakeholder and community engagement, and also qualitative and quantitative baseline measurements. The third and fourth phases involve program implementation, which should be closely aligned to the needs and resources of the local community, and an assessment of program impact and outcomes, which should involve short-term, medium term and long-term evaluative procedures that adopt appropriate and comprehensive measurement objectives (Bauman & Nutbeam, 2014). These four phases clearly align with the eight core components of HPS implementation, established by Rowling and Samdal (2011), which were examined previously in this chapter.
In relation to the focus of this thesis, it is important to reiterate that the SunSmart Program is managed by the state-based Cancer Councils. It has been detailed throughout this chapter that the health sector and education sector often have distinct agendas and procedures. Variations in health-related terminology and understandings of terminology can result in initiatives being misunderstood and goals misinterpreted. The priorities of the Cancer Council are likely to be different to each individual school setting where the SunSmart Program is applied due to a number of contextual factors (Rowling & Jeffries, 2006). Therefore, while the Cancer Council manages the SunSmart Program, it is the responsibility of each individual school setting to carry out the procedures which make them a SunSmart school. As the SunSmart Program aligns with the HPS approach, it supports schools to achieve this objective.

In order to understand the practical application of the SunSmart Program, it is necessary to appreciate the specific context in which it is implemented, in particular the school community. The interactions between the individuals who comprise the school community and the SunSmart Program have the greatest influence on how it is implemented. However, previous research has not investigated the perspectives of the entire school community, nor has it provided a thorough examination of the contextual factors which influence the application of the SunSmart Program in a number of settings. Therefore, gaining insight into how the school community interprets the SunSmart Program is vital to comprehending its role within the school setting. The link between perceptions and action has been well documented, and active participation in HPS is associated with attitudes, intentions, beliefs and perspectives (Tjomsland, Iversen, & Wold, 2009; Viig, & Wold, 2005).

Understanding the processes of SunSmart Program application could inform how SunSmart schools could be further supported to implement effective sun protection practices and enhance the skin cancer prevention efforts. This objective clearly aligns with the first and second phases of Bauman and Nutbeam’s (2014) contemporary model for evaluating health promotion programs, which involve consultation with stakeholders and the community to better understand the problem and need for intervention. Subsequently, the development and application of a comprehensive research methodology to better understand the contextual features that impact program implementation could establish an effective framework for addressing the necessary planning procedures of health promotion programs,
as advised by Bauman and Nutbeam (2014). Considering many health promotion programs and interventions overlook these planning procedures, such a framework would represent a valuable asset for the validity and reliability of future health promotion research.

**Chapter summary**

The literature presented in this chapter established the various approaches to health promotion and how these approaches have been adopted within Australia to support skin cancer prevention efforts. The SunSmart Program is a school-based skin cancer prevention initiative which aligns with the principles of the HPS framework in order to encourage sun protection behaviour using a comprehensive, contextual, settings approach. As the SunSmart Program is one of the most widely adopted skin cancer prevention programs in Australian schools, there have been a number of studies that have attempted to examine the efficacy of the Program. However, these studies have predominantly used a scientific approach in an attempt to establish a correlation between the SunSmart Program and a single feature of its design, such as policy comprehensiveness or hat-wearing behaviour. There have been no studies that have investigated the holistic impact of the SunSmart Program on the knowledge, attitudes and behaviours of school communities in regards to skin cancer prevention and sun protection behaviour.

Following the synthesis of health promotion literature, it is apparent that schools are incredibly complex settings, particularly due to the extensive number of interactions that occur within the school community. The socio-ecological approach to health emphasises the scale and complexity of interactions between the social, institutional, and cultural contexts of people and their environments, and thus highlights the distinct contextualisation of health promotion efforts within specific settings. Subsequently, in order to investigate the impact of the SunSmart Program on skin cancer prevention efforts, it is necessary to examine how the SunSmart Program addresses, interacts with, and supports the unique contextualised features of individual school settings, which is unlikely to be measured using a purely scientific approach. The study detailed in this thesis was designed to provide an in-depth exploration of these features by using a methodology that has not been previously applied to review the SunSmart Program. This methodology is explained in the following chapter.
Chapter Three: Methods

Introduction

This chapter details the approaches selected to investigate key stakeholders’ understandings of the SunSmart Program. The term key stakeholders refers to the prominent groups of people within a school community. The identification of these key stakeholders was supported by the methodological framework of this study, while their value to the research was justified by the theoretical framework. In addition to detailing both of these frameworks, this chapter has multiple purposes, including:

- describing the research design;
- explaining and justifying the data collection and analyses techniques;
- presenting considerations of trustworthiness and triangulation, and;
- illustrating the measures to ensure ethical research practices.

The selection of the methods presented in this chapter was informed by the research questions of the study.

The research questions

The aim of this study was to explore the SunSmart Program from the perspectives of individuals whose interactions with the Program were most significant. The research questions were devised to address this aim, and were informed by the review of literature presented in the previous chapter of this thesis. Key stakeholders’ interpretations of the SunSmart Program were a focus of the research, as were the variables which influenced these interpretations and also the impact these interpretations had on stakeholders’ behaviour. These areas of inquiry could also inform the future design and/or management of the SunSmart Program. With these objectives in mind, the following research questions were formulated:

1. What do key stakeholders understand by the term “SunSmart”?
2. What experiences have informed key stakeholders’ understandings of the SunSmart phenomenon?
3. What motivations do key stakeholders have for enacting SunSmart behaviour?

4. How can SunSmart schools be further supported to implement the Health Promoting Schools framework?

The research design

The exploration of key stakeholders’ understandings requires an appreciation of how individuals make sense of the world around them, which is a process that involves individuals’ construction of meaning. The construction of meaning is a concept founded on interpretations of perceived reality. Therefore, social research methods were employed for this research as they enabled the researcher to understand individuals’ common-sense thinking, how they made sense of their social reality, and also explained their behaviour (Bogdan & Taylor, 1975). The design of the research was carefully considered to ensure the understandings of key stakeholders were the object of inquiry. Thus, the theoretical and methodological frameworks were selected to ensure a thorough and accurate exploration of the SunSmart Program. These frameworks also informed the selection of the research paradigm, the strategy of inquiry, the collection and analysis of data, and the sample of participants.

Theoretical framework

A theoretical framework is a philosophical lens through which the researcher is able to view each progressive stage of a study in a valid and meaningful way (Crotty, 1998). It acts as an independent schema to support the interpretation of complex data. There are several approaches in which a theoretical framework can be applied to research: i) providing rationalization or justification for the methodological approach used; ii) offering a comparative context or an organizational framework for the interpretation and representation of data; and/or iii) serving as a scheme for representing findings (Bradbury-Jones, Taylor & Herber, 2014; Bryman, 2012; Sandelowski, 1993). A theoretical framework can also be used for various purposes, such as describing, explaining, predicting, or prescribing responses, events, situations, conditions, or relationships (Meleis, 2007).
Due to the exploratory and descriptive focus of this research, phenomenology was selected as the theoretical framework as it provided the most appropriate conceptual lens to analyse and interpret data. Phenomenology is a philosophical approach that assists the understanding of how a specific aspect of social reality, known as a phenomena, is constructed, managed and sustained (Gubrium & Holstein, 2000). A phenomena is a specific aspect of social reality and can comprise any remarkable person, object or thing (Bryman, 2012). The SunSmart Program is viewed as a phenomenon for the purpose of this study. Considering the broad application of the SunSmart Program in Australian primary schools and its impact on the practices of school environments (Cancer Council NSW [CCNSW], 2016; Sharplin et al., 2012), it is likely that individuals within the school community would have interacted with the SunSmart Program, thus requiring them to construct meaning and significance of its existence within their reality. This philosophical conceptualisation of the SunSmart Program will be explained throughout this section, which will also provide an overview of phenomenology and justify its selection as the theoretical framework for this study.

The selection of phenomenology as the theoretical framework for this study provided structure for exploring the interpretations and perspectives of individuals. Additionally, an insight into such understandings can also support the explanation of individuals’ behaviour (Barnacle, 2001; Reid, Flowers & Larkin, 2005). Social research has shown that the exploration of an individual’s perspective, i.e. understanding the world from their point of view, gives meaning to their decisions and subsequent behaviour (Babbie, 2016; Bogdan & Taylor, 1975). Understanding the decisions of individuals within school communities in regards to sun protection behaviour is a focus of this research. The extensive promotion of skin cancer prevention strategies within Australia, such as the SunSmart Program, have had cultural, social, and economic impacts on Australian society (Montague et al., 2001; Sinclair, 2006). Yet there is evidence that the SunSmart Program has not had the desired effect on the sun protection behaviour of school communities (Dudley et al., 2017; Turner et al., 2014a). Therefore, the exploration of how individuals within school communities make sense of the SunSmart phenomenon, as well as understanding how their culturally and historically conditioned environment informed their constructions of meaning, will support the explanation of their behaviour (Bryman, 2012; Heidegger, 1988).
As there are different types of phenomenology, each with similar yet distinct pathways for exploring the perspectives of human interpretation (Gill, 2014), it is essential to briefly review the origins and conceptual development of this philosophical approach to explain how it is best applied to this study. Most types of phenomenology draw from the theoretical foundations of Edmund Husserl or Martin Heidegger (Gill, 2014; Moran & Mooney, 2002). The work of Husserl informed descriptive phenomenology, which aims to describe the essential concepts (i.e. essences) of a phenomenon that make it unique (Gill, 2014). This approach requires the researcher to view individuals as self-contained subjects, thus limiting reflections as to how the surrounding world of the individual informs their construction of meaning (Finlay, 2011; Moran & Mooney, 2002). Heidegger’s (1988) interpretive phenomenology is divergent from descriptive phenomenology in this regard; as everyone is already in a culturally and historically conditioned world, their interpretations of phenomena are always contextualised by their reflections of this world. Finlay (2011, p. 52) describes this phenomenological approach by recognising individuals’ “embeddedness in the world.” Thus when subjected to a phenomena, the construction of meaning inevitably encompasses preconceptions developed by past experiences and future anticipations (Finlay, 2011; Littlejohn & Foss, 2009).

Heidegger’s interpretive focus informed Smith’s (1996) Interpretative Phenomenological Analysis (IPA), which is an approach that aims to provide a thorough exploration of how individuals make sense of their world, and also examine how unique experiences may have significantly impacted individuals’ interpretations of phenomena (Smith & Osborn, 2003). In regards to this study, the interpretative approaches of Heidegger (1988) and Smith (1996) are more appropriate than descriptive phenomenology. As detailed in the previous chapter of this thesis, there is a breadth of research which shows a number of cultural, social, economic and geographic characteristics impact the interactions between the Australian population and skin cancer prevention practices. Thus, the exploration of individuals’ perspectives of the SunSmart phenomenon must consider these characteristics.

The methodology of this study was predominantly informed by IPA, as it allowed for flexible guidelines that supported the collaborative integration of the methodological framework, and also supported a rich investigation of individuals’ experiences and context (Gill, 2014; Smith,
Reid et al. (2005) explain that IPA offers the opportunity for the researcher to explicitly enter the research process by allowing them to make inferences, albeit cautiously, based on their awareness of the contextual grounds from where the data are gathered, in order to make interpretations that discuss meaning, cognition, affect and action. Therefore, the aforementioned cultural, social, economic and geographic characteristics which impact the interactions between the Australian population and skin cancer prevention practices were considered when key stakeholders’ understandings of the SunSmart phenomenon were interpreted. Furthermore, due to its flexibility, the application of IPA has expanded into other disciplines beyond philosophy, including health (Gill, 2014; Reid et al., 2005), which validates its suitability for this study. Although, the application of IPA was altered for this research to support the integration of the methodological framework and the strategy of inquiry. As the amount of participants for this study greatly exceeded the amount recommended for IPA research, the thematic analysis techniques were adapted (Brocki & Wearden, 2006; Smith & Osborn, 2003). This is explained further later in this chapter.

The selection of phenomenology as the theoretical framework of this thesis informed a number of subsequent areas of the methodology, which will be further detailed throughout this chapter. Firstly, it is vital to recognise that phenomenology requires the researcher to interpret participants’ construction of meaning. Therefore, the interpretivist paradigm was adopted for this study as it supported the subjectivity of this inquiry. Secondly, the participants for this study were selected because of their familiarity with the SunSmart phenomenon. While the methodological framework was used to identify the specific groups of key stakeholders, phenomenology informed the selection of individuals whose interactions and experiences of the SunSmart phenomenon were most relevant (Reid et al., 2005). Finally, semi-structured, focus group interviews have been commonly advised as a data collection method for phenomenological studies as they invite in-depth and personal discussion (Gill, 2014; Reid et al., 2005): a data collection method used in this thesis.

Due to the focus on the exploration of socially constructed meaning and lived experiences of participants, phenomenology is not used to test hypotheses (O’Leary, 2014; Reid et al., 2005). As a result, this study will not present a hypothesis, nor will it attempt to measure the efficiency of the SunSmart Program. The aim of the study is to explore the interaction
between a phenomenon and human experience so that the how’s and what’s of social reality can be better understood (Gubrium & Holstein, 2000; Moran & Mooney, 2002).

Paradigm

The interpretivist paradigm was selected for this study as it is closely aligned with phenomenology (Bryman, 2012; Gubrium & Holstein, 2000; O’Leary, 2014). Interpretivism represents one of the two opposing paradigms of epistemology, which refers to the specific viewpoints of different research approaches (Bryman, 2012). While interpretivism recognises the social sciences are distinctly separate from the natural sciences, and therefore must be studied differently, positivism represents the logicality of the natural sciences, whereby human behaviour is explained via controlled research to test and develop theories (Bryman, 2012; Gill, 2014).

Phenomenology is characteristically underpinned by its emphasis on the subjectivity of individuals’ understandings and how they make meaning of the world around them (Gill, 2014; Gubrium & Holstein, 2000; O’Leary, 2014). Considering the positivist paradigm aims to explain human behaviour using objective evidence (Bryman, 2012), the selection of the interpretivism for this study was essential. The interpretivist paradigm supports the appreciation of how unique lived experiences can create diverse constructions of social reality (Littlejohn & Foss, 2009). Furthermore, the literature discussed in the previous chapter highlighted the complexity of the school environment, particularly the numerous characteristics and features which interact and create a unique operating context of the setting (Colquhoun, 2005; Keshavarz et al., 2010; Nutbeam, 1999; Rowling, 2005). A positivist paradigm would be unable to fully appreciate these intricate characteristics and features which could impact stakeholders’ understandings of the SunSmart phenomenon.

The selection of interpretivism also supported the method of inquiry. Quantitative inquiry has been traditionally given more respect than the qualitative orientation, and has been the predominant method of inquiry adopted for previous research of the SunSmart Program (Berg, 2009; Dono et al., 2014; Jones et al., 2008; Sharplin et al., 2012; Turner et al., 2014b). However, where previous research aimed to investigate a measurable relationship between the SunSmart Program and a characteristic of the school setting (i.e. policy or hat-wearing
behaviour), this study views SunSmart as a social construct, whereby stakeholders’ perceptions of this social construct are interpreted and their behaviour is better understood. Subsequently, the method of inquiry adopted for this study was distinct from previous research pertaining to the SunSmart Program.

**Method of inquiry**

The qualitative method of inquiry was selected for this study due to its close association with interpretivism and phenomenology, and also its ability to provide a rich level of detail necessary for the aims of this research (Berg, 2009; Bryman, 2012). Although qualitative inquiry has been criticised due to its subjective viewpoints and analytical protocols, it is more effective than quantitative practices when aiming to capture individuals’ points of view, examine the constraints of everyday life and secure rich descriptions (Berg, 2009; Gubrium & Holstein, 2000). Qualitative research represents the view of social reality as a “constantly shifting emergent property of individuals’ creation” (Bryman, 2012, p. 36), which is closely associated with the interpretive paradigm’s focus on reality as a construct of the human mind (Bassey, 1999; Gubrium & Holstein, 2000).

Within the social sciences, the distinction between quantitative and qualitative inquiry has long been established (Berg, 2009). While quantitative practices emphasise measurement characteristics and controlled variables to find causal relationships between specific variables, qualitative methods look to investigate the social experience; how meanings and understandings are constructed (Gubrium & Holstein, 2000). While Bryman (2012) argues that these approaches are effective within their own field and can even complement each other when performed accurately, the distinction between these two methods justifies the adoption of qualitative inquiry for this study, as the in-depth exploration of human experience, perspective, and meaning is the focus. The selection of qualitative inquiry for health promotion research is also supported by Keshavarz et al. (2010, p. 1469), who advises quantitative methods are more compatible for studying simple relationships between phenomena, “while qualitative methods are better suited to exploration of new ideas and complex, changing relationships between phenomena.”
Methodological framework

Phenomenology was selected as the theoretical framework for this study to provide a conceptual lens for an in-depth, descriptive exploration of the SunSmart phenomenon, and also inform various methodological considerations. Additionally, the Health Promoting Schools (HPS) approach was overlayed as the methodological framework to provide further direction regarding the methodological considerations of the study. Subsequently, the collective integration of the theoretical and methodological framework provided a dual lens to guide the research. The HPS concept is a comprehensive approach for school health promotion, consisting of three overlapping and interconnecting components (Lee, 2009). Chapter One introduced the HPS concept, while Chapter Two provided a critical review of literature relating to health promotion and the HPS approach. The selection of the HPS approach as the methodological framework was validated by its alignment with the SunSmart Program and phenomenology.

The principles of phenomenology advise that the most valuable participants for understanding perceptions and social constructions are individuals situated within the phenomenon’s context (Bogdan & Taylor, 1975; Bryman, 2012; Gubrium & Holstein, 2000). Furthermore, Berg (2009) advises that the application of case study methodology within a community should examine groups of interest within the community, particularly due to their unique physical and social interactions with others and the phenomenon. As the HPS framework is founded on the comprehensive health promotion principles of the Ottawa Charter (Potvin & Jones, 2011), this study uses the HPS approach to determine the context of the SunSmart phenomenon and identify stakeholder groups within the school community. Thus, the application of the HPS concept as the methodological framework ensured that relevant data was not overlooked.

There are three components integral to the context of the SunSmart phenomenon, as advised by the HPS approach; the formal curriculum, the school ethos and the school-community relationship (Rowling, 1996). To ensure that the perspectives of all relevant and key stakeholders within the context of the SunSmart phenomenon were addressed, a variety of population groups associated with each of these components were sampled. A HPS initiative requires school community ownership and collaboration among students, school staff and
community members to be effective (Inchley et al., 2007; Leurs, Jansen, Schaalma, Mur-Veeman & De Vries, 2005; Macnab et al., 2014; St Leger & Nutbeam, 2000b). These population groups were identified as the key stakeholders for this research.

As the HPS framework emphasises a whole-school approach to health promotion, a variety of key stakeholders were required to ensure the findings were a holistic representation of the entire school community. Subsequently, the student stakeholder group included students from all year levels, the community member stakeholder group included students’ families as well as residents of the community who were engaged in day-to-day school activities, and the staff group comprised classroom teachers, administrative staff and the school principal. While collaboration between all stakeholder groups is crucial to the effectiveness of a HPS initiative (Inchley et al., 2007), the significance of staff is generally emphasised due to their influence on health education within the curriculum and the day-to-day health practices within the school setting (Macnab et al., 2014; Rowling, 2005). More specifically, the staff responsible for school management are of particular importance to this study, as they would likely have significant experiences of the implementation of the SunSmart Program within their school (Cushman, 2008). Thus, the school principal, teachers and administration staff were prioritised as participants for the staff stakeholder group (Cushman, 2008; Keshavarz et al., 2010). In addition to their managerial impact on school procedures, school administrative staff have also been identified as “the main gateway to the wider school population” (Leurs et al., 2005, p. 92). The sampling of these participants will be described in the following section.

To the best of the researcher’s knowledge, the application of the HPS concept as a methodological approach has never been adopted to review school sun protection programs within Australia. The selection of the HPS framework as the methodological framework for this thesis ensures that, unlike previous research, the most influential components of health promotion within a SunSmart school will be investigated.

**Strategy of inquiry**

A collective case study was chosen for this study due to its alignment with the theoretical and methodological frameworks of the research (McIsaac et al., 2015; Nordin, 2016; Stake, 2003).
A case study is an investigation of the features and characteristics of a specific circumstance (Stake, 2000). O’Leary (2014, p. 194) states the case study is useful to study “our social fabric,” while Stake (2000, p. 439) emphasises the “thick description” of the substance of a case, which can be derived from the research methodology. As the aim of this research was to provide an in-depth exploration of meaning and behaviour to better understand how stakeholders construct meaning within their social world, case study methodology was most suitable. Additionally, as the SunSmart phenomenon has not been previously investigated via a phenomenological lens, the flexibility of case study methodology supported an extensive and adaptable strategy of inquiry (Berg, 2009; Yin, 2003).

Each individual school environment encompasses an array of unique contextual elements which impact the interactions between the population of the environment and the phenomena within the environment (Keshavarz et al., 2010; Nutbeam, 1999; Rowling & Jeffreys, 2006). Subsequently, previous reviews of the HPS approach have advised case study methodology in order to address these elements (Denman, Moon, Parsons & Stears, 2002; Kremser, 2010; McIsaac et al., 2015; Nordin, 2016). Thus, unlike previous research of the SunSmart Program, which has generally dismissed the unique contextual elements of the school environment, the application of case study methodology for this study ensured these elements were acknowledged and their impact on stakeholders’ construction of meaning was examined (Cohen & Manion, 1989).

Stake (1994) indicates that there are three different types of case studies that are applicable to different purposes. An intrinsic case study refers to one which is undertaken as the researcher is personally interested in the case (Stake, 1994). Rather than attempting to solve a problem or develop a theory, an intrinsic case study is conducted out of interest in the subject matter. An instrumental case study is conducted to provide insight into problem or issue, whereby the findings can be generalised to other areas (Stake, 1994). Although this type of case study is conducted to facilitate broader understandings, it should still be conducted with the same level of depth as an intrinsic case study. These two types of case studies are similar from a methodological perspective; they both provide a rich description of a single case. It is the purpose behind these case studies which informs their selection (Stake, 2000). However, the third type of case study offers a distinct methodological difference. The
collective case study, also known as a multiple-case study, a cross-case study, a comparative case study, and a contrasting case study, is inclusive of multiple cases (Berg, 2009; Gerring, 2006; Merriam, 2001). As described by Stake (2000, p. 437) the collective case study is an “instrumental study extended to several cases.”

This study employed a collective case study design to produce a thorough and detailed portrayal of the SunSmart phenomenon in multiple sites (Berg, 2009). Although Stake (2003) seems to discourage comparing cases, as he believes this competes with the specificity of the case study focus, he also acknowledges that the use of a collective case study can assist understanding a larger collection of cases. Stake (2003) also acknowledges that a collective case study is useful for providing valuable and trustworthy knowledge as to how a phenomenon occurs in several settings. Yin (2003, p. 46) agrees that collective case studies are useful, stating that they are “considered more compelling, and the overall study is therefore regarded as more robust.” Subsequently, the examination and comparison of the SunSmart phenomenon within multiple cases for this study will assist understanding the SunSmart phenomenon in the context of the school environment beyond the scope of this study.

Although the SunSmart Program asserts specific sun safe recommendations for all schools to follow, the actioning of the Program in individual schools may vary from these guidelines depending on the availability of resources and school community priorities. Therefore, as outlined by the principles of phenomenology, the SunSmart phenomenon could be distinct to any stakeholder within each school setting due to their unique experiences with the Program, which are dependent on their specific circumstances and contextual factors (Gubrium & Holstein, 2000). This has implications for the generalisability of the results.

The analysis and comparisons of key stakeholders’ understanding of the SunSmart phenomenon as a social construct will provide a deeper understanding of the SunSmart school, specifically in the context of the cases which are selected. Comparing each school’s commissioning of the SunSmart Program will also reflect the extent to which it can be customised to suit individual school settings. As a result, the characteristics of the case can be described and written in such detail that the audience can compare them to other cases. Thus, the collective case study will compare the cases within this study, but could also be used
by researchers to compare these cases to other cases. For example, these cases could be compared to key stakeholders’ perceptions of a different sun safety program in an alternative setting. The selection of cases will be discussed in the Data Collection section of this chapter.

**Data collection**

In order to present a rich picture of the phenomenon and gather relevant data to answer the research questions, several data sources were used. As this study is primarily concerned with key stakeholders’ interpretations of the SunSmart phenomenon, semi-structured interviews with these key stakeholders represented the main source of data. A number of artefacts from each school site were also collected and analysed to support a thick description of each case. A description of these sources, their analysis, ethical considerations and triangulation issues will be addressed in the following discussion.

**Sampling**

The school sites were purposively sampled while the participants were recruited via non-probability convenience sampling. The theoretical and methodological frameworks of this study, as well as case study methodology, informed the selection of these sampling procedures. While there is a large population of cases, i.e. SunSmart schools, only a small subpopulation of these were accessible to, and manageable for, the researcher (Stake, 2000). Thus, in order to produce findings that are generalisable to some extent, the sampling of these cases ensures they represent the larger population of cases as best as possible. The cases for this site were purposively selected and comprised contrasting demographics. Variability among the contexts of the cases assisted the researcher to determine whether different settings and environments influenced key stakeholders’ lived experiences of the SunSmart phenomenon. The participants for this research were to be those situated within the context of the phenomenon, as advised by the theoretical framework. The methodological framework identified these participants, i.e. key stakeholders, as students, school staff members, and community members. The cases and participants were sampled between January and March 2015.
The cases

The cases for this study were drawn from two purposively sampled government primary schools in the Greater Western Sydney (GWS) region. The GWS region, as identified by the Western Sydney Regional Organisation of Councils (WSROC) (2016), embraces multiple sub-regions of Sydney, located in eastern NSW. More specifically, the GWS region stretches as far west as the Blue Mountains, as far east as Canterbury-Bankstown, as far north as Hawkesbury, and as far south as Liverpool. As such, the GWS region was selected for this study as it was accessible to the researcher, and also represents one of the most demographically diverse educational regions of NSW. Figure 3.1 illustrates the geographical boundaries of the GWS.

![Figure 3.1: The GWS region, as defined by the WSROC (2016)](image)

The selection of these cases required careful consideration to ensure the principles of phenomenology and case study methodology were supported. Purposive sampling provided control over the selection of cases to ensure they represented certain attributes or characteristics required for the study (Berg & Lune, 2012). The purposive sampling method was chosen due to three main recommendations from literature; accessibility, relevance and
ensuring that the cases contrasted. Stake (2003) and O’Leary (2014) emphasise the importance of selecting cases which will allow the researcher enhanced access to their information so that a thorough and rich description can be derived without being restricted. Secondly, phenomenological studies commonly adopt purposive sampling methods to ensure the participants have had interactions with the phenomena of interest so their perceptions are relevant (Barnacle, 2001; Gill, 2014). Finally, Bryman (2012), who refers to the collective case study as a comparative case study, emphasises the importance of recruiting cases which contrast. Stake (2003) asserts that the cases for these studies should be chosen purposively to ensure variety and accessibility, as the case sample is usually too small to allow for random sampling. Therefore, purposive sampling was used in this study to recruit schools which were accessible and have identifiably contrasting characteristics, where appropriate.

The sites were selected based on a variety of contrasting demographics. The HPS framework was used to identify demographics that influenced a school community’s ability to promote health behaviour. Subsequently, in addition to lived experiences, these aspects were likely to influence key stakeholders’ understandings of the SunSmart phenomenon. These demographics included the schools’ geographic location, the number of staff and students, and the socioeconomic profile of the community (Brady et al., 2005; Whitman, 2005). The cases chosen for this study were selected based on their association with these criteria, in addition to how accessible they were to the researcher.

Schools were initially contacted via telephone, whereby an overview of the project was provided and a meeting with the principal was requested. Site A (GSPS) was the first school contacted during the sampling process due to its accessibility to the researcher as well as its unique demographic characteristics. There were several schools contacted (n=12) while attempting to purposively sample a school that displayed contrasting demographic characteristics to Site A, although the majority of these schools (n=10) declined to participate due to time constraints. A representative from another school agreed to participate in the study but withdrew prior to the commencement of data collection. Site B (HGPS) was the final school recruited for this study. As the principal of HGPS also indicated time constraints were a concern, the data collection occurred over two separate school days within a two-week period in order to minimise the length and amount of disruption to regular school procedures.
Conversely, the collection of data from GSPS involved 12 school visits, and lasted approximately two months.

A detailed description of each site will be provided in Chapters Four and Five, whereby the results of each case study will be presented. The most notable contrasting demographic information of the sampled sites included the geographic location of the sites, the number of staff employed at the sites, the number of students enrolled at the sites, and the language background of the students.

Site A, which was provided the pseudonym Grove Street Public School (GSPS), was situated in the Blue Mountains area of the GWS region. Site B was provided the pseudonym Henry Gilbert Public School (HGPS), and was situated in the Blacktown area of the GWS region. Statistics pertaining to the demographic characteristics of these school communities were obtained from a number of publically available sources:

i) The MySchool website (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2016) that reports the profiling and academic information of Australian schools,

ii) The school websites, which were certified by the NSW Department of Education (NSWDE),

iii) The Bureau of Meteorology (BOM); and,

iv) The 2011 Australian census (Australian Bureau of Statistics [ABS], 2017), which was the most recent census available at the time of this study.

The demographic characteristics of these school communities are individually detailed in Chapters Four and Five, and are compared in Chapter Six. Due to the ethical limitations surrounding the confidentiality of the school sites, the school websites were not referenced.

The participants

The participants whose perceptions are most valuable to a phenomenological study are those who have been situated within the context of the phenomena, have lived experiences of the phenomena, and who can subsequently offer meaningful perspective of the phenomena (Gill,
As these meaningful perspectives are the focus of phenomenological research, Barnacle (2001) describes participants as co-researchers, as they are the experts of their socially constructed world and they determine the extent of insight into this world. Furthermore, the sample must present a full and intriguing interpretation of the data (Brocki & Wearden, 2006). Therefore, the identification and sampling procedures of participants for this study were crucial to providing a thorough insight into stakeholders’ interpretations of the SunSmart phenomenon.

Typically, the selection of participant samples depends on their relationship with the phenomenon being studied. As the SunSmart Program aligns with the holistic approach of the HPS framework, there are a variety of individuals and populations within the school community that have perceptions of SunSmart based on their experiences of the phenomenon. The methodological framework of this study informed the identification of key stakeholders as students from all year levels, teachers, staff, families, visitors and the broader school community (NSW Department of School Education, 1996; St Leger & Nutbeam, 2000b; McIsaac et al., 2015; Rowling & Samdal, 2011). Subsequently, these groups have been identified as key stakeholders to participate in this research as they are the main individuals situated within the SunSmart context. The perceptions of all key stakeholder groups were included from each school community to provide a rich and full picture of each of the cases.

Whilst Brocki and Wearden (2006) suggest that the ideal number of participants varied, Gill (2014) advises that the exploration of individuals’ interpretations of an object should include as many participants required until no new findings are discovered. This concept is known as theoretical saturation, which refers to obtaining data until no new or relevant data are being provided (Charmaz, 2000). To reach theoretical saturation, this study utilised non-probability convenience sampling to recruit all available key stakeholders at both of the sites. Convenience sampling relies on recruiting all available participants, especially those which are easily accessible (Berg & Lune, 2012). Although Bryman (2012) is critical of this approach due to its potential for limiting the representativeness of a population and subsequently weakening generalisability, Berg and Lune (2012) indicate this strategy is useful under certain circumstances, providing the sample is appropriate for the study. By reaching theoretical
saturation via convenience sampling, the participants were representative of their population.

Students, teachers, and community members were sampled using convenience sampling methods. Due to ethical restraints and sampling efficiency, the initial contact with potential participants at each site was facilitated by the school administrative staff. At each site, the researcher and school principal collaboratively determined the recruitment strategies that were adopted so that they were appropriate, non-bias, and logistically feasible. At both sites, information packages were included in the school newsletters and presented at school staff meetings, while community members were directly informed about the research by school staff, whereby their children were also invited to participate if they were students at the school. Additionally, Site B advertised the study on noticeboards and social media. Lastly, school principals also contacted staff, community members and students directly to participate in the interviews in order to reach theoretical saturation. Once potential participants indicated their interest in the study, they were provided information statements by either the researcher or a school staff member (Appendix 1), whereby they then indicated their informed consent if they chose to participate in the study (Appendix 2). The ethical consideration of the study relating to informed consent are detailed later in this chapter.

While students, teachers, and community members were sampled using convenience sampling methods, each school’s principal was purposively sampled due to the value of their understanding. The impact of a principal on HPS programs within their school has been described as “invaluable” (Whitman, 2005, p.129) due to their leadership, management and their influential link between school and community (Brady et al., 2005; Colquhoun, 1997; Keshavarz et al., 2010). In total, there were 24 students, six staff and 17 community members sampled from Site A (GSPS), and 26 students, seven staff and 25 community members sampled from Site B (HGPS). Thus, a total of 105 participants were interviewed from the GSPS (n=47) and HGPS (n=58) school sites.

**Sources of data**

As case study research requires a thorough and in-depth exploration to provide a thick description of the cases, multiple sources of data are required. This process, known as
triangulation, is an integral aspect of case study research. Stake (2000, p. 443) describes triangulation as “a process of using multiple perceptions to clarify meaning.” While triangulation is also used to increase the validity of findings, it must be acknowledged that the very concept of socially constructed understandings and uniqueness of case study research means it is unlikely for any case study to be perfectly repeatable (Stake, 2000).

In this study, the researcher collected a range of artefacts and conducted interviews with a number of key stakeholder groups, including students, school staff, parents and community members, to examine how sun protection information was documented, communicated, experienced and understood within the school communities of each of the cases. Figure 3.2 provides an overview of the methodology, which illustrates how phenomenology and the HPS framework were overlayed to collect data from each of the case study sites. This section will describe these sources of data and justify their selection.

Figure 3.2: An overview of the methodology
Artefacts

The use of artefacts as a data source is particularly valuable for case study research as they provide a textual and/or visual insight into the case, and can supplement information obtained from other sources (Berg, 2009; Duffy, 2005). The collection and analysis of various artefacts from each of the school settings added depth to the data by supplementing the evidence collected from the semi-structured interviews (Bryman, 2012). The artefacts collected for this research included school newsletters, the schools’ sun protection and uniform policies, and field notes in the form of photographs.

The selection of artefacts required consideration of the type of data source, its relevance to the SunSmart phenomenon, its alignment with the HPS framework, and its accessibility within the cases (Berg, 2009; Hodder, 2000). The school policies and newsletters were inadvertent types of documentary evidence, which indicates they were pre-existing and not designed for the purpose of the research (Duffy, 2005). In contrast to these inadvertent artefacts, the photographs gathered by the researcher were deliberate artefacts, as they were created for the purpose of the study. While deliberate artefacts are useful for recording specific aspects of interest from a case study, inadvertent artefacts provide a more reliable insight into the context of the case (Bryman, 2012; Duffy, 2005). Bryman (2012, p. 543) explains that this is because inadvertent sources are non-reactive and therefore the researcher is less likely biased by reactive effect of addressing research parameters.

Sun protection and uniform policies

The school policy documents were identified as pivotal artefacts for this study due to the SunSmart Program’s explicit recommendations for schools to enact a comprehensive sun protection policy and also include sun protection elements within the uniform policy (CCNSW, 2015). In order for schools to join the SunSmart Program, they must implement a sun protection policy that aligns with the SunSmart Program’s 10 recommendations (CCNSW, 2015). These 10 recommendations establish how sun protection should be addressed within the school environment, such as the provision of shade, the guidelines for hat-wearing practices, and the inclusion of sun safety within the curriculum (CCNSW, 2015).
The implementation of school policy as a means to influence healthy behaviours is recognised by the *ethos* component of the HPS framework as a valuable contribution to the development of a supportive healthy school setting (Colquhoun, 1997; Rowling & Jeffreys, 2006). Therefore, in order to investigate the SunSmart Program within each school’s context, and to address the components of the HPS framework, the collection and analysis of these policy documents was essential.

The sun protection policies of each school were provided by the principal, while the uniform policies were accessed from each schools’ online website. At the time of data collection, GSPS was in the process of renewing the uniform policy. Subsequently, the uniform policy document collected for this study, which represented the most recent uniform policy of the school at the time, was technically a draft policy. Furthermore, this draft policy was the only accessible uniform policy presented on GSPS’s school website. Both the sun protection and uniform policies of the two sites were examined to determine how closely they aligned with the SunSmart Program’s recommendations, and to also investigate the accuracy of key stakeholders’ understandings of these policies.

**School newsletters**

School newsletters were collected to investigate the promotion of SunSmart information to the broader community, which is a practice advised within the SunSmart Program’s 10 recommendations and the *partnership and services* component of the HPS framework (CCNSW, 2015; Rowling, 1996). Once schools have joined the SunSmart Program, they are encouraged to promote their SunSmart membership to the community, specifically via school newsletters (CCNSW, 2015). Examining newsletters from each school setting provided insight into how SunSmart information was communicated to the broader school community.

Newsletters are specifically identified by the SunSmart Program’s 10 recommendations as one of the methods to inform the wider school community of SunSmart practices and procedures (CCNSW, 2015). Interview participants also commonly identified newsletters as sources of SunSmart information for the school community. The school newsletters were accessed via each school’s website after the interviews occurred. As the SunSmart Program is recommended to be enforced throughout the entire school year, all school newsletters that
were published within the 12 months prior to the commencement of interviews with key stakeholders were collected and analysed.

Other methods of promoting SunSmart material to the school community, as advised by CCNSW (2015), include notice boards, online, parent meetings, staff meetings, school assemblies and on student enrolment. Due to ethical restraints, artefacts could not be sourced to provide insight into the promotion of SunSmart material during teacher-parent conversations. However, some of the other communication methods, such as notice boards, were examined via photographs, as detailed in the following section.

*Photographs*

Similarly to the purpose of collecting school newsletters, photographs were taken by the researcher to provide evidence as to how SunSmart material was promoted within the physical environment of each school site. Hodder (2000) recognises that the use of documentary evidence can provide information which may differ from or may not be available in spoken form, which is beneficial for phenomenological and case study research. Upon registering membership with the SunSmart Program, schools are provided various resources from CCNSW, including a SunSmart sign, a SunSmart certificate, and SunSmart flyers, to promote their SunSmart membership (CCNSW, 2015). Collecting photographs from each school setting provided insight into how these resources were used and promoted to the broader school community. However, due to ethical considerations, these photographs had no identifiable characteristics of any individual from within the school community.

Bryman (2012) identifies three distinct roles of photographs within research; i) illustrative; ii) as data; and iii) as prompts. The use of photographs as a prompt for interviewing is typically associated with extant photography, i.e. photographs which were taken by individuals other than the researcher for a purpose other than the research (Berg, 2009; Bryman, 2012). Berg (2009) explains that this allows the researcher to examine the content of the photograph as well as the viewpoint of the photographer, which can be just as valuable. As the photographs used for this study were a deliberate source of data, and their content was bound by ethical constraints, the validity of the artefacts as a potential data source was limited. Additionally, they could not be used as prompts for the interviews as they were collected during the
interview process, not prior to commencement. This was due to access to the school sites only being provided for a short period of time.

Based on these distinct roles of photographs within research, it is important to recognise that the photographs collected for this study acted as visual field notes, taken by the researcher to provide an accurate and detailed account of the school settings. Subsequently, the photographs were used as illustrative sources of data, whereby they were primarily used to supplement the data provided from other sources. While Bryman (2012, p. 547) indicates that such a use of photographs has a relatively limited role within a study, it can “enliven what might otherwise be a dry discussion of the findings.” The collection of photographs occurred when the researcher was made aware of SunSmart advertising within the school, either by a member of the school community or via their own recognition. All photographs were obtained during the period in which interviews were conducted.

Student work samples were also requested in order to examine the content of sun safety education, which would support the examination of the teaching and learning component of the HPS framework. However these artefacts could not be obtained due to ethical and time constraints.

While the use of artefacts alone were unlikely to provide enough depth to fully understand the SunSmart phenomenon within the context of a school community, they had the potential to reveal valuable information about the underlying meanings and understandings of the SunSmart phenomenon and they supported the triangulation of data gained from other sources. In addition to collecting artefacts, semi-structured interviews were conducted to explore key stakeholder’s understandings of the SunSmart phenomenon.

**Semi-structured interviews**

Phenomenological studies are highly dependent on the descriptions of the focus phenomena by participants (O’Leary, 2014). As the perception of the phenomena is at the intersection of participant and the object itself, interviews are a recommended method of data collection (Fontana & Frey, 2000; Gill, 2014; Taylor & Bogdan, 1998). Unlike surveys and questionnaires, interviews are adaptable and reveal characteristics that written information cannot, such as tone of voice, facial expression and pausing/hesitation (Bell, 2005).
Semi-structured interviews were used as a data collection method as they allowed the interviewer a way to explore the perceptions of the participants so that the process was a “flexible collaboration” (Reid et al., 2005, p. 22). This collaboration creates an opportunity to collect rich data and provide a full picture of each of the cases (Hamilton & Corbett-Whittier, 2013). Semi-structured interviews are situated in the middle of the interview approach continuum, between two opposing approaches; highly-structured and unstructured (Berg & Lune, 2012). While the highly-structured approach provides reliability across interviews, the understandings expressed by participants cannot be explored in further depth. Barnacle (2001, p. 65) describes highly-structured interviewing as the “antithesis of what is required in phenomenological research” as the participants need to be provided the freedom to share information and insights where they deem appropriate due to their expertise of the SunSmart phenomenon. Conversely, the unstructured approach allows exploration of participants’ responses, but sacrifices reliability (Berg & Lune, 2012; Wilson and Sapsford, 2006). Given the exploratory focus of this study, semi-structured interviews ensured respondents were given the opportunity to openly discuss their experiences and perceptions, while also allowing the interviewer to probe and clarify their responses to ensure the data were not misinterpreted and also maintain reliability between interviews (Fontana & Frey, 2000).

Focus group interviews

Students and community members participated in focus group interviews, which were selected for a number of purposes relevant to the sample. Focus group interviews are conducted with multiple participants and promote discussions on a specific topic (Berg & Lune, 2012; Bryman, 2012). Yin (2011, p. 141) explains that interviews are referred to as focus group interviews as the participating individuals presumably share a common experience which is central to the research aim/s. Throughout focus group interviews, the interviewer acted as a moderator to promote discussion among all group members and prompted them to share opinions (Yin, 2011). Allowing participants to probe, argue and collaborate with each other’s responses and beliefs is particularly effective for phenomenological studies as they are likely to establish similarities and differences among their understandings of the phenomenon (Fontana & Frey, 2000). Bryman (2012, pp. 503-504) refers to this process, stating it allows participants to “collectively make sense of a phenomenon and construct
meaning around it” (Bryman, 2012, pp. 503-504). In addition to the value of participant discussion, focus group interviews also supported a large student and community member sample size, as it is recommended that interviewing any more than 10 participants from a particular population should utilise focus group interviewing methods (Reid et al., 2005).

The number and type of participants informed the organisation of the focus group interviews. Hayes (2000) advises the consideration of how individuals from different ages, sexes or ethnicities may interact when planning focus group interviews. The student participants were arranged into the stage of their education to align similar ages, cognitive levels and experiences with learning. While attempts were made to differentiate male and female focus group interviews, this was impractical due to the logistical organisation of students during school hours. The number of participants in each focus group was limited to six individuals, as additional participants may have reduced the ability and desire of some participants to express their feelings (Bryman, 2012). The amount and type of key stakeholders that participated in each focus group interview varied due to their availability. Table 3.1 illustrates the amount of focus group interviews that occurred at each site, and also the amount of key stakeholders that participated in each focus group interview. Additionally, the distribution of participants within the focus group interviews is described further in Chapters Four and Five, which present the results of the case studies that were conducted at each of these school sites.

Table 3.2: The distribution of focus group interviews at each case study site

<table>
<thead>
<tr>
<th>School &amp; Stakeholder Group</th>
<th>Focus Group #</th>
<th>Participants</th>
<th>Student Stage Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSPE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>1</td>
<td>6</td>
<td>Stages 2 &amp; 3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>6</td>
<td>Stages 2 &amp; 3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>6</td>
<td>Early Stage 1 &amp; Stage 1</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>6</td>
<td>Early Stage 1 &amp; Stage 1</td>
</tr>
<tr>
<td>Community members</td>
<td>1</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
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</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HGPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>1</td>
<td>4</td>
<td>Early Stage 1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>Stage 1</td>
</tr>
</tbody>
</table>
There are limitations associated with focus group interviews which had to be considered within the methodology of the data collection. Due to the number of participants included within a single focus group, it is possible that an individual or number of individuals could dominate the interview and limit the opportunity for other participants to respond (Fontana & Frey, 2000; Yin, 2011). As interview moderator, it is the interviewer’s role to ensure the perspective of all participants is considered. Laws (2003) recommends probing all participants for their perspective once a question has been answered. Another limitation of focus group interviews involves the social desirability effect. When participating in interviews with peers, social or professional bias can influence participants’ responses whereby they respond to a question or questions with an answer they perceive to be more socially acceptable by their peers (Travers, 2010). While this effect has drawn heavy criticism of social research, Bryman (2012, p. 228) states “it is important not to get carried away with such findings” and recommends limiting the potential for this effect to influence participants’ responses in cases where it is likely. While the influence of the effect on students and community members could not be determined, it was recognised that the relationship between staff and the SunSmart phenomenon was, in-part, professional. As management of a SunSmart school is predominantly the responsibility of school staff, exploring their understandings of the SunSmart phenomenon provided them with an opportunity to critically examine their school’s procedures. As this is a sensitive issue, staff members’ responses may have been influenced by a desirability bias if they were interviewed in the presence of co-workers (Hamilton & Corbett-Whittier, 2013).
**Individual interviews**

Due to the potential for social/professional desirability bias, school staff members were interviewed individually. The number of staff members at each of the cases was considerably less than the number of students and community members, which further supported the use of individual interviews as they could be completed within a realistic timeframe. At GSPS, there were six staff members interviewed, including the school principal (who also acted as a classroom teacher), three classroom teachers, the administration staff member, and a teacher’s aide. At HGPS, there were seven staff members interviewed, including the school principal, four classroom teachers, an administration staff member, and a librarian (who also acted as a relief classroom teacher at times).

Efforts were made to build rapport and gain the trust of the participants so they were comfortable during the interviews, which would likely improve the openness and truthfulness of their discussion (Fontana & Frey, 2000). In order to build rapport, all interviews were conducted face-to-face. This allowed the interviewer and interviewees to exchange and respond to non-verbal cues, such as smiling and eye contact, which are important for determining the pace and direction of an interview (Berg & Lune, 2009; Bryman, 2012). Conducting interviews using other methods, such as telephone interviews, are useful when participation is limited by geographic locations, but are more appropriate for structured interviews as the exploration of participants’ understandings is limited when non-verbal cues are overlooked (Berg, 2009). In addition to face-to-face interviews, Berg (2009) suggests children are less likely to feel overshadowed by the interviewer if they are accompanied by their peers, and thus more comfortable expressing their thoughts/opinions.

**Interview schedule**

The interview schedule was designed to explore participants’ understandings of all components of the SunSmart Program and HPS framework in order to investigate their perceptions of the SunSmart phenomenon. Focusing on these aspects ensured that the research questions were addressed. The interview schedule has been included as Appendix 3. All participants were asked to discuss their understandings of SunSmart and a SunSmart school, the promotion of SunSmart material, sun protection policy, sun protection education, sun protection practices, the distribution of sun protection information to the school
community, the motivations which enable or constrain the implementation of SunSmart procedures within the school community, and recommendations to improve SunSmart procedures. There were separate interview schedules for students, community members, school staff and principals to ensure that the questions aligned with each population’s perspectives, social contexts, and educational level (Berg, 2009). The following excerpts from the interview schedules provide an example of how the interview questions varied among the participant population groups. This example highlights how a question regarding sun protection education was framed:

Principal: Do you or your teachers educate students about sun protection during your lessons?

Staff: Do you educate students about sun protection during your lessons?

Students: Have you ever talked about sun protection or being sun safe in the classroom?

Community members: Have you ever talked to a teacher or to a student about what they learn in the classroom in regards to sun protection and sun safe behaviours?

The interview schedules comprised approximately 20 open-ended questions to ensure the subject matter was covered in sufficient depth within a suitable timeframe, given the typical time constraints of the school environment (Brady et al., 2005). Unlike closed questions, which limit the participants’ responses, open-ended questions allow them to fully explain and discuss their thoughts and perceptions regarding the topic without leading them to a predetermined answer, which is a more suitable approach for an exploratory study (Fontana & Frey, 2000). As the boundaries between context and phenomenon can often be difficult to distinguish, Yin (1994) advises that case studies should be performed in the reality of the phenomenon. Accordingly, all interviews occurred at the participants’ school site and were usually conducted during school hours, although some interviews occurred immediately before or after school, depending on what was most convenient for the participants. Interviews with school staff, community members and older students in Stages 2 (S2) and 3 (S3) lasted approximately 20 minutes, while interviews with younger students in Early Stage 1 (ES1) and Stage 1 (S1) were generally shorter, lasting approximately 15 minutes. Due to the
estimated length of the interview, there were several community members and school staff who declined to participate due to time constraints, although there were no participants who withdrew from the interviews once they had indicated their consent.

The structure of the questions also ensured there were no leading questions and participants were only asked to respond to a single issue at a time, unlike “double-barrelled” questions which involve a single question simultaneously probing multiple issues (Berg, 2009; Bryman, 2012). Additionally, the sequence of the questions was also taken into consideration. Berg (2009) recommends beginning the interview with a series of non-threatening questions to build rapport, followed by a process of focusing on a topic area and progressing to more sensitive questions regarding the topic until it is time to move to the next topic. This involves the combination of basic introductory questions to develop rapport, essential questions to examine the focus area, extra questions to review the essential questions and increase reliability within the interview, and probing questions to draw out more complete stories from the participants (Berg, 2009). However, the flexibility of the interview schedule allowed the discussion to be nondirective, which refers to the sequence of topics occurring out of order to the interview schedule. This practice is important as it allows the participants to vocalise their own priorities when describing their understanding of the phenomenon (Yin, 2011). Being nondirective also allows the conversation to move beyond the focal points of the interview schedule to a relevant topic which had not originally been included within the planned discussion (Yin, 2011). While the specific order of questions is important to a structured interview to maintain high reliability across interviews, an important aspect of semi-structured interviewing is probing and prompting participants’ discussion, particularly when exploring their understandings of a phenomenon (Bryman, 2012).

**Data analysis**

The following section will describe the methods which were used to analyse the data. The analysis of studies which adopt the practice of phenomenology and case study methodology are typically very thorough as they are “underpinned by a process of coding, organising, integrating and interpreting of data, which is detailed and labour-intensive, but also very rewarding” (Reid et al., 2005, p. 22). While the interview data were analysed using thematic
analysis techniques, the analysis of artefacts involved a combination of content analysis and thematic analysis techniques.

**Content analysis**

A content analysis was conducted to provide a preliminary analysis of the school policies and newsletters collected from each site. Bowen (2009) advises that content analysis techniques can be used to provide an effective superficial examination of information, whereby thematic analysis techniques can then be applied to conduct a more thorough examination and interpretation of relevant information. While the sorting and coding of text provides little value for a phenomenological study, the objectivity of a content analysis can support the identification of meaningful and relevant passages of text, as well as minimising potential bias and misinterpretation of content (Bowen, 2009; Bryman, 2012).

While this study has adopted an interpretive paradigm and qualitative method of inquiry, a content analysis is typically a quantitative approach as it aims to objectively and systematically identify specific characteristics of a document (Berg, 2009). As such, some qualitative research experts (Silverman, 2000) have discouraged the use of content analysis as it diminishes the interpretive analysis of the data. However, Bowen (2009) explains that such criticisms usually overlook the amount of content included in documents and artefacts which may be irrelevant to the phenomenon of interest. As the sample of newsletters from each site comprised all newsletters that had been published 12 months prior to the commencement of the interviews with participants, there was an excessive amount of information included in these artefacts that was irrelevant to the research focus. Thus, as suggested by Bowen (2009), a content analysis was used to initially review the documents and identify pertinent information. Once the relevant areas of the artefacts had been identified by the content analysis, a thematic analysis was conducted to provide a more careful, focused review of the document.

A list of predetermined key words and phrases relevant to the SunSmart phenomenon was required to conduct the content analysis, as searching for predetermined key words and phrases supplements comparisons between the artefact types and the artefacts from each site (Bowen, 2009). The SunSmart Program was the primary source of these predetermined
key words and phrases (CCNSW, 2015). A review of previous studies that have examined SunSmart policy in schools supported the identification of additional key words and phrases which were not included in the SunSmart Program (Dono et al., 2014; Jones et al., 2008; Turner et al., 2014a). A full list of the key words and phrases which were used to conduct the content analysis of artefacts are included as Appendix 4. A content analysis of the schools’ sun protection policies, uniform policies and newsletters was performed by searching each of these artefacts for all key words and phrases. The locations of key words/phrases within the artefacts were identified as pertinent information, and would subsequently be included in the thematic analysis. The documents were also reviewed visually in their entirety by the researcher following the content analysis to ensure all relevant information had been identified (Bowen, 2009).

Following the content analysis, which was used to identify and separate pertinent information, elements of an interpretive thematic analysis were integrated to provide a more thorough examination of the artefacts (Berg, 2009; Bowen, 2009). A thematic analysis produces emerging themes via a careful process of reading and re-reading of the data (Bowen, 2009; Fereday & Muir-Cochrane, 2006). Yin’s (2011) Five-Phased Cycle was used as a framework for the thematic analysis, and is subsequently detailed in the following section of this chapter.

As sun protection policy represents an integral component of the SunSmart Program, and CCNSW provides recommendations as to how sun protection policy should be structured, another level of analysis was conducted with this data source. The themes established in each school’s sun protection policy from the combination of content and thematic analyses were then compared with the SunSmart Program’s 10 recommendations for sun protection policy to determine how closely these policies were aligned.

The production of photographs was deliberate, rather than extant, meaning that the photographs were taken for the purpose of research (Bryman, 2012). These visual field notes acted as a supplementary data source to support the researcher’s recollection of the school environment (Berg, 2009), and how key stakeholders’ perceptions of its existence constructed their understandings of the SunSmart phenomenon. Thus, they were not analysed as a source of data, but rather used as a means of reliability to support the findings of other data sources.
**Thematic analysis**

A thematic analysis was used to extract the key themes from the data which are crucial to the description of the phenomenon (Bryman, 2012; Fereday & Muir-Cochrane, 2006). Common topics, concepts or focuses in the responses, which are coded using intra- and inter-textual analysis to decipher themes. Intra-textual analysis occurs within each of the participant sample groups, while inter-textual analysis occurs across each of the participant sample groups, including multiple participant groups from the same population (Maykut & Morehouse, 1994).

Although the transcriptions of the interview recordings were used as the primary reference point for the interviews, the recordings were also reviewed to ensure any slang, dialects, pauses or other features which affect the context of the responses were noted (Berg, 2009). The student participants’ responses could not be categorised by sex. Due to the vocal similarities of boys and girls prior to puberty, these participants could not be distinguished, with full validity, from an audio recording. Given the importance of inter-textual analysis, it was determined that sex would not be included as a variable for any participant group.

While the use of phenomenology and thematic analysis are conceptually aligned (Barnacle, 2001; Gill, 2014; Reid et al., 2005), the selection of a specific thematic analysis procedure was challenging due to the conflicting recommendations of the literature. There were concerns among researchers that traditional qualitative thematic analysis techniques could reduce the holistic representation of participants’ lived experience, and subsequently the depictions of the phenomenon. Researchers have advised those utilising IPA methodology avoid using traditional qualitative thematic analysis techniques for this purpose (Finlay, 2011; Smith & Osborn, 2003). However, this recommendation is predicated on the presumption that IPA methodology had been conducted precisely, which typically involves a small sample size and single case study (Brocki & Wearden, 2006; Smith & Osborn, 2003), unlike the hybrid IPA methodology of this study which involved multiple cases and over a hundred participants. In contrast, Barnacle (2001, p. 66) advises the simplification of phenomenological analysis techniques, and argues that the process of phenomenological inquiry is not a matter of following strict analytical guidelines, but instead a “philosophical stance that values the nature of human existence and the personal meaning of experience.” In conjunction with this
statement, Yin (2011) agrees that the focus of all qualitative research is on capturing and interpreting the language of participants, and therefore maintains that it is the rigor demonstrated throughout the analytic process which is most important. Consequently, this study adopted Yin’s (2011) Five-Phased Cycle as it supported the rigor of the thematic analysis and also the thorough exploration of stakeholders’ understandings. When this approach is applied effectively, the interpretation of data moves away from researcher-centric perspectives and preconceived expectations of data analysis, and instead provides a thick description that portrays the people, events, and actions within their locally meaningful contexts (Yin, 2011). This emphasis on thick description and context-specificity clearly aligns with the aim of this research.

Berg (2009) also suggests that phenomenological research should avoid coding procedures to analyse data as the process of condensing and categorising participants’ responses could obscure the essence of an account. However, this viewpoint is based on the philosophy of phenomenology developed by Husserl, which was previously described in this chapter. Husserl believed phenomenological studies should be absent of any past scientific knowledge or philosophical beliefs (Moran & Mooney, 2002). Contrasting Husserl’s philosophy of phenomenology, this study uses Heidegger’s interpretive phenomenology, which recognises the importance of considering the social and cultural background of the phenomena (Littlejohn & Foss, 2009). Thus, the social and cultural background of SunSmart, and the associated concepts of skin cancer prevention and sun protection, will be included.

**Yin’s Five-Phased Cycle of analysing qualitative data**

Yin’s (2011) Five-Phased Cycle involved compiling, disassembling, reassembling, interpreting and concluding, as illustrated in Figure 3.3. This cycle supports analytic rigor by organising and interpreting data in such a way that promoted constant comparisons, rival explanations, and the researcher’s role as an interpreter. This section will detail how Yin’s (2011) Five-Phased Cycle was used to analyse the interview data, and also how it was applied as a framework for the thematic analysis of sun protection policy, uniform policy, and newsletter artefacts.
Figure 3.3: Yin’s (2011, p. 178) Five-Phased Cycle for Qualitative Data Analysis

The first phase of Yin’s (2011) Five-Phased Cycle involves compiling data into appropriate databases. In this study, there were two databases constructed to differentiate the artefacts and the interview transcripts. Within each of these databases, the source of the data was clearly labelled to distinguish where it had originated. The artefact database comprised information pertinent to the SunSmart phenomenon, as identified by the content analysis. The interview database was constructed to differentiate the three types of stakeholder groups at each site and responses to each interview question. In addition to interview transcripts and artefacts, field notes (i.e. photographs) were compiled into a database to assist the researcher to recall the context of each case.

As there was a large amount of data, the systematic organisation of the databases supported the formal analysis process as it ensured the data were easily accessible and less likely to be overlooked (Bryman, 2012; Yin, 2011). The structure and organisation of these databases ensured the data were illustrated clearly to assist the intra- and inter-textual analysis procedures. Throughout this process, the researcher continually reviewed the artefacts, interview recordings, interview transcripts and field notes to familiarise themselves with the data, as advised by Yin (2011).
The second and third phases required data to be disassembled into smaller fragments then reassembled into categories of similar fragments (Yin, 2011). These fragments are referred to as codes, while the amalgamation of codes is known as themes (Berg & Lune, 2012; Yin, 2011). Disassembling and reassembling the data was repeated alternatively multiple times to ensure the categorisations of themes were an accurate depiction of the codes repeated throughout the artefacts and interviews (Yin, 2011).

The overall purpose of coding data is to methodically rearrange specific items, such as participants’ explanations and perceptions, into categories that highlight the similarities and differences between these items, thus providing a deeper insight into these features (Bryman, 2012; Yin, 2011). Implicit coding (also known as latent coding) was applied, which refers to the categorisation of visible and suggested content whereby various responses can suggest similar themes using different words or phrases (Berg, 2009; Sproule, 2010). Although implicit coding is more subjective and less reliable than explicit coding, its ability to identify suggested content allows for a far greater depth of analysis, which is necessary for examining participants’ interpretations and also the emphasised areas of the artefacts (Berg, 2009; Bowen, 2009; Sproule, 2010).

Once the data were disassembled into codes, the data were reassembled into themes. Yin (2011) advises the use of an array, which allows a more formal reassembly process as the data are considered under multiple arrangements of themes until one such arrangement emerges which satisfactorily addresses the requirements of the research. There are two types of arrays for reassembling data, referred to as hierarchies and matrices. Both types of arrays were used cooperatively for this study (Yin, 2011). Hierarchies are used to reassemble data under multi-level concepts, inclusive of similar and dissimilar themes. Broader concepts are positioned at one end of the hierarchy, which are used to pull together similar themes at the level below, and so on (Yin, 2011). As multiple hierarchies can be created, links between concepts can be established through each individual hierarchy, and across multiple hierarchies, which detail different groupings of data (Yin, 2011). Matrices use a form of matrix to reassemble the data, which is typically a table of rows and columns (Yin, 2011). Once the rows and columns of a matrix have been allocated a specific dimension of the data, the cells of the matrix are used to organise items relevant to the intersection of these dimensions.
As this study involved the multi-level analysis of concepts and the analysis of interactions between different dimensions, hierarchies and matrices were both used to reassemble the data. For instance, hierarchies were used to examine how the HPS approach had been addressed by each site, as it required an analysis of the components and sub-components of the HPS framework, and contrasting each site’s enactment of these components. Whereas matrices were used to investigate the similarities and differences between the perceptions and understandings of participants from each population group and school site. The analysis of artefacts only required the use of a matrix as it was not as complex as the interview data, and the use of pre-determined key words and phrases from the content analysis facilitated the categorisation of the data into a table.

The fourth phase of Yin’s (2011) Five-Phased Cycle is the key analytic segment of the cycle, known as interpreting. As this phase provides a basis for the understanding of the study, it is vital that it includes a thorough and comprehensive interpretation of the data, but does not overreach on the findings available from the quality of the data (Yin, 2011). Given the exploratory and descriptive focus of this study, the interpretation of interview data focused on portraying the participants’ understanding of the SunSmart phenomenon within their local context, rather than a researcher-centric perspective which is adopted when using research to promote some form of action (Yin, 2011). Similarly, the interpretation of the artefacts focused on exploring the themes which were identified to portray how the SunSmart phenomenon was documented and communicated within the school community. Thus, the interpretive phase created a new narrative from the themes categorised in the previous phases of the cycle (Yin, 2011).

The interpretive phase of this study adopted the phenomenological lens of emphasising lived experience. This process is not a rule-bound process, but rather a free act of seeing meaning in order to establish new insights and understandings about the world of the phenomenon under inquiry (Barnacle, 2001; van Manen, 1990). Subsequently, a rich description of sense making becomes the focus of interpretation (Finlay, 2011). For this thesis, the results of the interpretive phase of data analysis were distinguished for each case site. Chapter Four presents the results of the interpretive phase of data collected from GSPS, while Chapter Five presents the results of the interpretive phase of data collected from HGPS.
Following the interpretation of data, the final phase of Yin’s (2011) Five-Phased Cycle involves drawing conclusions from the previous analytical phases to explain how the findings of the research have significance and implications beyond the scope of the study. While Yin (2011) suggests that conclusions can include predictions of the future or new theories about human social behaviour, these are not the focus of phenomenological research. While these conclusions are possible, this study aims to explore how individuals within a context understand a specific phenomenon and the implications these understandings may have on health promotion within school communities. Chapter Six presents a discussion and comparison of the data collected and analysed from each school, and also provides the conclusions of the study.

**Triangulation**

It is generally accepted that a single data collection method is unable to effectively draw conclusions of a phenomenon without the likelihood of error, which has resulted in recommendations for the adoption of multiple data sources to provide a richer, more accurate illustration of the phenomenon being studied (Berg, 2009; Stake, 2000). This concept is known as triangulation, and is strongly advised for studies investigating a particular social phenomenon (Berg, 2009; Bryman, 2012; Reid et al., 2005).

In this study, triangulating the social reality of the SunSmart phenomenon was facilitated by recruiting a large sample of participants, which encompassed a number of stakeholder groups (i.e. students, staff, parents, and community members) across multiple case sites (Bell, 2005; Stake, 2000). Reid et al. (2005) acknowledges that, while IPA typically involves a small sample of participants, larger sample sizes support the exploration of a phenomenon from multiple perspectives, which subsequently provides a more detailed and multifaceted account of how the phenomenon is experienced. As the data collection continued until theoretical saturation occurred, the likelihood of misinterpretation/error was diminished (Stake, 2003).

Additionally, the collection of relevant artefacts from each site provided documentation of school procedures for which the stakeholders’ interpretations of the SunSmart phenomenon were compared. For instance, stakeholders’ interpretations of school policy were compared to the policy guidelines collected from their school to examine the similarities and differences
between documented procedure and stakeholders’ constructions of what they deem meaningful. Such comparisons, which can also occur via the school newsletters, increased the triangulation of data by exploring the enactment of the SunSmart phenomenon from a formally documented perspective.

**Trustworthiness of the data**

As the interpretivist paradigm requires the researcher to explain the meaning of participants’ perspective of their social world, it involves more subjectivity than the positivist paradigm (Bryman, 2012). Subsequently, it is viewed as a less precise and reliable research method as it is more prone to bias (Berg, 2009; Bryman, 2012). Denzin and Lincoln (2000, p. 8) explain that such criticisms have led to allegations that qualitative researchers “have no way of verifying their truth statements,” and conclude that the debate among researchers regarding the paradigm will likely continue. Nonetheless, these criticisms emphasise the importance of establishing criteria for evaluating social research (Bryman, 2012).

While subjectivity is indeed a feature of interpretivism, its potential detrimental impact on the credibility of research can be minimised by enacting a number of rigorous methodological considerations (Barnacle, 2001; Reid et al., 2005). The most prominent criteria for evaluating social research includes reliability, replication and validity. This section will detail how these criteria were addressed and their implications on the findings of this research.

**Reliability**

Reliability refers to the ability of a procedure to consistently produce similar results under similar circumstances (Bell, 2005). As the artefact analysis process involves a content analysis, which is typically quantitative procedure, the reliability of this research component is high. Bryman (2012, p. 304) identifies the transparency and reliability of a content analysis as one of its biggest advantages. Finnegans (2006, p. 146) states that, assuring that the document is relevant to the study, it can “lead to more accurate and insightful results.”

As the interviews seek the perceptions of the participants, the reliability of responses could be questionable. Given that an individual’s perceptions, opinions and beliefs are influenced by circumstances in their day-to-day life (Bell, 2005), it is entirely possible that a single
participant may provide contrasting responses to an interview question on different days depending on the circumstances that had impacted them leading up to the interview. From this perspective, the reliability of the research is minimal as the stability of findings is not guaranteed.

Nonetheless, the internal reliability of participants’ responses, which refers to the consistency of their responses using multiple indicators, was considered (Bryman, 2012). To increase internal reliability within the participant sample, questions of importance were asked more than once within the same interview, but worded uniquely. Additionally, as the number of participants within this study provided theoretical saturation, all data relevant to the perceptions and understandings of key stakeholders was collected from the interviews with key stakeholders, and therefore encompassed a reliable representation of the cases at the point in time in which they were studied.

**Replication**

Replication is very similar to reliability in that it refers to the ability of a study to be replicated (Bryman, 2012). While this feature has been identified as a predominant criteria for evaluating research, it is predominantly a quantitative measure and is rarely addressed in qualitative research (Bryman, 2012). As detailed in the previous section, individuals’ perspectives are prone to adjustment, particularly those within a complex adaptive system such as a school (Keshavarz et al., 2010). Considering that the objective of case study research is to holistically investigate the nature, background, setting and relevant contexts of a case at a specific point in time (Stake, 2000), it is entirely possible that the findings from one point in time would be distinct from the same case at another point in time. Therefore, the replication of this study within the same two case sites using the same participants has the potential to yield distinct results.

**Validity**

Validity indicates the accuracy of the conclusions generated from the research (Bryman, 2012). There are a number of types of validity which have been considered for this study, including measurement validity, internal validity and external validity. Measurement validity reflects the reliability of the data collection methods adopted, as unreliable methods are likely
to provide invalid results, and is predominantly a quantitative validity consideration (Bryman, 2012). Nonetheless, the use of semi-structured interviews with a number of stakeholders for the purpose of obtaining varied and relevant perceptions has been regularly advised as the ideal data collection method for such research (Bryman, 2012; Gill, 2014; Smith & Osborn, 2003).

Internal validity relates to causality between research variables, specifically whether the conclusions of the study are accurate within the confines of the study (Bryman, 2012). Much of the critique of social research is due to the subjectivity of data collection and analysis, which limits the validity of the research approach as it cannot devise an objective outcome (Berg, 2009; Bryman, 2012). This issue is clearly evident in this study. For instance, a document is typically created to communicate a particular message or viewpoint, and the perceptions and potential bias of the author means that they cannot be guaranteed objectively accurate (Bryman, 2012). While Berg (2009) recognises that these subjective views, as imprinted by their creators, are the essence of what makes artefacts useful for case study research, phenomenological bracketing was used by the researcher throughout the thematic analysis process to minimise the risk of interpretive bias. Bracketing requires the researcher to examine the phenomenon from an unbiased perspective by removing any preconceptions or assumptions (Bryman, 2012; Gill, 2014). The concept of bracketing is interchangeable with phenomenological reduction, which Gearing (2004, p. 1430) describes as “the scientific process in which a researcher suspends or holds in abeyance his or her presuppositions, biases, assumptions, theories, or previous experiences to see and describe the phenomenon.”

The process of phenomenological bracketing in this research, and the associated boundaries of its integration, involved three main phases: i) abstract formulation; ii) research praxis; and iii) reintegration (Gearing, 2004). The initial phase simply involved the explicit establishment of the methodological procedures, specifically the epistemological position, adopted by the researcher (Gearing, 2004), which have been detailed throughout this chapter. Research praxis encapsulates the core elements of bracketing by establishing the focus of bracketing for the research, which then supports the selection of methods to address this focus (Gearing, 2004). As this research was designed to explore the underlying essence of the SunSmart phenomenon, the researcher’s internal presumptions needed to be bracketed out during the
artefact and interview analyses (Gearing, 2004). These internal presumptions that were bracketed out by the researcher included personal knowledge, culture, experiences, values, and academic perspectives, such as their personal views on education, health promotion, and skin cancer prevention strategies. Typically, the boundaries of this bracketing approach are left undefined as the process represents the researcher’s identification of possible bias and specific intentions to remove such bias during the analysis of data, rather than any rigid guidelines (Gearing, 2004). Finally, the data from the bracketing process is reintegrated into the broader research investigation for interpretation (Gearing, 2004). As the bracketing process has been applied independently to each primary source of data (artefacts and interviews), the analysis results of these data sources will be presented individually within each case study (Chapters Four and Five, respectively) before being reintegrated within the interpretive phase of the thematic analysis (Chapter Six).

However, it is important to highlight the concept of bracketing has been refuted among some philosophers as it seems counterintuitive to interpret lived experience without an appreciation of the phenomenon’s, or researcher’s, context (Cohen & Omery, 1994; LeVasseur, 2003). This criticism was taken into consideration when selecting the type of bracketing approach used for this research. Specifically, the researcher acknowledges that their preconceptions and assumptions may have had a minor influence on the analysis of data, despite the use of bracketing, and has included these in the Research limitations, which are presented in Chapter Six.

The main concern for internal validity regarding this study is associated with the accuracy and depth of participants’ responses within the focus group interviews. Although focus groups can be effective in inducing animated responses and discussions from participants, the lack of confidentiality among participants may amplify feelings of exposure and affect the validity of their responses. This can result in the social desirability effect, whereby participants adjust their responses to appease other participants or the interviewer (Bryman, 2012). This can include concealing controversial or personal information (Berg, 2009; Walter, 2010), or exaggerating school procedures and/or characteristics due to their vested interest in the school setting. In regards to the specific key stakeholder groups identified for this study, McIsaac et al. (2015) suggested social desirability bias is most likely to occur among teachers
due to their employment status. In order to minimise the likelihood of social desirability bias among teachers, these participants were interviewed individually. Furthermore, in an attempt to minimise the social desirability effect among all key stakeholder groups, the interviewer developed rapport with participants prior to the commencement of interviews to gain their trust, and also requested participants sign a group agreement to maintain confidentiality. Although not enforceable by law, this honourable agreement is designed to provide participants an opportunity to reflect on the issues of confidentiality (Berg, 2009).

External validity refers to the generalisability of the results, which infers whether the findings of the study may be applicable to other settings. The research design of this study, specifically case study methodology, does not prioritise the generalisability of the findings. As explained by Stake (2000, p. 448), “the purpose of a case report is not to represent the world, but to represent the case.” The complex history, specific characteristics, and contextual substance of a particular case which provokes intrigue and exploration also advocates a distinct uniqueness which constrains any explicit comparisons between cases. It is important to recognise the complexity of school-based health promotion initiatives, which are heavily influenced by a school setting’s contextual factors, and ensure that unique factors should be distinguished, rather than diminished (Colquhoun, 2005; Durlak & DuPre, 2008; Keshavarz et al., 2010; Nutbeam, 1999; Rowling & Samdal, 2011). Accordingly, Stake (2000) acknowledges that the commitment to generalise can damage the study when the researcher’s attention is drawn away from understanding the important features of the case itself.

However, other researchers have suggested that, while the results of a case study are not broadly generalisable to entire populations, it is likely that the issues faced by individuals and groups within the setting of the case are likely experienced by those in other, similar cases (Berg, 2009; Simons, 2009). Considering 80% of NSW primary schools are registered members of the SunSmart Program (CCNSW, 2016), it is likely that there are other SunSmart schools with similar contexts to the two case sites sampled for this study. Therefore, the investigation of the SunSmart phenomenon across multiple cases establishes whether there are common (or uncommon) characteristics that can be generalised to some extent, providing the appreciation of each case as a unique entity is prioritised (Stake, 2000). The generalisability
of the results was further improved by purposively sampling two school sites located in different areas of NSW, which also demonstrate diverse demographic characteristics.

Subsequently, this case study was not primarily aiming to produce results generalisable for a variety of sites, but instead examine how the SunSmart Program can be implemented in schools and interpret perceptions regarding its operation. These findings provided insight as to what issues may be involved with becoming/improving/sustaining SunSmart credibility and why these issues may occur (Berg, 2009). Lastly, the unique methodology of this research, which was used to provide a comprehensive exploration of the SunSmart phenomenon that had not been previously achieved, may inform future research in the area that may aim to produce more generalisable results (Stake, 2000).

**Ethical considerations**

**Informed consent**

Informed consent refers to the process in which a potential participant is provided information on the aims and purpose of the research, specifically regarding their personal contribution, and that their involvement is entirely voluntary (Berg, 2009). As the involvement of participants is voluntary, they should also be made aware they have a right to withdraw from the study at any time (Bryman, 2012). For this study, each school principal was required to provide informed consent for their respective school to be sampled as a case study site, and all interview participants were required to provide informed consent prior to their participation in the interview.

Information statements were provided to potential participants to inform them of the study design, their voluntary involvement, and their rights and contributions as participants (Appendix 1). Participants were then required to sign and return consent forms (Appendix 2) to the researcher as evidence they had read the information statements and provided of their informed consent. The Charles Sturt University (CSU) Research Data Management Policy requires all data pertaining to research, including signed consent forms, to be kept by the principal investigator under careful guard for a minimum period of five years from the date of publication. Following this timeframe, the consent forms will be destroyed.
As the sample of interview participants involved students, who were under the legal age of consent, their consent had to be obtained by their legal guardian (Berg, 2009). Additionally, due to the complexity of the research design, the information statements for younger students were designed to be reviewed by their parent/guardian, who were then to explain the information to their child.

**Anonymity and confidentiality**

Anonymity and confidentiality represent two distinctive, albeit similar, characteristics that refer to the identification of individuals, groups and/or institutions that were involved in the research (Bell, 2005). *Anonymity* means that the identities of the subjects are not known at any stage of the research, even to the researcher, whereas *confidentiality* infers that the researcher was aware of the identity of the participants but removes any elements from research records that may indicate the identities of the participants or schools (Berg, 2009).

As the researcher was fully aware of the school sites and individuals that comprised the subjects of the study, anonymity was not possible. Subsequently, a high degree of confidentiality for the subjects was prioritised. Berg (2009, p. 92) recognises that the most likely form of disclosure of identifiable information is the result of “careless or clumsy handling of records and data” which makes it available to the public. To prevent this issue, all data and consent forms were securely stored and only accessible to the researcher.

Another precaution that was taken to uphold confidentiality involved the selection of information that was publicised. As the case study of each site required a thorough examination of each site’s context, the characteristics of the school site and surrounding community have been presented. These characteristics include the student population, staff employment, the ethical and religious background of the surrounding communities, and other relevant demographic features. As the region of each school has been identified, these school community characteristics may assist narrowing the location of the school sites. However, they will not support the specific identification of either school site due to the number of schools within these regions. As there are more than 10 schools within a 20 kilometre radius of each of the school sites (Australian Curriculum, Assessment and Reporting Authority
[ACARA], 2016), it is implausible that the school community characteristics will be sufficient to identify the school sites.

In order to further increase confidentiality, the characteristics of the school sites that were sourced from the MySchool website (ACARA, 2016) were presented in a non-identifiable manner, meaning the general substance of the characteristics was portrayed without depicting any specific quantities or percentages. Additionally, the names of all subjects (i.e. schools and participants) were allocated pseudonyms to uphold their confidentiality. Finally, while the school websites have been examined to provide insight into the promotion and communication of sun safety and general school procedures, these websites have not been referenced.

Finally, as the focus group interview participants were aware of each other’s identities, and these individuals were not bound by the same ethical standards as the researcher, there was a possibility that the focus group participants could jeopardised other participants’ confidentiality. To reduce this possibility, participants signed an honourable group agreement to maintain confidentiality, and were also given further opportunity to withdraw from the research if they were concerned about their confidentiality or did not believe they could keep the responses of others confidential.

**Ethical clearance**

The CSU Human Research Ethics Committee (HREC) approved this study on May 13th 2014. The CSU HREC approval number is 2014/062.

A State Education Research Applications Process (SERAP) was also submitted to the NSWDE, which was approved on July 3rd 2014. The SERAP approval number is 2014148.

**Chapter summary**

Chapter Three has explained the methodology adopted for research design of this thesis, as well as procedures that were adopted to collect and analyse data. Phenomenology acted as the theoretical framework to support the exploration of the SunSmart phenomenon from the perspectives of individuals whose interactions with the SunSmart Program were most significant. These individuals, known as key stakeholders, included students, school staff
(teachers, administrative staff members and the school principal), students’ parents and community members. The identification of these key stakeholder groups was supported by the HPS framework, which was adopted as the methodological framework of the study. Qualitative research methods were adopted due to the interpretivist paradigm of phenomenology.

A collective case study was conducted to investigate the features and characteristics of the SunSmart phenomenon within two demographically diverse primary school sites. Key stakeholders from both sites were interviewed to explore their perceptions and interpretations of the SunSmart phenomenon, while a number of relevant artefacts were sampled from each site, including school policy documents, school newsletters and photographs, to provide additional depth and insight into the cases. The artefacts were analysed using a combination of content and thematic analysis techniques, while the interview data were analysed using a thematic analysis. A collective case study was adopted so that the findings from each case study could be compared, and the contextual features that impact the implementation of the SunSmart Program within a school setting could be fully appreciated and understood.
Chapter Four: Results of the case study of Grove Street Public School (GSPS)

Introduction

Chapter Four is the first of two results chapters, and details the findings resulting from the case study conducted at Grove Street Public School (GSPS). As GSPS represents one of the two case studies that will be examined for this thesis, Chapter Five will act as the second results chapter and detail the findings relating to the remaining school site. Following these two results chapters, Chapter Six will present the implications of this research by providing a detailed examination and comparison of the findings from both case studies.

This chapter will be presented by firstly providing an overview of the GSPS setting to establish the context of the school community. Secondly, the findings of the analysis of the artefacts collected from the site will be reported. These artefacts included the school’s sun protection policy, uniform policy and newsletters. Finally, the results of the qualitative analysis of the interviews with key stakeholders from the GSPS community will be examined. The term “key stakeholders” refers to students, school staff and community members.

Case overview

This section presents a snapshot of the GSPS community at the time of data collection using the most recent and relevant available data. This snapshot includes an overview of the student population, the school staff, and the local community. In order to present such a thorough overview of the GSPS community, relevant data were sourced from the Australian Bureau of Statistics (ABS), the Bureau of Meteorology (BOM), and the MySchool website (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2016). In addition to these sources of data, any information relevant to the depiction of the GSPS community that was uncovered by the analysis of artefacts and interviews with key stakeholders was also included. This overview will assist the portrayal of the GSPS community, including the identification of relevant contextual features, and also determine the extent to which sun exposure risks affect the community’s population. However, as the MySchool website is a publically accessible website, all information that was collected from this data source was
purposively generalised, meaning that no specific quantities or percentages are portrayed in order to uphold the confidentiality of the school.

The school setting

Situated within the Blue Mountains area of the Greater Western Sydney (GWS) region, GSPS is a government, K-6 public school. During data collection, there were between 50-100 students enrolled at GSPS; approximately 20% of whom indicated a language background other than English, and less than 5% who identified as Indigenous (ACARA, 2016). The Index of Community Socio-Educational Advantage (ICSEA) is used by the MySchool website (ACARA, 2016) to compare students’ achievements in the National Assessment Program – Literacy and Numeracy (NAPLAN) across Australian schools. The data presented on the MySchool website indicates that the ICSEA distribution of students at GSPS was relative to the Australian average, albeit slightly higher (ACARA, 2016).

There were fewer than ten full-time equivalent staff, including teaching and non-teaching staff employed at the site (ACARA, 2016). The term “non-teaching staff” refers to those employed at GSPS who had non-teaching duties, such as an administrator. The school website, which has not been referenced for confidentiality purposes, indicates that the teachers maintain the highest integrity and concern for children’s wellbeing. As skin cancer prevention is a matter of children’s wellbeing, this statement suggests that teachers at this school should perceive sun protection as a matter of importance. Additionally, there are two segments regarding sun protection explicitly outlined on the school website:

Our school takes sun safety seriously. Children learn about how to protect themselves from the sun’s damaging UV [ultraviolet] rays, and our school implements a range of sun protection strategies. Sun sense information in community languages.

We teach students about the damaging effects of the sun and promote sun safety practices.

These segments also included hyperlinks to the health and wellbeing section of the NSW Department of Education website ([NSWDE], 2014), which promotes the Sun Safety for
Students guidelines (NSWDE, 2013) and also offers the option to view the site in different languages.

The school community

The 2011 Australian census was used to review the demographic information of the surrounding community (ABS, 2017). As the 2011 census was the most recent census available at the time of this study, the data provided the most up-to-date profile of the population of the GSPS community (ABS, 2017). The population of the community surrounding GSPS was less than 1000, which included a relatively equal male-to-female distribution (ABS, 2017).

When the demographics of the GSPS community were compared to the New South Wales (NSW) average, a number of notable distinctions became apparent. These distinctions may have influenced the community’s perspectives and understandings of the SunSmart phenomenon. In comparison to the NSW average, the GSPS community was relatively culturally and ethnically homogenous. For instance, the most frequently identified ancestries among the GSPS community were English, Australian, Irish and Scottish, and there was a higher rate of individuals born within Australia compared to the NSW average (ABS, 2017). Furthermore, there was a considerably higher likelihood that English was the only spoken language (ABS, 2017). In regards to socioeconomic status, employment records indicate that individuals within the GSPS community were less likely to work full-time and more likely to work part-time, compared to the NSW average, and had a lower median income per household (ABS, 2017). This statistic is notable as it has the potential to affect individuals’ ability to purchase health-related goods and services, such as sunscreen or skin cancer screening consultations.

The World Health Organization ([WHO], 2003) advises individuals should use sun protection practices when the UV Index is higher than three, and also advises individuals avoid sun exposure during midday hours when the UV Index is higher than eight. The BOM indicates that the geographical location of the GSPS community annually experiences an average UV Index of approximately seven (BOM, 2017). More specifically, BOM (2017) data indicates the average monthly UV Index is only less than three during two months of the year (June and
July), and is higher than eight for six months of the year (January, February, March, October, November and December).

As reported by the GSPS website, the school newsletters and the interviews with key stakeholders, there is a strong partnership between GSPS and the surrounding community. The strength of this partnership is reportedly due to the small size of the school, which increases key stakeholders’ involvement in school procedures. The GSPS website promotes the involvement of parents and community members in school activities and also provides examples of how community members can be involved, through activities such as volunteering, supervising, fundraising, and joining committees. A preliminary overview of the school newsletters found that community events are regularly advertised to parents and community members, such as local playgroups and art workshops, and such events are often held at the GSPS site after school hours or on weekends. A more thorough examination of the GSPS newsletters is provided later in this chapter.

**Implications for the enactment of the SunSmart Program**

The GSPS community had a population less than 1000, and student enrolments at GSPS were less than 100 (ABS, 2017; ACARA, 2016). It was suggested by a number of key stakeholders that the small size of the GSPS community facilitated a strong partnership between the school and the surrounding community. This partnership could have also been supported by the relatively culturally homogenous community population, which may coincide with comparable beliefs, values and norms, thus culminating in a shared vision of their needs and how they should be addressed (Macnab et al., 2014). Regardless, a strong partnership between school and community typically has positive implications for the enactment of health promotion initiatives as collaboration results in perceived ownership, which should result in holistically enforced knowledge, attitudes and behaviours (Cushman, 2008; Lee, 2009; Rowling & Jeffreys, 2006).

The demographic characteristics of the population have the potential to influence their sun protection practices. Census data shows the GSPS community displays two predominant risk factors for skin cancer; a median age which is older than the NSW average, and a population which has ancestral backgrounds primarily associated with white-pigmented skin (WHO,
2003). Given the average annual UV Index of the geographic area is categorised as “high” (BOM, 2017, n. p.), these data indicate that sun protection should represent a significant interest of the community. Furthermore, as the recess and lunch periods of GSPS align with midday hours, and therefore pose a relatively high risk for harmful sun exposure, school-based sun protection practices should be enforced during these periods.

**Artefact findings**

There were three types of artefacts collected from GSPS to provide a deeper insight into the procedures of the school: i) the sun protection and uniform policies of the school; ii) school newsletters which were made publically available to the community; and iii) photographs. The school policy documents and newsletters were analysed using a combination of content analysis and thematic analysis techniques. A description of these analysis techniques and how they were applied to this study was presented in Chapter Three. Due to ethical constraints, the photographs could not contain any identifiable characteristics of the school site or any individual. As a result, the validity of the photographs as a primary data source could not be ensured, so they were used as measure of reliability to compare to key stakeholders’ perceptions and facilitate the researcher’s recollection of the case (Bryman, 2012).

**Sun protection policy**

GSPS’s sun protection policy is a one page document titled; *SunSmart strategies for skin protection: No Hat – Play in the Shade*. This policy document has been de-identified and included as Appendix 5. Policy information is presented in four categories, which indicate the roles, responsibilities and requirements of four groups. These groups are: i) students; ii) staff; iii) the school; and iv) parents. The categorisation of policy components reflects the principles of the Health Promoting Schools (HPS) framework as the roles and responsibilities of sun protection are shared among the community (Cushman, 2008).

The GSPS sun protection policy document lists the requirements and expectations of each of these groups. The list of requirements for each group is preceded by their title and the word “will.” For example, “students will: be encouraged to use sunscreen.” There are four requirements listed for students, three for staff, six for the school, and four for parents. Table
4.1 presents the results of the content analysis, which established a frequency count of predetermined key terms and phrases within the GSPS sun protection policy document.

Table 4.1: The frequency of key terms and phrases presented in the GSPS sun protection policy document

<table>
<thead>
<tr>
<th>Key words/phrases</th>
<th>Frequency</th>
<th>Key words/phrases</th>
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<tr>
<td>Schedul*</td>
<td>1</td>
<td>Sunscreen</td>
<td>3</td>
</tr>
<tr>
<td>Outdoor</td>
<td>5</td>
<td>Role</td>
<td>1</td>
</tr>
<tr>
<td>Outside</td>
<td>1</td>
<td>Model</td>
<td>1</td>
</tr>
<tr>
<td>Shade</td>
<td>4</td>
<td>Curriculum</td>
<td>1</td>
</tr>
<tr>
<td>Hat</td>
<td>5</td>
<td>Educat*</td>
<td>0</td>
</tr>
<tr>
<td>Legionnaire</td>
<td>0</td>
<td>Communit*</td>
<td>0</td>
</tr>
<tr>
<td>Bucket</td>
<td>0</td>
<td>Glasses</td>
<td>0</td>
</tr>
<tr>
<td>Cap</td>
<td>0</td>
<td>Review</td>
<td>0</td>
</tr>
<tr>
<td>Broad</td>
<td>0</td>
<td>Sun</td>
<td>1</td>
</tr>
<tr>
<td>“No Hat”</td>
<td>1</td>
<td>UV</td>
<td>0</td>
</tr>
<tr>
<td>Uniform</td>
<td>1</td>
<td>SunSmart</td>
<td>3</td>
</tr>
<tr>
<td>Collar</td>
<td>0</td>
<td>Policy</td>
<td>0</td>
</tr>
<tr>
<td>Sleeve</td>
<td>0</td>
<td>Term</td>
<td>0</td>
</tr>
<tr>
<td>Clothing</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The title of the policy suggests that “SunSmart strategies” have been predominantly associated with hat-wearing and shade-seeking practices. This is further reinforced by the frequency of key terms and phrases identified in Table 4.1, which indicate “hat” (n=5) and “shade” (n=4) as two of the three most commonly used terms within the GSPS sun protection policy document, in addition to “outdoor” (n=5). Upon further inspection of the document, it is evident there are policy elements relating to a number of additional sun protection practices and procedures. The content analysis of the GSPS sun protection policy document revealed eight different sun protection practices and procedures that had a frequency count of one or more; hat-wearing, shade-seeking, sunscreen application, protective clothing, the scheduling of outdoor activities, staff role-modelling, sun safety education, and the integration of the school community. Thus, GSPS sun protection policy meets eight of the ten SunSmart Program membership criteria. The review component and the sunglasses component are the two areas of SunSmart criteria that were absent. It is worthwhile noting that the sunglasses component is an optional area of the SunSmart membership criteria.
Following the content analysis, the most prominent sun protection policy components were coded during the thematic analysis as: i) hat-wearing guidelines; ii) protective clothing; iii) parental expectations; iv) sunscreen guidelines; and v) curriculum.

**Hat-wearing guidelines**

The hat-wearing and shade-seeking guidelines were extensively detailed and predominantly interrelated throughout the GSPS sun protection policy document. However, the guidelines referring to these practices were not consistently clear. For instance, the title of the policy document states “No Hat – Play in the Shade,” while the students’ category of the policy document indicates students were required to “sit in the shade if they do not have a hat at school.” The distinct use of contrasting language within these two segments has implications for the behavioural requirements of students who are relocated to a shaded area for not wearing a hat. Although the title of the document indicates “play” is allowed in the shade, later in the document it is indicated that students must “sit” in the shade.

Although the GSPS sun protection policy advises students wear hats, the specific type of hat they are required to wear was not explicitly identified. The sun protection policy does provide insight into the guidelines regarding the type of hat that is acceptable, indicating “school uniform hats are appropriate and comply with Cancer Council guidelines,” and also that students must wear hats that “protect their face, neck and ears whenever they are outside.” The GSPS uniform policy, which is analysed in the following section of this chapter, provides additional information in regards to the type of hat students are encouraged to wear.

Although shade is predominantly affiliated with hat-wearing behaviour within the sun protection policy, there are a number of guidelines that indicate shade is considered and encouraged regardless of hat-wearing behaviour. For instance, students are “encouraged to use available areas of shade for outdoor play activities” while the school ensures that the provision of shade is considered in regards to “sports carnivals and outdoor events” and students’ “play areas.” While not directly associated with shade, the policy document also states that staff are required to take the “season and weather conditions” into account when scheduling outdoor activities and the school will “limit exposure times whenever possible.” Although the specific season and weather conditions that impact the scheduling of outdoor
activities are not explicitly explained, it is nonetheless beneficial that the GSPS sun protection policy includes guidelines which minimise direct sun exposure by providing, encouraging and enforcing multiple sun protection practices.

**Protective clothing guidelines**

Unlike the hat-wearing and shade-seeking guidelines that were extensively detailed throughout the GSPS sun protection policy document, the guidelines pertaining to protective clothing are minimal. The GSPS sun protection policy indicates staff are required to “wear protective hats and appropriate clothing for outdoor activities.” While this policy requirement is not explicitly associated with the phrase “role modelling,” the required sun protection behaviour of staff involves two easily observed sun protection practices, which subsequently produces positive role-modelling behaviour. Without explicitly advising staff to role-model sun protection behaviour, there is a potential for staff to misinterpret the importance of wearing protective hats and appropriate clothing. However, the uniform policy document does provide further clarity to teachers’ role-modelling practices, which is detailed in the following section.

Students’ protective clothing requirements are not detailed within the sun protection policy document as the clothing worn by students at school is determined by their uniform requirements. The analysis of students’ uniform requirements, as per the GSPS uniform policy, is presented later in this chapter. Expectations of parents’ role-modelling behaviour were distinct from staff, and are detailed in the following section.

**Parental expectations**

The GSPS sun protection policy document explicitly outlines a number of expectations directed at students’ parents, which include: i) “be informed of SunSmart procedures”; ii) “ensure that their children have appropriate headwear for school”; iii) “encourage their children to use 30+ sunscreen”; and iv) “act as positive role models and practise skin-protection behaviour themselves.” It is evident from these four policy requirements that parental encouragement of students’ sun protection emphasises hat-wearing behaviour and sunscreen use, as other sun protection practices such as shade-seeking, sunglasses use, or protection clothing, are not mentioned. Furthermore, unlike staff, parents are explicitly
advised to role-model “skin-protection behaviour.” However, the guideline does not specify explicit role-modelling practices for parents. As a result, this could lead to parents’ misunderstanding their behavioural expectations as role models if they do not have a sufficient understanding of appropriate sun protection behaviour.

Although the policy document indicates that it was the school’s responsibility to communicate SunSmart strategies via newsletters, parent meetings and other school activities, it was also inferred that it was parents’ responsibility to “be informed of the SunSmart procedures.” While this strategy encourages the dispersal of information, the emphasis on parental consumption of policy information rather than collaborative development of policy is worthwhile noting.

**Sunscreen guidelines**

All references to the term “sunscreen” within the GSPS sun protection policy document were affiliated with students’ sunscreen application. While staff and parents were required to “encourage” students to apply sunscreen, there were no recommendations for either parents or staff to enact sunscreen application behaviour. Considering sunscreen is a widely recommended sun protection practice, the lack of incentive for staff and parents to apply sunscreen indicates that the policy guideline requiring staff to wear protective hats and appropriate clothing was included to enforce their role-modelling behaviour, rather than in relation to their own health and safety. Furthermore, it is not indicated whether sunscreen is supplied by the school, as advised by the SunSmart Program (CCNSW, 2015).

**Curriculum**

The sun protection policy of GSPS identified the specific Key Learning Areas (KLA) (Personal Development, Health and Physical Education [PDHPE]) and syllabus strand (Safe Living) inclusive of educational content relating to sun safety. While it is advised that the school will integrate sun safe programs into the curriculum, the capacity for this integration is not detailed. Therefore, the length, quality and year level of sun safe programs operating at GSPS cannot be determined.
**Uniform policy**

The GSPS uniform policy document, titled *Grove Street Public School Uniform Policy*, is four pages in length. It includes a statement of purpose, which justifies the implementation of a school uniform, an overview of the NSWDE guidelines, the objectives of the policy, the guidelines of the policy, the procedures and standards of the policy, the uniform requirements of GSPS, and how uniforms can be purchased.

The content analysis of the GSPS uniform policy document highlighted a considerable variation in the frequency of key words/phrases. The most commonly used term/phrase was “uniform” (*n*=44), followed by “community”/“communities” (*n*=15), and “parent” (*n*=11), while the terms/phrases “hat”, “role”/“model”, “review” and “cloth” were used twice throughout the uniform document. All other key terms/phrases were used either once or not at all. The majority of instances in which the term “uniform” was used were in reference to the NSWDE Guidelines (*n*=17) and the Procedures and Standards of GSPS (*n*=10).

The content analysis revealed a number of features pertaining to the SunSmart phenomenon in the GSPS uniform policy document. The thematic analysis of these features resulted in the formation of three predominant themes: i) community; ii) protective clothing; and iii) hat-wearing guidelines.

**Community**

The rationale of the GSPS uniform policy emphasises the impact of uniform on school identity, specifically the school’s “sense of belonging, unity and identity.” It is stated that the school uniform is “seen by the school community as supporting a sense of social and economic equality among our students.” The policy document also indicates uniform enhances the health and safety of students, and eliminates the influence of peer pressure on students’ clothing choices. The integration of parents and community members is continually reiterated throughout the document, and it would seem their influence on the decision-making process of uniform requirements is valued, as opposed to the sun protection policy. This is evidenced by the following excerpts:

> A school uniform should reflect school community standards and expectations. It should be developed in consultation with and agreed upon by the school community.
It should be based on a strong student and parent voice. The whole school community has a role to play in encouraging the meeting of these standards.

The school uniform will reflect school community standards and expectations. School communities determine the standards of dress with consultation of staff, students and parents.

The collaborative efforts of school communities to develop and encourage school uniform is consistent with the principles of the HPS framework (Colquhoun, 1997).

**Protective clothing**

The uniform requirements of students at GSPS impact the sun protection provided by clothing in a number of ways. As there is a winter, summer and sport uniform for students, the length and fabric of the garments associated with these uniforms provide varied protection against UV radiation. The differences between these uniforms are detailed in Table 4.2. However, it must be noted that the length and fabric of these garments is not always specified, which limited the ability to make inferences about the sun protection provided by the GSPS school uniforms.
Table 4.2: An overview of the GSPS uniform policy

<table>
<thead>
<tr>
<th>Uniform</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Winter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tops</strong></td>
<td>A polo shirt (long/short sleeve) and a school jumper (polar fleece)</td>
<td>A polo shirt (long/short sleeve) or skivvy, and a school jumper (polar fleece)</td>
</tr>
<tr>
<td><strong>Bottoms</strong></td>
<td>Pants</td>
<td>Slacks, a pinafore/skirt, and/or navy leggings</td>
</tr>
<tr>
<td><strong>Shoes</strong></td>
<td>Practical school shoes, ankle boots, or jogger-style shoes</td>
<td>Practical school shoes, ankle boots, or jogger-style shoes</td>
</tr>
<tr>
<td><strong>Additional</strong></td>
<td>Track pants or tracksuit top</td>
<td>Track pants or tracksuit top</td>
</tr>
<tr>
<td><strong>Summer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tops</strong></td>
<td>A polo shirt (long/short sleeve)</td>
<td>A polo shirt (long/short sleeve)</td>
</tr>
<tr>
<td><strong>Pants</strong></td>
<td>Shorts</td>
<td>Dress (gingham) or skorts</td>
</tr>
<tr>
<td><strong>Shoes</strong></td>
<td>Practical school shoes, ankle boots, or jogger-style shoes</td>
<td>Practical school shoes, ankle boots, or jogger-style shoes</td>
</tr>
<tr>
<td><strong>Additional</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sport</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tops</strong></td>
<td>Sport shirt</td>
<td>Sport shirt</td>
</tr>
<tr>
<td><strong>Pants</strong></td>
<td>Unisex sports shorts</td>
<td>Unisex sports shorts or skorts</td>
</tr>
<tr>
<td><strong>Shoes</strong></td>
<td>Practical school shoes, ankle boots, or jogger-style shoes</td>
<td>Practical school shoes, ankle boots, or jogger-style shoes</td>
</tr>
<tr>
<td><strong>Additional</strong></td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The winter uniform provides considerable protection against UV radiation as students’ arms, legs and chests would be largely covered, although the risk of skin damage from UV radiation during this period of the year is considerably less than during summer (BOM, 2017). The summer uniform is less likely to protect students against UV radiation. Depending on whether students wear a long or short sleeve polo shirt will result in considerable variance in protection provided, given this variable is associated with arm coverage. Further, the use of shorts and dresses/skorts indicates students’ legs are only protected from the knee-up. However, the uniform policy does not specify the length of these clothing options, so the precise protection provided cannot be inferred. The sports uniform is similar to the summer uniform, although there is less specificity involved. Therefore, it is difficult to draw definitive conclusions as there is a considerable amount of information relevant to sun protection.

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5 A “skort” is a pair of shorts with a fabric panel across the front so that it resembles a skirt, thus providing the freedom to do more activities while giving the appearance of a skirt.
missing from the uniform policy document, such as the type of material, length and design of the “sports shirt.”

While the GSPS uniform policy document indicates students’ uniform should address aspects of safety, such as “eye protection and hats,” the inclusion of sunglasses to reduce the risk of sun damage to students’ eyes is not explicitly identified.

**Hat-wearing guidelines**

The use of key terms/phrases within this policy document were rarely affiliated explicitly with sun protection. There were three statements included in the document detailing the sun protection considerations of the policy:

Aspects of the uniform related to safety, e.g. safe footwear, eye protection and hats, will need to be enforced as appropriate.

Ensure that everyone has a role setting standard in setting the standards for the school. Teachers and staff should model appropriate standards for students. All staff wear broad brimmed school hats on playground duty.

The school has a “No Hat, No Play” policy. All children are encouraged to purchase and wear a broad brimmed school hat. The school beanie is encouraged to be worn during the colder months.

All three of these statements provide further insight into the enforcement of students’ and staff members’ hat-wearing behaviour. For instance, unlike the sun protection policy, a broad-brimmed hat was explicitly identified by the uniform policy as the type of hat students were encouraged to wear. Also, it is indicated that “the school beanie is encouraged to be worn during the colder months.” This statement elaborates the guideline of the sun protection policy which stated “season and weather conditions” were to be taken into account when scheduling outdoor activities. Furthermore, the role-modelling practices of school staff are also specified in the uniform policy, which indicated staff were required to wear broad-brimmed hats while on playground duty.

The most significant distinction between the GSPS sun protection and uniform policies was the language of the hat-wearing policy guidelines. The phrase “No Hat, No Play” was written
in bold and advised by the uniform policy, whereas the sun protection policy document was titled “No Hat – Play in the Shade.” This difference in phrasing could have contributed to stakeholders’ varied understandings of the GSPS hat-wearing policy guidelines, which are explored later in this chapter.

**Newsletters**

All newsletters that were published within the year proceeding the commencement of interviews with key stakeholders (March, 2015) were collected and analysed (n=40). The newsletters from GSPS were published weekly and had been made available on the school website. All sampled newsletters used a similar format: they were addressed to “parents and caregivers” and generally included four pages of information regarding upcoming school events, Parent & Citizens (P&C) news, community notices, and a brief report from the principal.

The content analysis of the newsletters indicated the communication of sun protection information was limited. The most commonly used key terms/phrases were “uniform” (n=11), “policy” (n=7), “hat” (n=4), community (n=2), “outside” (n=1) and “broad” (n=1). There were no references to any other key word/phrase throughout the sample of newsletters. The thematic analysis of the newsletters revealed no themes relating to the focus of this thesis. Throughout the sample of newsletters, there was no communication sun protection policy guidelines, and hats were the only sun protection practice identified in the sample of newsletters. The use of hats in relation to sun protection purposes was only discussed twice. The first instance was in the lead-up to winter and suggested that winter hats may be worn instead of summer hats. The analysis of the GSPS uniform policy suggests that the winter hat is a beanie. The second reference to hats was a reminder for wearing sun protection hats, which stated “School Broad Brimmed Hat Now $10.” The inclusion of this statement was notable as it was a prominent feature within the newsletter. While most information was written in size 10-12 font using standard black text, this statement was written in bold, coloured red and appeared in size 36 font. This contrast in text resulted in the statement being distinctive from all other text in the newsletter.
An additional statement in the newsletter indicated “it is expected to get quite hot on Wednesday” prior to highlighting the availability and price of the school broad-brimmed hat. While this comment suggests that sun protection behaviour was associated with temperature, the timing of the comment is noteworthy. This newsletter was published in mid-March. Data from the BOM (2017) shows that the average maximum temperature for the geographic location of GSPS peaked in January and had been gradually declining each subsequent month. By March, the average maximum temperature was approximately 21 degrees Celsius (BOM, 2017). Similarly, the UV exposure had also peaked in January and February and had declined each subsequent month (BOM, 2017). Therefore, the first reminder for any sun protection practice came after the peak temperature and UV radiation periods of the year. Although it must be recognised that March still experienced “very high” levels of UV radiation exposure (BOM, 2017).

Throughout the 12-month period of sampled newsletters, there were reminders relating to participation in outdoor activities, such as cross country, athletics/swimming carnivals, and a swimming program. There was no information regarding sun protection included with these reminders. One newsletter included a review of an outdoor event which included pictures of students wearing broad-brimmed hats and caps during summer, but sun protection was not discussed via text. Other sun protection practices, such as applying sunscreen or avoiding the sun during peak UV times, were not mentioned in the newsletters. Therefore, the only promotion of sun protection within the 12 month sample of school newsletters occurred following the hottest and most intense UV radiation period of the year.

The analysis of school newsletters did provide insight into the relationship between GSPS and the local community. It was evident that the school attempted to include parents and community members into the procedures of the school. Notable examples of such integration included:

- Encouraging parents and community members to attend upcoming meetings to influence school policy;
- Requesting parents and carers to comment on aspects of their child’s schooling;
- Inviting parents and community members to attend school events and assemblies, and assist when necessary (such as during a school athletics carnival);

- Developing a social media account for the school to improve communication between the school and parents; and,

- Consistently commending the parents’ and community members’ support of the school.

While these examples of community integration are not directly associated with the SunSmart Program or any particular sun protection efforts, they do provide a relevant insight into the relationship between school and surrounding community. Given the partnership between the school and broader community is an integral aspect of the HPS framework, the relationship between GSPS and the community is noteworthy. As stated in the case overview, community events were often advertised in the school newsletters and even held at the GSPS site after school hours or on weekends. This partnership between school and community and the communication of SunSmart information between the two groups, or lack thereof, may have had a significant role in key stakeholders’ understandings of the SunSmart phenomenon.

**Key stakeholder interview findings**

As described in Chapter Three, semi-structured interviews were conducted with key stakeholders from the GSPS community to explore their understandings of the SunSmart phenomenon. The data obtained from these interviews were analysed using thematic analysis techniques (Yin, 2011), and the results of this process will be presented in this section.

To support the readers’ comprehension of the results and to also support inferences drawn regarding students’ age or year level, groups of students in Early Stage 1 (ES1) or Stage 1 (S1) are referred to as “younger” students, whereas those in Stage 2 (S2) or Stage 3 (S3) are referred to as “older” students. As student focus group interviews were not organised by sex or gender, each participant’s gender could not be established with certainty based on the interview recordings. Subsequently, this variable would not be included within the analysis of results and the students’ pseudonyms may not reflect the participant’s sex/gender. Although there were different types of community members (i.e. students’ parents as well as residents
of the GSPS community), the focus group interviews for this stakeholder group comprised a diversification of community members for convenience purposes. Therefore, the individual types of community members could not be distinguished based on voice alone.

There were two focus group interviews conducted with younger students (n=12), two focus group interviews conducted with older students (n=12), and four focus group interviews conducted with parents (n=13) and community members (n=4). The six staff member participants recruited from GSPS, which included the school principal (n=1), teachers (n=3), a support teacher (n=1), an administrative staff member (n=1), participated in six individual interviews.

The results of the thematic analysis have been classified into three sections to provide a clear and comprehensive explanation of the key stakeholders’ interpretations of the SunSmart phenomenon and how it influences their behaviours. The first section outlines key stakeholders’ understandings of the SunSmart phenomenon by explaining their interpretations of the phenomenon. The second section explores where and how key stakeholders obtained their understanding of the SunSmart phenomenon. The third section examines how various motivations interact to influence key stakeholders’ engagement with SunSmart practices.

Key stakeholders’ understandings of the SunSmart phenomenon

Understandings of the SunSmart phenomenon were largely constructed through key stakeholders’ strong associations between the term “SunSmart” and sun protection practices. When applied to the school setting, the stakeholders interpreted SunSmart as a phenomenon that encourages these practices via the enactment of policies and educational approaches. As such, there were three themes identified which framed key stakeholders’ understandings of the SunSmart phenomenon: i) sun protection practices; ii) policy; and iii) education. This section will examine these three themes and also detail key stakeholders’ perceptions as to whether they perceived GSPS to be a SunSmart school.

Sun protection practices

Community members, staff and older students perceived SunSmart as a phenomenon that facilitates and encourages sun protection practices via awareness and education. These
perceptions are highlighted in the following comments which detail participants’ responses when asked what they understood by the term “SunSmart”: 

Probably just an awareness of any sun issues out there, if they’re going to be at all sunburnt, or what times of the day to be wearing the protective gear, wearing protective gear, and just making sure that we’re all aware of the issues. (Principal Rogers)

Obviously protection against overexposure to sun, which is like wearing hats, sunscreen if applicable, and I think I hear there’s a kind of a cover over the sandpit play area. (Ms Kent; community member)

...You don’t just go out without sunscreen or a hat or good stuff to protect you from the sun. (Samantha; older student)

Younger students provided contrasting interpretations of the SunSmart phenomenon. It may be assumed that younger students were unfamiliar with the term, as Aiden was the only student to indicate he was aware of the term “SunSmart.” His response is provided below. All other younger students explicitly indicated they were unfamiliar with the term, or did not provide a response. Although Ryan indicated he was unfamiliar with the term, he outlined his interpretation of the term “SunSmart.” The following comments highlight Aiden’s and Ryan’s understandings of the term “SunSmart”:

SunSmart is playing with bats. (Aiden; younger student)

Maybe sort of like smiling in the hot sun. (Ryan; younger student)

Although younger students’ awareness and perceptions of SunSmart did not align with other key stakeholders’, they were aware of multiple sun protection behaviours, including hat-wearing, sunscreen application and seeking shade, as well as some of the risks associated with excessive sun exposure, such as sunburn. As younger students’ awareness of these risks influenced their motivations for enacting SunSmart behaviour, these aspects will be explored in the third section of this analysis. The three sun protection behaviours identified by younger students (hat-wearing, sunscreen and shade) were consistent with the most commonly identified sun protection practices by all key stakeholder groups interviewed at GSPS. Key
stakeholders strongly associated these three practices with the enactment of SunSmart policy.

**Policy**

School policy was frequently identified and described by key stakeholder groups as an integral aspect of the SunSmart phenomenon. Key stakeholders’ perceptions of policy as the essence of the SunSmart phenomenon reflects the formal requirements of the SunSmart Program (CCNSW, 2015). However, the majority of key stakeholders were not familiar with the GSPS SunSmart policy document. Staff members provided the following responses when they were asked if GSPS had a SunSmart policy or had completed the SunSmart membership process:

No, I don’t know [laughs]. (Mr Bryant; teacher)

No, don’t know. No. (Mr Rawlings; teacher)

I don’t know really. (Ms Baker; support staff member)

I think we are SunSmart. I think we have our SunSmart; our policy for what we wear outside and what we ask the children to wear so everyone wears a hat. (Principal Rogers)

The only key stakeholder who was reportedly familiar with the SunSmart policy document was Ms Bourke, the administrative staff member. Ms Bourke provided the following comment when describing the accessibility of the policy document:

Oh yeah I have [seen the policy document] but don’t ask me where it is... I think they’re [staff members] all aware of it but whether they could lay their hands on it would be another thing.

These responses suggest that staff members were generally unaware of SunSmart policy or the SunSmart membership process. Although Ms Bourke was reportedly aware of the policy document, she did not know where it was located and did not discuss its contents, and thus did not produce any evidence of policy comprehension. Following additional prompting, Principal Rogers outlined the school’s SunSmart membership was facilitated by a partnership between GSPS and CCNSW, but was unable to recall the specific procedures required to
obtain membership as it occurred prior to her employment at the site. In addition to Principal Rogers, a community member was able to provide an accurate understanding of the formal SunSmart Program by outlining the school’s partnership with the Cancer Council. This understanding is highlighted in the following conversation between the community member and the interviewer:

They’ve [the school] obviously got a formal plan that, I’m not sure how that starts but obviously there’s an agreement somewhere that they agree to do this, and have it...
(Mrs Walker)

[Interviewer: an agreement with who?]

Cancer Council, I would have thought. (Mrs Walker)

While Principal Rogers and Mrs Walker recognised the relationship between SunSmart and CCNSW, their understanding was not shared by any other key stakeholders interviewed at GSPS. Although, other stakeholders associated elements of the SunSmart phenomenon with different organisations, and these perceptions will be explored in the second section of this analysis. Nonetheless, the key stakeholders’ limited understanding of SunSmart policy and procedures indicates that the protocols of the school’s SunSmart membership had not been transferred from the previous principal to the current principal or other key stakeholders of the GSPS community.

Although key stakeholders’ awareness of GSPS SunSmart policy documentation was limited, they had still constructed understandings of what the policy comprised. The majority of key stakeholders interpreted the school’s SunSmart policy as a supportive tool for the enforcement of students’ hat-wearing practices. While Mr White stated that SunSmart was “an overall policy to try and reduce skin cancer problems in the community,” thus suggesting it impacts the broader community, the majority of participants indicated the SunSmart policy primarily focused on students’ behaviours. The following conversation from a community member focus group highlights the perceived association between SunSmart and hat-wearing policy guidelines:

[Interviewer: what’s your understanding of a SunSmart school?]

121
Encouraging them to wear hats. (Mrs Watson)

It’s not only encouraging them, it’s essential, obviously they’re not allowed to play without a hat... (Ms Clarke)

Oh yeah, the No Hat, No Play rule. (Mrs Watson)

The No Hat, No Play rule to which Mrs Watson referred was identified by participants in all key stakeholder groups. They explained that this policy item required students to wear a hat, otherwise they were required to relocate to a shaded area. The following conversation reinforces that older students also associate SunSmart with this hat-wearing policy:

[Interviewer: why [is this school SunSmart]?

Everybody’s wearing hats. We get reminded a lot that we have to wear our hats out in the sun. Because like if you have no hat and then you can’t play. (Jarrod)

While Jarrod didn’t explicitly refer to the hat-wearing policy item as No Hat, No Play, he indicated that students were unable to play without a hat. There were reportedly two different types of school hats available to students; a broad-brimmed hat and a beanie. These items are consistent with the school’s uniform policy. The broad-brimmed hat was “really strongly encouraged” (Mrs Banner; a community member) by staff throughout most of the year, while beanies were advised for colder periods. However, the key stakeholders indicated that, while the broad-brimmed hat was encouraged, any type of hat was sufficient to comply with hat-wearing policy guidelines. This is consistent with the GSPS sun protection and uniform policy documents. Principal Rogers indicated broad-brimmed hats were not enforced because students’ playtime was valued by the school, stating “I would never, as long as they’re wearing a hat they’re allowed to play... if they’ve got a hat on we get them out playing.” The key stakeholders indicated if they were not wearing a hat, they were required to relocate to a shaded area, which staff and students agreed was a specific seated area, shaded by trees.

While key stakeholders generally agreed on these aspects of the hat-wearing policy, they debated the specific wording of the hat-wearing policy, and subsequently the behaviours that were permitted once students had been relocated to the shaded area. The following
statements from staff members highlight the contrasting interpretations of the hat-wearing policy:

It’s not ‘No Hat, No Play,’ it’s ‘Sit in the Shade.’ (Principal Rogers)

No Hat, No Play. So, but we can’t actually say ‘No Play’ anymore. So, I find amusing. That means no hat, then they sit in, they play in the shade. (Mr Rawlings)

We call it ‘Sit and Play,’ but you know, you’re not actually punished for it but you can’t go out and play. (Mr Bryant)

From the time I’ve been here [11 years] it’s always been No Hat, No Play. (Ms Bourke)

It is worthwhile noting that Principal Rogers, who initially emphasised the importance of students’ playtime, was one of the staff members who indicated students’ non-compliance with the school’s hat-wearing policy guidelines restricted their playtime. There were community members who also cited the policy item’s longevity, similarly to Ms Bourke. Ms Kent estimated No Hat, No Play had been enforced for over two decades, while Ms Clarke stated it had “been around a while” and also reported its use in other school sites.

Nonetheless, these contrasting perceptions of the hat-wearing policy reflect the conflicting phrasing of the GSPS policy documents. While the GSPS sun protection policy is titled “No Hat – Play in the Shade,” the uniform policy indicates the procedure is “No Hat, No Play.” These varied understandings among key stakeholders also resulted in opposing perceptions as to whether the consequences of non-hat-wearing behaviour, as enforced by the policy, were a punishment. These contrasting perceptions were also evident among school staff, who were the enforcers of school policy. While Mr Bryant stated students weren’t punished for not wearing a hat, Ms Bourke explicitly referred to the consequences as a punishment. Furthermore, Principal Rogers and Mr Bryant debated whether there were incentives to reward students for consistently wearing their broad-brimmed hat, as evidenced in the following statements:

We’re currently encouraging them through assembly award where they win a bear if their class has the highest percentage of the broad-brimmed hat wearer. And his name’s Victor, so he sort of has a little hat on, and they win that. (Principal Rogers)
I think they used to give out, like these teddy bears at assembly for people who were all wearing their hat; that’s kind of gone to the wayside. (Mr Bryant)

While Mr Bryant indicated the program was inactive at the time the interviews occurred, Mr White suggested a long-term positive rewards program was in development, which he believed would have a stronger effect on students’ motivation to engage in SunSmart practices. These motivations will be examined in the third section of this analysis.

Although the key stakeholders debated the behaviour that was permitted once students had been relocated to a shaded area, the majority agreed that the school had sufficient shade available for students. Furthermore, the debate among staff when determining whether the consequences of the policy were a punishment was not evident among community members. Ms Larson was the only community member to raise the issue, and didn’t believe the consequences were a punishment as students were allowed to converse with their peers and there were spare hats for them to borrow.

In addition to the hat-wearing guidelines in the SunSmart policy, staff also identified the provision of sunscreen as an aspect of the SunSmart policy. However, key stakeholders provided contradicting accounts as to whether sunscreen was available at the school. Principal Rogers indicated sunscreen was available for students at the main office, and parents were encouraged to apply it to their children before coming to school. Mr Bryant and Mr Rawlings also indicated sunscreen was available for students. In contrast to these reports, Mr White argued that sunscreen was not available for students at the school, and parents were generally not encouraged to apply it to their children. These contradicting perceptions were also expressed by students. Older and younger students debated whether sunscreen was available at school but agreed that their parents reminded them to wear sunscreen. Community members were unsure of the availability of sunscreen at school, but parents recalled reminders from the school to apply sunscreen to their children prior to school.

Key stakeholders’ also recognised being SunSmart required an informed understanding of sun safety. While policy provided school guidelines for sun protection behaviour, education and awareness of sun safety was identified as a key feature of the SunSmart phenomenon. Subsequently, the following theme will detail how sun safety education and awareness is
addressed by the SunSmart phenomenon, as understood by key stakeholders of the GSPS community.

**Education**

Key stakeholders interpreted SunSmart as a phenomenon that ensures individuals were educated about the risks of sun exposure and how to effectively reduce these risks by engaging in sun protection practices. While this aspect of SunSmart was not identified or discussed as frequently as policy, it was recognised by all three key stakeholder groups. The following comments highlight stakeholders’ perceived association between SunSmart and education:

- How to make your school more protective on the skin. (Vanessa; older student)
- When you’re smart when you go in the sun... (Samantha; older student)
- ... Because of the word “SunSmart,” encouraging the children to feel that they are smart if they adhere to these particular words. (Mrs Walker; community member)
- Knowledgeable about the impact of ultraviolet radiation and the sun on people’s health. (Mr Rawlings; teacher)

The majority of staff referred to SunSmart as a phenomenon that increases individuals’ awareness and/or understandings of the risks associated with sun exposure and different types of sun protection. However, Ms Bourke described the SunSmart phenomenon and the SunSmart Program as two distinct concepts in this regard. She perceived SunSmart to be a phenomenon that referred to being knowledgeable of sun protection practices, specifically how and why to adopt sun protection behaviours. Following this explanation, Ms Bourke was asked whether the SunSmart Program facilitated this understanding, to which she responded:

- No. They facilitate you should have a hat, you should have sunscreen, you know; No Hat, No Play, all that sort of stuff, but there’s nothing in schools to say “right this sunscreen you’ve got to have it on for 20 minutes before you go outside.”

This response suggests that Ms Bourke perceived the SunSmart Program supported sun protection policy but not sun protection education within the school, for which it was
responsible. The influence of education on key stakeholders’ understandings of the SunSmart phenomenon will be explored further in the second section of this analysis.

**SunSmart membership**

Although there were no staff members who were aware of a formal SunSmart membership process or SunSmart policy, they all indicated GSPS was a SunSmart school. A notable example of how SunSmart is interpreted as a phenomenon beyond formal membership procedures is evidenced in the following conversation:

[Interviewer: can you explain what you understand what it means to obtain an actual SunSmart membership, so an accreditation for the school?]

Oh yeah, no, I wouldn’t know. (Mr Bryant)

[Interviewer: not sure?]

Yeah. (Mr Bryant)

[Interviewer: would you say that GSPS is SunSmart?]

Yeah, I think we’re pretty conscious of, I mean everyone wears a hat, we kind of try and promote that, and if it’s like a really sunny day outside and you know, we’re doing something, we’re outside, we try and make sure they’re in the shade. So yeah, I think we’re pretty conscious of it. (Mr Bryant)

Although Mr Bryant indicated he was unaware of any formal SunSmart membership requirements, he perceived GSPS to be a SunSmart school due to the awareness and encouragement of sun safety as a part of the school’s ethos. Similarly, community members were likely to agree GSPS was a SunSmart school due to the enforcement of No Hat, No Play. While older students indicated that GSPS was SunSmart school, younger students either indicated the school wasn’t SunSmart or they didn’t respond. This contrast between students’ beliefs is consistent with the differences between younger and older students’ awareness and understandings of the SunSmart phenomenon, which were outlined previously in this analysis.
This section of the analysis has highlighted key stakeholders’ understandings of the SunSmart phenomenon, which were relatively similar. While stakeholders’ awareness of the term “SunSmart” varied, the majority of key stakeholders interpreted the SunSmart phenomenon as a combination of policy and education to support students’ sun protection behaviour, and believed that GSPS was a SunSmart school. It was evident that younger students, unlike other stakeholders, were relatively unaware of the term “SunSmart,” and were less likely to indicate GSPS was a SunSmart school. These understandings, while similar, were influenced by a range of experiences, which will subsequently be explored.

**Influences on key stakeholders’ understandings of the SunSmart phenomenon**

This section of the analysis will examine the factors which influenced how and where stakeholders constructed their understandings of the SunSmart phenomenon. The thematic analysis of the interview data categorised these influential factors into the following themes: i) advertising and campaigning; ii) education; iii) childcare settings; and iv) communication between the school and the community.

**Advertising and campaigning**

There were a number of advertisement strategies and health promotion campaigns that played a role in key stakeholders’ construction of the meaning of SunSmart. These included previous media-focused sun protection campaigns, government and non-government organisations (NGO), and the promotion of GSPS as a SunSmart school. However, there were no younger students who identified campaigning as an influence on their understandings of the SunSmart phenomenon, and subsequently their perceptions in relation to this theme will not be featured. Thus, this section will explore influence of these strategies and campaigns on older students’, staff members’ and community members’ understandings of the SunSmart phenomenon.

The analysis of interview data at GSPS found that community members strongly associated the SunSmart phenomenon with the *Slip! Slop! Slap!* campaign. Notably, there were community members who were aware of the *Slip, Slop, Slap* campaign, but not the SunSmart phenomenon. This was expressed by Mrs Allen when discussing SunSmart:
Yeah back in the *Slip! Slop! Slap!* era. So I presume it’s [SunSmart] very much similar; yeah hats. But I haven’t heard of the SunSmart. (Mrs Allen)

The community members at this site displayed positive attitudes of the *Slip! Slop! Slap!* campaign and its association with SunSmart. They perceived that the campaign increased the Australian population’s awareness of the dangers of sun exposure as well as the importance of sun protection practices, specifically compared to previous generations. Ms Barnes described her appreciation of sun protection campaigns by indicating sun safety awareness is “a lot more prevalent than it was once upon a time so obviously they’re doing a good job.”

The community members were able to identify the sun protection practices encouraged by the *Slip! Slop! Slap!* campaign (hat-wearing, sunscreen application and using protective clothing) due to their familiarity with the advertisements, but had difficulty identifying the organisation that managed the campaign. Suggestions included the Cancer Council, the Government, the Department of Health, and the companies selling sunscreen. The last organisation was suggested by Ms Davis, who explained:

> It’s a bit of a scare tactic I think... if you don’t protect yourself with the sun block you’re at risk with melanoma, whereas there are probably other ways of protecting yourself without putting all the chemicals on your face. (Ms Davis)

Ms Davis’ concern of the health risks associated with sunscreen application impacted her motivation for enacting and encouraging SunSmart practices, and will therefore be examined further in the next section of the analysis.

Although staff and students also identified the *Slip! Slop! Slap!* campaign, they did not align the campaign with the SunSmart phenomenon as frequently or as strongly as the community members. Mr Bryant indicated the campaign was used as a teaching resource for sun protection education activities in his lessons, while Ms Bourke credited the *Slip! Slop! Slap!* campaign for raising awareness for sun protection within the community. Jackie, an older student, associated the *Slip! Slop! Slap!* campaign with the term “SunSmart,” but identified the sun protection practices advised by the campaign in an alternate order, stating “slip, slap, slop” rather than “slip, slop, slap.”
In addition to the *Slip! Slop! Slap!* campaign, the SunSmart sign erected at the entrance to the school was discussed by staff and community members. However, these stakeholder groups reported contrasting perceptions of the SunSmart sign’s value to the school community. While community members perceived the SunSmart sign positively impacted the school community’s awareness of sun protection, staff members indicated they did not perceive the sign as a valuable resource. The following statements highlight the contrasting perceptions of staff and community members in relation to the value of advertising a school’s SunSmart membership:

I guess it’s [the SunSmart sign] actually telling the community, maybe prospective parents of the school that this is what the school does, this is another way that the school cares for its students. (Ms Ferguson; community member)

...It’s [the SunSmart sign] also a reminder to everybody that there’s an issue with sun and cancer and everything else, so it’s just one of those prompts that you, you know, a parent or somebody might have seen and you think, “Oh yeah, I need a hat or the kids need this,” so it extends beyond just these four walls. (Mr Cartwright; community member)

If you’re talking about whether it attracts people to the school because we’re a SunSmart school I wouldn’t say there’s any benefit because I think all the schools now would have to be SunSmart schools. (Ms Bourke; school administrative staff member)

I wouldn’t use it as a marketing tool; I wouldn’t say to people, “We’re a SunSmart school.” (Principal Rogers)

Ms Ferguson also believed all schools were required to obtain SunSmart membership. Ms Bourke discussed this perception by explaining SunSmart membership was viewed as an expectation for schools by parents and the community. However, while Ms Ferguson and other community members perceived the promotion of GSPS as a SunSmart school could increase sun protection behaviour among the school community, Ms Bourke believed parents didn’t think about SunSmart status when choosing a school for their child as it was an expectation; “it’s just part and parcel of the school environment.” Similarly, Principal Rogers admitted she was unable to recall the visual design of the SunSmart sign. Unlike staff and
Community members, older students identified other advertising strategies for SunSmart, including posters, documentaries, television advertisements and banners.

Some community members and staff recognised the association between SunSmart and an organisation based outside the school community; mainly the NSWDE or the Cancer Council. However, despite the reported influence of the Cancer Council on key stakeholders’ understandings of the SunSmart phenomenon, the stakeholders indicated the Cancer Council had little influence on their motivation to become members of the SunSmart Program. These motivations will be examined in the third section of this analysis.

School teachers, particularly Principal Rogers, discussed how their interpretations of SunSmart were affected by the NSWDE’s role in school-based health promotion. Principal Rogers explained that GSPS’s SunSmart membership was obtained around 2012 due to “a fairly strong push all the way through the Department.” The push the principal refers to indicates she believed the NSWDE was campaigning for schools to increase their responsibility for sun protection policy. Principal Rogers also explained the sun protection policy guidelines recommended by the SunSmart Program were “very closely reflected in the Departmental policy,” therefore recognising that the NSWDE Sun Safety for Students guidelines (2013) and SunSmart Program were aligned. This influenced her understanding of the SunSmart phenomenon as she perceived the SunSmart policy was used as a resource to support the school’s adherence to NSWDE requirements.

In addition to key stakeholders’ experiences with advertising strategies and sun protection awareness campaigns, they also discussed their experiences with childcare settings that reportedly had a SunSmart membership. The influence of these experiences on key stakeholders’ understandings of the SunSmart phenomenon will be explored in the following theme.

**Childcare settings**

At the time data collection occurred, the SunSmart Program resource was available for primary schools, childcare settings and out of school hours care (OSHC). The interviews with key stakeholders at GSPS illustrated their varied experiences with the application of the SunSmart Program in childcare settings, which affected their understanding of the SunSmart...
phenomenon. These experiences were predominantly associated with the application of sunscreen to students in childcare settings.

The GSPS community members were the key stakeholder group most likely to indicate their experiences with the SunSmart Program in childcare settings influenced their interpretation of the SunSmart phenomenon. Mrs Johnson explained there was support provided within childcare settings to ensure children attending these settings engaged in sun protection practices, and also believed that this initiative was approved by the majority of parents. Furthermore, Ms Kent believed this support contributed to lifelong, sun protection behaviours in children. However other community members indicated they were opposed to the SunSmart practices enforced in childcare settings, specifically sunscreen application. These arguments are evidenced by the following statements:

Childcare some days, I have a problem with the amount of sunscreen put on them, it’s totally excessive and I don’t like it... they’re just, in my opinion, over the top, and they come home smeared and to the point where he reacted to a sun cream and got a swollen eye... (Ms Clarke)

They put so much on. I used to have to wash my daughter’s hair every time she went to preschool because it was just caked with sunscreen. (Ms Larson)

In addition to her employment at GSPS, Ms Baker was also reportedly an experienced staff member in childcare settings, and was therefore able to provide further insight. Similar to the perceptions of some of the GSPS community members, Ms Baker also associated the SunSmart Program in childcare settings with sunscreen application. While Ms Baker inferred it was appropriate for childcare workers to apply sunscreen to children in childcare settings, she believed sunscreen application in primary school settings should be the responsibility of students and their parents. This perception indicates that her understanding of the SunSmart phenomenon is influenced by her experiences with the Program in different settings. Ms Baker’s experiences indicate that the implementation of SunSmart practices vary between childcare and primary school settings.

There were a number of elements identified in this theme that affected key stakeholders’ motivations to engage in SunSmart practices, specifically the role of settings and the
environment, as well as concerns relating to sunscreen application. These elements will be examined in the third section of this analysis. The following theme explores how education influences key stakeholder’s construction of their meanings of the SunSmart phenomenon.

**Education**

The majority of key stakeholders interviewed at this site indicated sun safety education was limited, or did not occur, in the school curriculum. Throughout this section, the reported amount and type of sun safety education that had occurred at GSPS, in addition to education from other sources, will be explored to highlight how it influenced key stakeholders’ understandings of the SunSmart phenomenon.

Younger students discussed the risks associated with sun exposure, such as sunburn, and were able to identify a variety of sun protection practices, including sunscreen application and wearing a hat. However, despite their apparent knowledge of sun safety, younger students provided limited evidence that sun safety education had occurred within classroom lessons. When these students were probed to identify where they sourced their sun safety knowledge, no student identified school-based education. Ryan emphasised the students had “not even once” been taught about sun safety within classroom lessons.

Similarly, the majority of older students interviewed suggested limited sun safety education occurred at the school, and some older students indicated they sourced their knowledge from outside of school. The older students had a sound knowledge of the risks associated with sun exposure, as evidenced by Samuel’s comment:

> The sun is really dangerous. The ozone is protecting you because the sun releases ultraviolet rays; short word UV; and it’s really harmful to your body causing sunburn and your skin [can] also be eviscerated by the sun. And also UV rays also create sunburn more often and also create skin cancer more often.

When Samuel was probed to identify where he sourced this knowledge of sun exposure, his only response was “not from the school.” Wayne and Samuel both stated sun safety education is a “once a year thing,” which involved teachers discussing sun safety with students and providing sunscreen. Samuel and Jake stated that this unit occurred in
December to coincide with hotter temperatures. The association between key stakeholders’ motivation to engage in SunSmart practices and the season of the year is examined in the third section of this analysis. It is possible that students’ interpretations of SunSmart predominantly encompassed policy requirements because they had limited experiences of sun safety education, and therefore did not associate education with the SunSmart phenomenon.

As depicted by GSPS staff, the reported accounts of sun safety education contrasted the accounts from students. Ms Davis, Mr Bryant and Mr Rawlings indicated that students were taught about sun safety, and the latter two staff members described classroom activities they used for sun safety education:

We haven’t done it [sun safety education] this term yet, but we’ll do a little unit... We’ll go on the *Slip! Slop! Slap!* kind of stuff, just being aware of how much time you should spend in the sun, that kind of thing. (Mr Bryant)

Usually we’d look at you know the effects of the sun on your health but also the effect of the sun on other things. So we might put some ice cubes outside and you know do some experiments around that. We might look at shadows and you know what percentage of light gets through certain materials, that sort of thing. (Mr Rawlings)

Mr Rawlings indicated this activity drew on aspects of the PDHPE and Science curricula, and he also discussed the importance of making the content engaging for students. He believed that if the content was “a bit more practical” then students would be more likely to retain the information. Principal Rogers, who was also a Stage 3 teacher, suggested that there was little time to teach about sun protection education because of the considerable amount of content in the PDHPE K-6 syllabus. She stated:

It’d [sun safety] only be a very small area of the health education, because there’s a very large syllabus in that area and there’s a very small amount of time put to it. So health education itself is quite a broad, broad area. It would be part of the protective safety factors, and that would just be, you know, it’d be touched on. They might at some stage in one grade perhaps make a poster or something like that, but it wouldn’t go much beyond that. (Principal Rogers)
Although most community members were not aware of any sun safety education that had occurred at GSPS, Ms Stark indicated it had occurred during the school’s swim scheme. In preparation for the swim scheme, students were taught to “slap it on.” It was not clear whether this reference to the *Slip! Slop! Slap!* campaign meant that the campaign has been used as an educational resource or whether this was Ms Stark’s way of describing sun safety education due to her own associations with the campaign.

Nonetheless, no students were able to recall such activities, which indicates the intended learning outcomes were not sufficiently addressed. Furthermore, the most frequently identified recommendation by community members to improve the SunSmart Program was to increase the amount of sun protection education in schools. It was suggested that an annual workshop, coordinated by the Cancer Council, would excite students and prompt learning. Furthermore, this stakeholder group also recommended that the Cancer Council should provide information for students to take home to their parents to increase their understanding of SunSmart practices. However, some community members suggested sun safety education was unnecessary. When a focus group of community members was invited to identify the sources of students’ knowledge of sun protection practices, the following conversation occurred:

  It’s [sun protection] just what they do, you know, it’s just a really minor part of their day, you know, they go outside they’re got to put their hat on, that’s just how it is. They’re not thinking about it, they just do it. (Ms Clarke)

  *Interviewer: Where do you think they learnt that behaviour?*

  Well it’s the rule, so they just have to do it. (Mrs Marston)

The “rule” these community members were referring to was the No Hat, No Play policy item, which they believed was sufficient for developing students’ SunSmart behaviour. This perception reinforces community members’ understandings of the SunSmart phenomenon being strongly associated with policy. Furthermore, Ms Clarke, Mrs Marston and other community members in their focus group indicated they enforced the No Hat, No Play policy in the home environment. While key stakeholders’ motivations for SunSmart behaviour will be examined in the third section of this case study, the influence of the school-home...
partnership on key stakeholders’ understandings of the SunSmart phenomenon will be explored in the following section.

*Communication between the school and community*

The GSPS sun protection policy indicates parents will be informed of the SunSmart procedures of the school, and SunSmart strategies are to be reinforced through newsletters, parent meetings and other school activities. While community members and staff agreed the relationship between the school and community was strong, they provided contrasting descriptions of SunSmart communication. This section will detail community members’ and staff members’ reports of how communication from the school influenced their understandings of the SunSmart phenomenon. As students did not discuss this theme, their perceptions will not be featured.

It was reported that the school informed the community of SunSmart procedures verbally and via the school newsletter. Mrs Watson, a community member, also described an introduction pack that was supplied to parents when their child began kindergarten. This introduction pack reportedly provided information about the school’s SunSmart procedures. Community members also recalled SunSmart practices being encouraged particularly in preparation for extended outdoor activities via the newsletter. Ms Ferguson stated:

> I’m pretty sure through their newsletter, you know, like if there’s a swimming carnival or athletics carnival or something, “Don’t forget to send a hat with your child and sunscreen,” stuff like that. I’ve seen things like that in their newsletter.

Ms Bourke, the school administrative staff member, also suggested SunSmart information is only likely to be communicated in preparation for a large scale outdoor event held earlier in the year, during warmer periods. When preparing for these events, the school would remind parents to provide sunscreen for their children. Mrs Allen, a community member, indicated that SunSmart information is only communicated when the temperature is “scorching hot,” and parents are encouraged to remind their child to wear a hat. While the analysis of GSPS newsletters found that sun protection information was not communicated via this medium in preparation for a specific event, there was a single instance in which hat-wearing behaviours were encouraged due to high temperatures.
Many community members who were parents of students attending the school indicated they had been predominantly informed of SunSmart practices from their children. Based on the reports of these parents, children primarily communicated practices pertaining to the No Hat, No Play policy item, which were based on the children’s experiences at school. As the students’ perceptions of their experiences at school were influenced by their interpretations of what had transpired, the information they communicated to their parents was subsequently affected. As a result, Ms Larson was critical of the school’s communication methods, which she believed were insufficient, as explained by the following comment:

...a lot happens at the school that I don’t know about and I rely on my kids telling me what’s happening on what day and then often they’re wrong.

As evidenced throughout this section, each stakeholder group was subjected to a number of distinct influences that impacted their understandings of the SunSmart phenomenon. While staff were influenced by the directives of the NSWDE, community members and students were more likely to develop their understandings of the SunSmart phenomenon from previous experiences. These experiences included media-based sun protection campaigns, the implementation of the SunSmart Program in alternative settings and their experiences of policy implementation within the GSPS site. It is likely that these experiences were the primary influences on these key stakeholders’ constructions of meaning because SunSmart information was rarely communicated by the school. The implications of this finding will be discussed further in Chapter Six. Nonetheless, many of these influences had an impact of stakeholders’ motivations to engage in SunSmart practices. These motivations will be examined in the following section of this analysis.

**Key stakeholders’ motivations for engaging in SunSmart practices**

Similarly to the factors that influenced key stakeholders understandings of the SunSmart phenomenon, the reported motivations that determined their SunSmart practices were varied. As the key stakeholders from the GSPS site aligned the term *SunSmart* with encouraging and/or enacting sun protection practices, the phrase “SunSmart practices” will be used throughout this section of the analysis to refer to any behaviour that encourages the enactment of sun protection practices. The analysis of the interview data established six key
themes which represented the predominant motivations that either positively or negatively influenced key stakeholders’ desire to engage in SunSmart practices. These motivations included: i) policy; ii) school-home partnership; iii) settings, environments and temperatures; iv) health; v) peer acceptance; and vi) discomfort associated with sun protection practices.

**Policy**

The first section of this analysis established that key stakeholders strongly associated the term “SunSmart” with policy, particularly a No Hat, No Play policy. To summarise; students’ non-compliance with the No Hat, No Play guidelines resulted in them being relocated to a shaded area. This policy item was also identified by key stakeholders as a substantial motivation for students’, and to a lesser extent teachers’, SunSmart practices. This section will examine key stakeholders’ support of the GSPS SunSmart policy, as well as the reported influence of the policy on key stakeholders’ sun protection behaviour.

The No Hat, No Play policy was generally supported by community members, many of whom were parents of students at the school. As the parents reportedly felt somewhat vulnerable about being unable to control students’ behaviour within the school setting, they appreciated the No Hat, No Play policy as it represented an assurance that their children were being protected from harmful sun exposure while at school. Ms Bourke, the school administrative staff member, recognised the support provided by the parental community, stating:

> We don’t have any parents coming up whinging, “oh little Johnnie couldn’t play today because he didn’t have a hat.”

Students confirmed the No Hat, No Play policy motivated their behaviour as being restricted to a smaller playing space due to noncompliance with the policy was an undesirable outcome. However, some students discussed methods of avoiding the consequences of the No Hat, No Play policy rather than abiding by the policy’s guidelines. There were two younger students, Ryan and Dianna, who indicated they were easily able to hide from the teacher. Although, this perception was debated by another young student (Aiden), who indicated “you will be in trouble” if attempts were made to avoid the consequences of noncompliance, and also Mr Rawlings, who believed that the teachers were “very good at keeping the kids in the shade if they don’t have a hat.” The specific area where students were relocated for noncompliance
with the No Hat, No Play policy, which was labelled as the kindergarten area, provided further motivation for older students to comply with the policy’s guidelines as the area was associated with younger students.

In addition to enforcing students’ hat-wearing behaviours, most key stakeholders agreed it was important for staff to role-model hat-wearing behaviours as they are acting as enforcers of the No Hat, No Play policy. Community members were in favour of staff members wearing hats, as highlighted by Mrs Walker:

I think it would be a double standard [if teachers did not wear hats].

All school staff also agreed it was important that they wear hats to motivate students’ hat-wearing behaviours. This perspective is evidenced in the following excerpt from the interview with Mr White:

Always wear a hat when we go outside ourselves, and always make sure it’s a hat that has a decent brim. (Mr White)

[Interviewer: And do you feel like that changes the attitude of students regarding that?]

Yes, definitely. Well, they learn by following the example that teachers set. (Mr White)

Ms Bourke agreed with Mr White, stating that role-modelling causes hat-wearing behaviour to become “second nature” for students. To promote staff role-modelling behaviours, Principal Rogers reportedly purchased all staff members a school broad-brimmed hat. However, it is apparent that despite the consensus among community members and staff regarding the importance of teachers’ role-modelling behaviour, their reasons for this belief were distinct. Staff members suggested their role-modelling had a positive influence on students’ behaviours, regardless of policy, whereas community members generally agreed it would be a double standard or hypocritical if staff didn’t wear hats but enforced hat-wearing policy. Thus, community members associate staff role-modelling with policy, while staff members were more likely to perceive policy and role-modelling as two independent sun protection strategies. This contrasting perception has implications that will be detailed later in this chapter.
In addition to the opposing motivations presented by staff and community members regarding why teacher role-modelling behaviour is necessary, key stakeholders also provided contrasting reports of the role-modelling behaviour of teachers at GSPS. The following responses reflect the conflicting perceptions of students when they were asked if teachers engaged in hat-wearing behaviour:

Yes, sometimes. [Teachers wear] school hats like us. (Jamie; younger student)

Sometimes. Some don’t some do. (Dianna; younger student)

No. (Louis, Ryan and Toby; younger students)

Not all teachers but most. (Samuel; older student)

Only one teacher wears hats. (Jarrod; older student)

Despite these conflicting reports, there were specific teachers who were identified as consistent role models for hat-wearing behaviour. Community members identified Mr White and Principal Rogers, while students identified Mr Rawlings and Mr Smith as staff members who consistently role-modelled hat-wearing behaviour (the latter of which was unable to participate in an interview for this study). Mr Bryant was the only staff member who indicated he didn’t often role-model hat-wearing behaviours, which he attributed to allowing students to borrow his hat.

Despite multiple teachers being identified as role models for sun protection behaviour, a group of older students collectively agreed that the school staff were not SunSmart. Cameron stated “they don’t have their hats on though, and sunscreen wears off.” Older students also suggested it was “unfair” for teachers to enforce No Hat, No Play without also engaging in hat-wearing practices. This perspective aligns with the community members’ belief that it would be a double standard or hypocritical if teachers enforced hat-wearing policy but did not role-model the practices themselves.

Regardless of teachers’ role-modelling behaviours, the key stakeholders generally agreed that the school’s policy provided motivation to engage in SunSmart practices within the GSPS
setting. Mr White, who was a teacher at GSPS, indicated that the No Hat, No Play policy was one of the main benefits of SunSmart membership, as articulated via the following comment:

I think that the No Hat, No Play really does put the responsibility on the kids to make sure that they look after their own possessions and as a result looking after their own health. So I think putting it on their own, the responsibility goes to them. (Mr White)

However, a number of key stakeholders suggested the policy had limited impact on students’ SunSmart practices outside the school setting. It was suggested that students only associated the hat-wearing requirements of the policy within the school setting, as this is the only setting where the policy was enforced. As a result, it was suggested by some staff and community members that the policy needed to be implemented holistically and consistently in order to support the behaviour. The following comments by Mrs Johnson and Principal Rogers detail this perspective:

Without your parent promoting it or pushing it just gets left really. I mean you might pick it up at school a bit but it needs that, like you said that continuation from one spot to the next. (Mrs Johnson; community member)

I think definitely [teacher role-modelling is important for influencing behaviour], but I think probably the communication with parents is the stronger importance. So when I make it very clear to them that I feel that they should be wearing the broad-brimmed hats and not the flat caps and the Superman hats, most people come on side, and then they start to say to the kids, “You can’t wear that. You’ve got a broad-brimmed hat.” So that’s probably been as equally strong. (Principal Rogers)

The perceptions described by community members suggested that key stakeholders were motivated to engage in SunSmart practices based on the setting in which they were located. The analysis of interview data identified the influence of settings, environments and associated temperatures as a substantial motivation for key stakeholders SunSmart practices, and will therefore be examined in further depth later in this analysis. The next theme to be presented in this analysis will provide further insight into the previous statements of Mrs Johnson and Principal Rogers, who specifically identified the partnership between the school
and home environments as a valuable component for motivating key stakeholders to engage in SunSmart practices.

School-home partnership

It was established in the second section of this analysis that there were community members who believed the school did not provide adequate SunSmart information to the community. Despite this reportedly inadequate communication, multiple key stakeholder groups identified a number ways in which SunSmart was supported within the home environment, including policy support, financial support, and parental role-modelling. This theme will examine how the school’s partnership with parents and community members, particularly in relation to the home environment, motivated key stakeholders’ engagement with SunSmart practices.

The P&C group was identified by a number of staff and community members as a valuable support resource for SunSmart practices. Principal Rogers praised the support provided by parents and indicated the fundraising efforts of the P&C group facilitated a subsidy for the cost of school hats. Staff and community members agreed that the school hat was reasonably priced and affordable as a result of this subsidy.

However, there were school staff who indicated more support could be provided by community members to improve SunSmart practices. In particular, while it was established that most parents and community members were supportive of the No Hat, No Play policy being enforced in the school environment, the analysis of staff interviews suggested there were a proportion of parents who provided limited support for the No Hat, No Play policy. Mr White and Ms Bourke indicated that parents sometimes allowed their child to attend school without the school-branded broad-brimmed hat to minimise conflict, as explained in the following comments:

You know, as a parent you pick your arguments and really, “oh look they’ve got a hat on. Does it really matter what sort of hat? At least it is a hat; it’s sun protection.” Whereas if you make a huge argument, they’re not going to wear any hat and then they’re just going to whinge that they’re not playing at lunch time. As I said a parent you got to pick your arguments. (Ms Bourke)
I think limitations possibly to do with just how much they [parents] want to manage their own children when they’re older; the older kids have a bit more of a fashion idea and there’s some battles that the parents don’t really want to fight. (Mr White)

These two statements indicate that some parents have difficulty encouraging their children to wear broad-brimmed hats. Mr White suggested that older students were influenced by motivations associated with peer acceptance, which limited their desire to wear a broad-brimmed hat. Peer acceptance was identified by key stakeholders as a strong motivation for students’ engagement in SunSmart practices and will be examined further later in this chapter. In addition to the previous comments, Mr White also stated that there has been “some resistance from parent bodies about enforcing that broad-brim hat as the school uniform hat.”

As the No Hat, No Play policy was interpreted by key stakeholders as an integral aspect of the SunSmart phenomenon, community members’ discussions of supporting SunSmart practices were primarily associated with this policy. Although some community members did not agree with the principles of the No Hat, No Play policy, they indicated their support of its implementation in the school setting via various methods. Some parents within the community member participant group reportedly supported the No Hat, No Play policy by encouraging their children to comply, while other parents enforced the policy beyond the school setting. Parents’ motivations for providing varying levels of support for the policy are expressed in the following statements:

I wouldn’t make my kids wear a hat for 20 minutes at morning tea but, yeah, it’s a rule but that’s just the way it is. (Ms Larson)

If it [encouragement to wear a hat] comes from the school then they’re [students] more likely to do it then if it just comes from me. (Ms Stark)

I know the kids have told me about it [No Hat, No Play] and yeah they’re very upset if they don’t have their hat. (Mrs Banner)

These responses detail a range of motivations to support, and engage in, SunSmart practices. While Ms Larson indicated she supported the policy because she respected school policies in
general, Ms Stark appreciated the support provided by the school in shaping her child’s SunSmart behaviour. Finally, Mrs Banner recognised the negative consequences for her child if she did not support the school’s SunSmart policy.

As explained in the previous theme, although teachers were expected to role-model hat-wearing behaviours, parents perceived they were less constrained by this expectation. Instead, parents believed their responsibility to support the school’s SunSmart policy was to encourage their children to wear a hat during school periods. This responsibility was associated with policy compliance rather than encouraging sun protection behaviour, as outlined by the following responses:

[Interviewer: So what do you think your role is as a parent in a relationship with the school to ensure that your child engages in sun protection?]

Tell them they have to wear the hat. (Ms Clarke)

Make sure they know where it is, for the littlies, you know, they’ve got to fish through their backpacks and sometimes it’s a bit of a scramble for them probably. So, yeah, just the basics of making sure they know which pocket of their backpack their hat’s sitting in. (Ms Bourke)

I leave it to them mostly... they’re [students] reminded once, “have you got your school hat?” and then if they don’t have it, that’s too bad, they’ve got to sit under the tree. (Ms Larson)

These perspectives support the attitudes of community members that were detailed in the previous theme, which indicated community members associated the role-modelling of sun protection behaviour with the enforcement of sun protection policy. As many parents reportedly did not enforce sun protection policy within the home environment, this may explain why they perceived they were less constrained by expectations to role-model sun protection behaviours. It is concerning that some parents were aware of these conflicting expectations and the negative impact they had on students’ attitudes, but did not express any indication they were motivated to change their behaviour. This is exemplified in the following statement from Ms Larson:
I think they [teachers] should wear hats too. That’s when, on a sunny day I make my kids wear hats and they always question me ‘cause I don’t wear a hat and I can see the, you know, the problem there.

The students interviewed at this site discussed their parents’ role-modelling at length. Similar to their reports of teacher role-modelling behaviours, students’ responses indicated parental role-modelling of SunSmart practices were inconsistent. This trend is noticeable across student age groups, and is evidenced by the following statements:

My mum does [wear a hat]! My mum does! (Jack; younger student)

My mum always puts sunscreen on her face and she always blocks, she always tints her windows, she always puts this thing to stop her from getting burned on the windows. (Samuel; older student)

My dad always gets sunburnt. Because he doesn’t have sunscreen. (Ben; younger student)

These responses indicate that students were aware of their parents’ sun protection behaviours and, in some cases, associated the behaviour with a health-related outcome. For instance, Ben recognised that sunburn was a result of his father not applying sunscreen. In addition to the statements identified previously, Aiden suggested that sunburn made his dad “sick” while Ryan described the “special type of cream” that medicated his father’s sunburn. Notably, fathers were most frequently identified as a negative role model for SunSmart practices, while mothers were most frequently identified as a positive role model.

While students’ reports of their parents’ role-modelling behaviours varied, the students were more likely to agree that their parents encouraged and reminded them to engage in sun protection behaviours. This is consistent with the reports of community members. However, there were still contrasting perceptions, displayed by students across age groups, regarding this issue. The difference among students’ perceptions is highlighted in the following conversation with younger students:

[Interviewer: So who reminds you to put sunscreen on?]
Overall, students’ mothers were more likely to remind them to wear sunscreen than their fathers, similar to reports of parental role-modelling behaviour. Students’ reports of parental reminders and encouragement of sun protection practices were primarily associated with the practice of applying sunscreen and engaging in sun protection during warmer periods and environments, such as during summer and at the beach. The influence of settings, environments and associated temperatures on key stakeholders’ motivations to engage in SunSmart practices is examined in the following theme.

**Settings, environments and associated temperatures**

The key stakeholders interviewed at this site were strongly motivated by specific settings and environments, such as aquatic environments, sports carnivals and the geographic location of GSPS. The temperature associated with these settings also influenced their motivations as high temperatures reportedly acted as a trigger for SunSmart behaviour. For instance, while students of all ages indicated that “hot” temperatures motivated them to engage in SunSmart practices, some students also explained that colder periods decreased their motivation to engage in SunSmart behaviour as they did not perceive the behaviour as necessary.

Key stakeholders often associated temperature and the perceived amount of sun exposure as two interrelated variables that affected their motivation to engage in SunSmart practices. Due to the motivational impact of these two variables, staff and community members indicated that SunSmart behaviour should extend to any setting in which individuals were exposed to sunlight for an extended period of time. This perception is highlighted by the following comments by two community members:

I find I do [encourage SunSmart behaviour] more during summer than the rest of the year. It sort of depends on how, if they’re [children] going to be outside a lot or not... Pretty much don’t worry about it in winter. (Mrs Watson)
We were talking earlier also about the fact that it’s not just within the school, it’s when they go on excursions, athletics carnivals, swimming carnivals when they’re actually going to be out in the sun much more than at the school. (Ms Ferguson)

Mr Bryant and Mr White also explicitly identified school sports carnivals as triggers for SunSmart behaviour. Furthermore, aquatic environments, such as beaches and swimming pools, were also identified by all key stakeholder groups as triggers for SunSmart behaviour due to the association between these environments and increased sun exposure. It is worthwhile noting that while these settings acted as a cue for increased SunSmart practices, including role-modelling among staff and encouragement from parents, ordinary school days did not act as a cue for such SunSmart practices.

While key stakeholders were motivated by increased levels of sun exposure to engage in SunSmart behaviours, many key stakeholders also believed they were less susceptible to the risks associated with sun exposure due to their geographic location. More specifically, it was suggested that the GSPS community was subjected to less harmful UV radiation, especially when compared to other areas of Australia. This belief was particularly evident among community members. The following conversation among community members details their perceptions of the risks associated with sun exposure in relation to their geographic location:

They [children] don’t tend to get burnt. The sun’s sort of relatively gentle somehow I think, seems to be, except in summer. (Mrs Watson)

Tends to be there’s just not that many sunny days. (Ms Clarke)

When it’s a sunny day in winter, you try and absorb as much as you can ‘cause we don’t get that many. (Ms Davis)

They just don’t burn as quickly do they? (Mrs Watson)

This conversation highlights the influence of the weather and temperature of the school’s geographic location on community members’ motivations to engage in SunSmart practices. Although Ms Larson later argued these perceptions by identifying the high incidence of melanoma in Tasmania, which is typically being a cold location, other community members perceived this incidence to be a result of the ozone layer being depleted around Tasmania.
Ms Davis suggested that the typically colder temperature of the GSPS region motivated students to prioritise staying warm rather than engaging in sun protection. For example, it was suggested by students, staff and community members that students prioritised wearing a beanie rather than a broad-brimmed hat. There were staff who supported this behaviour, as highlighted in the following statements:

Well especially up here, it’s pretty cold so a lot of the time we don’t get to go outside, so you know, I think a bit of sun’s probably good too. (Mr Bryant)

I do think though like up here we don’t really get a lot of sun out... so I think it’s good to also get out... if we’re going to be out for 10 minutes do we really need to hat up and stuff? It’s kind of like, you know, yeah, I think it’s got its place, for sure. (Mr Bryant)

As I said up here because we do have such different weather to Sydney even in Spring kids are sometimes still in beanies here with long sleeves and jackets. (Ms Bourke)

In contrast to the majority of key stakeholders whose sun protection behaviours were negatively motivated by the school’s geographic location, Mr Rawlings suggested the school’s geographic location resulted in a higher risk of skin damage and that the school community needed to be more mindful of sun exposure. He referred to UV levels, stating “it’s always much higher here than in Sydney,” and also the demographics of the school community, indicating “they’ve all got white skin; very pale skin.” Despite his concerns, Mr Rawlings recognised the school’s geographic location inhibited the school community’s SunSmart behaviour, suggesting they’re “less health concerned.” However, health acted as a strong motivator for many key stakeholder’s SunSmart behaviour.

**Health**

The key stakeholders at this site discussed health-related issues influenced by sun exposure. These health issues included short-term and long-term health damage and benefits caused by sun exposure. While students and staff were more likely to suggest health issues were a motivation to engage in SunSmart practices, community members were more likely to indicate health issues were a motivation to reduce SunSmart behaviour.
All key stakeholders groups indicated students engaged in SunSmart practices due to concerns of being sunburned. Notably, sunburn was the only health issue associated with inadequate sun protection behaviour that was identified by younger students. It was evident that older students were motivated by a number of health issues, as outlined in the following responses from older students when asked why they want to wear a hat:

- So you don’t get sunburnt. (Jarrod)
- So you don’t get freckles. (Samantha)
- Lessen the chance of dying from skin cancer. (Robert)
- And lower their chance of dying. (Vanessa)

As a result of increasing the awareness of the health risks associated with sun exposure, one of the main benefits of SunSmart, as identified by key stakeholders, was the development of lifelong healthy behaviours. The following excerpt highlights the role of health in motivating SunSmart behaviour, as described by a staff member:

- I mean they [students] say things like you know someone said, “Well I don’t want to wear a hat.” And then another one will say, “Well you have to because you’ll get skin cancer.” And then someone will be like, “My uncle had skin cancer,” and you know they talk about it. It’s in their vocabulary and they talk about it. So, and they’re well aware of it. (Mr Rawlings; teacher)

Similarly to Mr Rawlings’ report of the students’ conversation, some community members also indicated that they had experienced a personal involvement with someone who had been diagnosed with skin cancer, which motivated them to engage in SunSmart practices. There were also parents who discussed their children’s vulnerability to sunburn, which motivated them to encourage their children to engage in SunSmart practices. Mrs Allen described her son’s experience with sunburn which resulted in an increase in sun protection behaviour due to his concern of skin cancer. Mr Warren indicated his child’s sensitive skin and subsequent vulnerability to sun exposure motivated him to encourage SunSmart practices. Similarly, Mr Rawlings, a teacher, was also partly motivated to role-model hat-wearing behaviours at school due to his own skin sensitivity and susceptibility to sunburn.
Contrasting the perceived health risks associated with sun exposure, some community members also identified perceived risks associated with sun protection, thus suggesting increased sun exposure was necessary for maintaining health. These health risks included vitamin D deficiency and the harmful effects of the chemicals in sunscreen. The following statements reflect community members’ concerns of vitamin D deficiency:

You need a certain amount of sun anyway for your vitamin D. (Mrs Marston)

A lot of people up in the [Blue] Mountains are vitamin D deficient... my GP said it is a problem up here because we don’t have those, you know, we have a lot more overcast days, a lot more rainy days, I suppose. (Mrs Watson)

We were talking a little earlier about in the Blue Mountains especially, there are people with vitamin D deficiency because, you know, especially in winter you really don’t get a lot of sunlight. (Ms Ferguson)

These comments also reflect community members’ perceived relationship between the risk of vitamin D deficiency and the geographic location of GSPS. In addition to vitamin D deficiency, some community members suggested the chemicals in sunscreen were potentially harmful. Ms Larson indicated this belief led her to be “pretty relaxed with sunscreen.” However, there were community members who disagreed with these perceptions. Ms Stark was critical of individuals who perceived harmful sun exposure to be beneficial, which she believed was a perception held by older generations and resulted in this population’s higher incidence of skin cancer.

While community members’ perceived health risks associated with sun protection included vitamin D deficiency and the chemicals in sunscreen, a staff member identified an additional detriment of SunSmart practices. Mr White described the school’s aim to support students’ physical activity levels, which was difficult when also enforcing the No Hat, No Play policy, as outlined in the following comment:

And we also want our kids to stay fit and healthy and run around a lot, and if they’re not allowed to play outside it’s very hard for them to run around and stay fit.
Mr White then indicated the school sometimes provided spare hats for students to wear if they’ve forgotten their hat, especially for “fitness activities.” This supported their ability to engage in both physical activity and SunSmart practices. Mr White’s motivation to encourage physical activity was also expressed by Principal Rogers. As mentioned in the first section of this analysis, Principal Rogers indicated students were allowed to wear any type of hat to comply with the hat-wearing guidelines of the sun protection policy so “we get them out playing.”

**Peer acceptance**

Community members and staff suggested that students avoided wearing broad-brimmed hats due to a fear of judgement or ridicule from their peers. However, the students interviewed at this site provided little evidence that peer acceptance was a motivation for their own SunSmart practices. Subsequently, this theme will focus on students’ motivations as reported by community members and staff.

Although key stakeholders indicated students are strongly encouraged by teachers to wear the broad-brimmed hat, they often wore a cap instead. The following responses reflect the perceptions of most community members and staff regarding students’ preference to wear a cap rather than a broad-brimmed hat:

- It’s a fashionable thing; it’s cool. (Mrs Banner; community member)
- They’re a bit more, trying to be individual. (Mr Rawlings; staff member).

Mrs Banner also indicated her 10 year old daughter wore a baseball hat to school but kept her school broad-brimmed hat in her bag in the event she was requested to wear it by a teacher. This strategy allowed Mrs Banner’s daughter to wear a fashionable item of clothing, but also comply with hat-wearing policy to maintain free-play ability in the event the policy is more strictly enforced. Mrs Banner suggested it was “good in a way” that this strategy reportedly complied with the school’s sun protection policy guidelines. However, this community member’s support of her child’s decision to wear a cap instead of a broad-brimmed hat opposes the efforts of staff, who reportedly strongly encourage students to wear a broad-brimmed hat. Ms Bourke, the administrative staff member, described the
students’ preference for wearing caps, and the schools’ unsuccessful effort to establish SunSmart hat-wearing practices:

Yeah we’ve tried, look I’ve been involved in this school for 11 years, we’ve tried the legionnaire baseball caps, tried all sorts of stuff because they’re better for the kids, for the protection for their ears and all that, they just go back to the baseball cap. They need to make the bucket hat cool. I don’t know how.

It was reported by community members and staff that this motivational influence of peer acceptance became stronger as children aged and peaked during adolescence. Ms Bourke outlined that one of the benefits of the No Hat, No Play policy was that it was enforced on all students:

At least with it being a policy it’s a matter that everyone’s the same; it’s not just your child that you’re saying, “Oh you need to wear a hat because I don’t you to get burnt.” It’s all the children are told they have to wear a hat.

Limiting the influence of peer pressure was one of the main objectives of the school’s uniform policy, as detailed previously in this chapter. As the influence of peer acceptance on students’ behaviour increased as they aged, it was commonly suggested their hat-wearing behaviours were expected to sharply decline during high school. Community members and staff reported this was compounded by the fact that secondary schools were less likely to hold a SunSmart membership. Given the social dynamic of peer acceptance became more influential as individuals increased in age, it is not surprising that Mr Rawlings suggested staff members, at times, were also affected by their desire for peer acceptance when considering their SunSmart behaviour. However, his perception was not reinforced by other key stakeholders.

As suggested by multiple stakeholder groups, the hat-wearing behaviours of older students also acted as a motivation for younger students. Ms Larson indicated that her son, who was a younger student, wanted to wear “cool caps” rather than a broad-brimmed hat because “the bigger kids always do.” Mr Bryant, a teacher, believed that the role-modelling behaviours of students’ peers were more influential than teachers or parents, especially for older students. Community members agreed with this perception and recommended SunSmart
schools enforce the behaviour of older students more strictly to support their role-modelling behaviour for younger students.

While the majority of staff and community members believed peer acceptance acted as a predominant motivation for students’ SunSmart behaviour, students were more likely to report that their dislike of specific sun protection practices decreased their motivation to engage in SunSmart practices. This influence is examined in the following theme.

**Discomfort associated with SunSmart practices**

Students of all ages expressed a number of features associated with sun protection practices constrained their motivation to engage in SunSmart practices, including the design of the school hat and the physical sensation of sunscreen application. Although students discussed these features at length, community members and staff provided little insight into this theme. Therefore, this theme will primarily detail students’ reports of these motivations.

Students provided conflicting reports regarding their hat-wearing behaviour within and beyond the school setting. While younger students were more likely than older students to reportedly enjoy wearing hats, there were also younger students who indicated they did not wear their hat outside school. The majority of older students indicated they did not enjoy wearing hats, specifically the school hat. This is evidenced by Cameron, who stated:

> The hat’s horrible. It gets annoying and I just don’t like it.

Additional criticisms of the school hat included general discomfort, difficulty participating in physical activity, and the colour of the hat. Robert’s tone of voice as he described the colour of the hat as “a rat colour” indicated dissatisfaction. These perceptions conflict with community member reports, as Ms Larson believed “everybody’s happy to wear hats."

Older students indicated they did not like the design of the school broad-brimmed hat. Sophie and Wayne identified their preferred hat-type as a “flat cap,” which is a colloquial term for a flat brim baseball cap. While Sophie suggested the flat cap had a better design for the purpose of sun protection, stating “you can cover your face better too,” Samuel acknowledged the broad-brimmed hat was encouraged by teachers for students to wear, “because it actually covers your ears.” Samuel’s perception was acknowledged and agreed upon by the majority
of older students. Cameron suggested students preferred the flat cap because “they think it looks cool.” This statement represents the only instance of a student reporting peer acceptance as a motivation for SunSmart behaviour.

Despite older students’ dislike of the school broad-brimmed hat, many of them also indicated they would not use sunscreen as a substitute for wearing hats. The data from the student interviews indicates that younger and older students disliked sunscreen. Their dislike of sunscreen was primarily due to the way it felt on their skin, as described by the following students:

Disgusting. (Katy; younger student)

It makes your skin sticky... smells disgusting as well. (Samantha; younger student)

Gross. (Wayne; older student)

Slimy... it doesn’t come off and it makes you look like a ghost (Jackie; older student)

In addition to the general dislike of how sunscreen feels, Ben (a younger student) and Robert (an older student) recalled experiences that involved sunscreen making contact with their eyes, which resulted in pain. However, there were students who indicated an appreciation of sunscreen. Jack, a younger student, suggested sunscreen tastes “yummy,” while Jake and Chaydin, older students, suggested sunscreen application was beneficial and should be increased at school.

Despite their reported dislike of sunscreen, students’ most frequently discussed recommendations to improve the SunSmart Program were to increase the amount of sunscreen and shade availability at the school. It was reported that additional shade would result in less strict requirements for hat-wearing behaviour. Students also advised this could be supported by developing a type of sunscreen that didn’t feel uncomfortable when applied and had a more appealing colour.

Chapter summary

This chapter presented the results of the case study that was conducted at GSPS. A comprehensive profile of the GSPS community was presented, which detailed a range of
relevant data to analyse the school setting, the school community, the relationship between
the school and community, and the implications for the enactment of the SunSmart Program
within the GSPS setting. Data were collected from the school by collecting a number of
relevant artefacts and also conducting interviews with key stakeholders of the GSPS
community.

The findings from the analysis of artefacts that were collected from GSPS indicated that the
GSPS sun protection policy meets the majority of SunSmart Program criteria, but specifically
focuses on hat-wearing guidelines. The uniform policy elaborates on some of the key areas of
the sun protection policy, specifically that students are encouraged to wear broad-brimmed
hats and that staff are expected to role-model broad-brimmed hat-wearing behaviours.
Although the uniform policy emphasises the partnership between the school and the
surrounding community, the analysis of newsletters found that sun protection information
had only been communicated once in the entire year prior to the commencement of
interviews at the site.

The analysis of interviews with key stakeholders revealed a number of valuable findings
regarding the enactment of the SunSmart Program within a school setting. It was evident that
the majority of key stakeholders interpreted the SunSmart phenomenon as a social construct
that promoted sun protection behaviour within a school setting via sun protection policy and
education. Hat-wearing policy was identified as a predominant feature of the SunSmart
phenomenon, and as the key stakeholders had experienced the implementation of hat-
wearinng policy within the GSPS setting, the majority of key stakeholders believed GSPS was a
SunSmart school.

However, while the key stakeholders’ experiences of hat-wearing policy within the GSPS
setting were the predominant influence on their understandings of the SunSmart
phenomenon, it was evident there were a number of additional, distinct features that
facilitated their construction of meaning. This was clearly evident among staff and community
members. The directives of the NSWDE impacted the staff members’ understandings of the
SunSmart phenomenon, although it was apparent that the knowledge of the formal SunSmart
membership process resided with a previous GSPS principal, who had not dispersed this
information to the current principal or staff. As SunSmart information was rarely
communicated between the school and community, community members had primarily constructed their understandings of the SunSmart phenomenon from their experiences of a media-based sun protection awareness campaign that had been launched decades prior. Community members’ understandings of the SunSmart phenomenon were also supplemented by their experiences of implementation of the SunSmart Program in alternative settings and also their children’s reports of school procedures, which were reportedly often incorrect.

Due to the diverse influences that effected key stakeholders understandings of the SunSmart phenomenon, as well as the lack of clear communication of the school’s SunSmart procedures, the key stakeholders exhibited varied motivations for engaging in SunSmart behaviour. Many of these motivations supported key stakeholders to engage in SunSmart practices, such as policy, health concerns, and specific triggers for sun protection. However, there were a number of motivations that constrained SunSmart practices within the GSPS community. While the GSPS hat-wearing policy motivated students and staff to engage in hat-wearing behaviour during school periods, it was evident that the motivational impact of peer acceptance alongside the leniency of the school’s hat-wearing policy resulted in students choosing to wear hats that did not provide adequate sun protection, such as caps. Furthermore, although parents supported the school’s enactment of hat-wearing policy, they were unlikely to enforce these guidelines within the home environment and were also unlikely to role-model appropriate hat-wearing behaviours. This lack of parental support opposes the GSPS sun protection policy guidelines and was also identified by staff and some parents as an issue that was constraining students’ motivation to engage in SunSmart practices. The analysis of interview data suggests that students of all ages observe are aware of teachers’ and parents’ role-modelling behaviour. It is possible that parents’ lack of support was due to being ill-informed of the school’s SunSmart procedures and also their beliefs that the geographic location of the GSPS community experienced less harmful UV exposure.
Chapter Five: Results of the case study of Henry Gilbert Public School (HGPS)

Introduction

In Chapter Four, the findings from the first case study were presented. This chapter is the second of two results chapters and will present the findings from the second case study. Chapter Six will act as a discussion chapter and highlight the similarities and differences between the two case sites in order to draw conclusions from the study. The discussion will be framed by phenomenology and the Health Promoting Schools (HPS) framework, which are the theoretical and methodological frameworks of the study.

The data presented in this chapter were collected from the Henry Gilbert Public School (HGPS) site. These data include relevant artefacts, such as the school’s sun protection policy, uniform policy, and school newsletters, as well as individual and focus group interviews with key stakeholders from the HGPS community. The application of the HPS concept as the methodological framework for this study led to the identification of students, school staff and community members as key stakeholders. The procedures which were used to analyse these data will be detailed in their respective sections. Prior to presenting the results of the analysis of data, this chapter will provide a context of the case by providing an overview of the population and environment of the HGPS community.

Case overview

HGPS is a government, K-6 public school situated within the Blacktown area of the Greater Western Sydney (GWS) region. This section presents a detailed overview of the HGPS community by highlighting a number of relevant characteristics that may have influenced key stakeholders’ understandings of, and motivations to enact, the SunSmart phenomenon. The MySchool website was used to provide information about the student and staff population of HGPS (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2016). However, as the MySchool website is a publically accessible website, the specificity of information presented that was obtained from this data source was limited for confidentiality purposes. The 2011 Australian census, which was the most recently published census at the time of the
research, was also examined to further detail the characteristics of the HGPS community. Climate information from the Bureau of Meteorology (BOM) was obtained to determine the importance of sun protection in the HGPS geographic region. All information presented is designed to represent the characteristics of the school community during the time of data collection.

**The school setting**

The *MySchool* website indicates that there were approximately 200 students enrolled at HGPS during the time of data collection (ACARA, 2016). Almost 50% of students had a language background other than English, while less than 3% of students identified as Indigenous (ACARA, 2016). According to the Index of Community Socio-Educational Advantage (ICSEA), which is used to compare students’ academic achievements in the National Assessment Program – Literacy and Numeracy (NAPLAN) across Australian schools, the students at HGPS achieve higher academic outcomes than the average Australian school (ACARA, 2016).

There were between 15 and 20 full-time equivalent staff, which included teachers and non-teaching staff, employed at the site (ACARA, 2016). The HGPS website, which was not referenced for confidentiality purposes, indicates the teaching staff encourage students to develop a love of learning and a desire to succeed, while maintaining the highest integrity and concern for students’ wellbeing.

**The school community**

The HGPS website emphasises the community links between the school and the surrounding community. The front page of the website describes the school as a “welcoming and friendly school with strong links to the community.” Further review of the HGPS website indicates the relatively small size of the school in relation to surrounding schools, in addition to the “family” atmosphere, has led to the school being known as “the country school in the middle of the city.” The community is encouraged to be involved in school events and procedures, such as volunteering at sports days, supervising excursions, supporting fundraisers, joining school committees, and listening to children read in the classroom.

The HGPS website also includes two segments about sun safety, which are highlighted below:
Our school takes sun safety seriously. Children learn about how to protect themselves from the sun's damaging UV [ultraviolet] rays, and our school implements a range of sun protection strategies. Sun sense information in community languages.

We teach students about the damaging effects of the sun and promote sun safety practices.

These segments also include hyperlinks to the NSW Department of Education website for sun safety ([NSWDE], 2014), and additional hyperlinks so that the NSWDE website for sun safety can be viewed in a number of different languages. The sun safety segments are one of many health issues identified on the HGPS website.

According to the 2011 Australian census, the population of the community surrounding HGPS was almost 20,000, which comprised a similar number of males and females (Australian Bureau of Statistics [ABS], 2017). When compared to the New South Wales (NSW) average, individuals within the community were far more likely to have had both parents born overseas, and a high proportion of the community comprised individuals born in India or Sri Lanka (ABS, 2017). In addition to the multi-cultural characteristics of the HGPS community, the population also had higher rates of full-time employment and lower rates of part-time employment. This may have been an influence on average weekly income per household, which is comparatively higher than the NSW average (ABS, 2017).

In regards to the intensity of sun exposure experienced at the geographic location of HGPS, the BOM indicates that the UV Index for any average year/month is similar to that of Grove Street Public School (GSPS) (BOM, 2017). More specifically, the UV Index in the area peaks at approximately 12 during the month of January (Extreme), drops to approximately 2 during the month of June (Low), and averages approximately 8 throughout the entire year (High) (BOM, 2017). The comparable exposure to UV radiation experienced by both GSPS and HGPS is due to their relatively similar latitudes (BOM, 2017).

The importance of sun protection within the HGPS community is somewhat complex, mainly due to the multicultural population. As there are higher rates of Indian and Sri Lankan individuals within the HGPS community, there is likely a higher percentile of individuals with a darker skin-pigment complexion. Individuals with a darker skin pigmentation do not need
to be as concerned about sun protection compared to whiter skin individuals, as they are less susceptible to skin cancer (Lucas et al., 2008). However, these individuals represent less than 20% of the HGPS community population, while individuals with ancestral backgrounds of predominantly white skin pigmentation, such as Australian, English or Irish, represent close to 50% of the HGPS community population, according to the 2011 Australian census (ABS, 2017). Given that the average UV Index is High within the HGPS geographic region, and can reach Extreme, this represents a considerable skin cancer risk for all individuals within the community, especially those with white skin pigmentation (World Health Organization [WHO], 2003).

**Artefacts findings**

There were three types of artefacts collected from HGPS which provide an insight into the SunSmart practices that reportedly occur at the site. These included the sun protection and uniform policies that were implemented at the school at the time of data collection, and newsletters published by the school in the 12 months preceding the interviews, which were made publically available to the community.

**Sun protection policy**

The HGPS sun protection policy document was three pages in length, and was titled “Henry Gilbert Public School – Sun Protection Policy.” This policy document has been de-identified and included as Appendix 6. The document indicated it was created in September, 2012. Throughout the document, the sun protection guidelines and rules are referred to as a “sun protection plan”. The structure of the policy document included three main sections:

i) **Rationale** – a brief outline of the risks of sun exposure and the susceptibility of children and adolescents to these risks;

ii) **The Goals of the Sun Protection Plan** – these goals are specifically detailed later in this section. They included increasing the students’ and school community’s awareness and use of sun protection practices, working towards a sun safe school environment, and increasing students’ responsibility for their sun protection behaviour; and,

iii) **Our sun protection plan** – this was the most extensive section of the policy. While there was a brief paragraph which indicated the policy was in operation all year, identified
specific periods when sun exposure is most harmful throughout the year (August-May) and daily (10am-2pm, or 11am-3pm daylight saving), there were multiple, specific policy guidelines which were categorised under 10 components.

The content analysis of the policy document provided an overview of the instances and frequencies in which key terms and phrases were used. This list of key terms and phrases was developed via a review of the SunSmart Program (Cancer Council NSW [CCNSW], 2015) in addition to relevant literature (Appendix 4). The word “sun” was the most frequently used term from the list of key words and phrases ($n=20$), and was commonly used in reference to “sun protection” ($n=12$). This phrase was used to describe a number of policy elements, such as the policy itself as a “sun protection plan,” the various “sun protection measures” and “sun protection behaviours” encouraged by the policy, the “sun protection principles” taught in lessons, and the “sun protection information” distributed to the school community. Table 5.1 presents the results of the content analysis of the HGPS sun protection policy document.

Table 5.1: A comparison of elements from three components of HGPS’s sun protection policy and SunSmart policy guidelines.

<table>
<thead>
<tr>
<th>Key words/phrases</th>
<th>Frequency</th>
<th>Key words/phrases</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedul*</td>
<td>0</td>
<td>Sunscreen</td>
<td>7</td>
</tr>
<tr>
<td>Outdoor</td>
<td>9</td>
<td>Role</td>
<td>2</td>
</tr>
<tr>
<td>Outside</td>
<td>5</td>
<td>Model</td>
<td>2</td>
</tr>
<tr>
<td>Shade</td>
<td>9</td>
<td>Curriculum</td>
<td>1</td>
</tr>
<tr>
<td>Hat</td>
<td>5</td>
<td>Educat*</td>
<td>1</td>
</tr>
<tr>
<td>Legionnaire</td>
<td>0</td>
<td>Communit*</td>
<td>7</td>
</tr>
<tr>
<td>Bucket</td>
<td>0</td>
<td>Glasses</td>
<td>5</td>
</tr>
<tr>
<td>Cap</td>
<td>0</td>
<td>Review</td>
<td>2</td>
</tr>
<tr>
<td>Broad</td>
<td>2</td>
<td>Sun</td>
<td>20</td>
</tr>
<tr>
<td>“No Hat”</td>
<td>0</td>
<td>UV</td>
<td>5</td>
</tr>
<tr>
<td>Uniform</td>
<td>2</td>
<td>SunSmart</td>
<td>0</td>
</tr>
<tr>
<td>Collar</td>
<td>1</td>
<td>Policy</td>
<td>1</td>
</tr>
<tr>
<td>Sleeve</td>
<td>1</td>
<td>Term</td>
<td>0</td>
</tr>
<tr>
<td>Clothing</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The thematic analysis of the HGPS sun protection policy document revealed two predominant themes: i) alignment with the SunSmart Program; and ii) community.
**Alignment with the SunSmart Program**

A prominent finding from the thematic analysis of the HGPS sun protection policy was that the third section of this document (*Our sun protection plan*) closely resembles the SunSmart Program’s sun protection policy. Table 5.2 compares four components of the HGPS and SunSmart Program sun protection policy documents to provide examples of instances where the phrasing of these documents were identical, as well as where differences occurred.

Table 5.2: A comparison of elements from four components of the HGPS sun protection policy and SunSmart Program policy guidelines.

<table>
<thead>
<tr>
<th>HGPS’s sun protection policy</th>
<th>SunSmart Program sun protection policy</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Scheduling outdoor activities:</em> Where possible, we will schedule outdoor activities (e.g. assemblies, sport and physical education lessons) outside peak UV times of 10am – 2pm (11am – 3pm daylight saving time) and plan activities to take place in the shade or indoor areas.</td>
<td><em>Scheduling outdoor activities:</em> Where possible, we schedule outdoor activities (assemblies, sport, PE, etc) outside peak UV times of 10am – 2pm (11am – 3pm daylight saving time).</td>
</tr>
<tr>
<td><em>Hats:</em> Students are encouraged to wear school hats that protect their face, neck and ears.</td>
<td><em>Hats:</em> Students are encouraged to wear sun-safe hats that protect the face, neck and ears when outside. Recommended sun-safe hats include legionnaire, broad-brimmed and bucket hats. Baseball caps are not recommended.</td>
</tr>
<tr>
<td><em>Clothing:</em> Sun safe clothing is included in our school uniform and sports uniform. This will include shirts with collars (or covered necklines) and sleeves, longer style dresses and shorts, rash vests or t-shirts for outdoor swimming.</td>
<td><em>Clothing:</em> Sun safe clothing is included in our school uniform and sports uniform. This will include shirts with collars or covered necklines, sleeves, longer style dresses and shorts, rash vests or t-shirts for outdoor swimming.</td>
</tr>
<tr>
<td><em>Sunglasses (optional):</em> Consideration will be given to staff and students wearing close fitting, wrap around sunglasses that cover as much of the eye as possible and meet the Australian Standard 1067 (Sunglasses: Category 2, 3 or 4).</td>
<td><em>Sunglasses (optional):</em> Staff and students are encouraged to wear close-fitting, wrap-around sunglasses that cover as much of the eye as possible and comply with Australian Standard AS1067 (Sunglasses: Category 2, 3 or 4).</td>
</tr>
</tbody>
</table>

While the HGPS and SunSmart Program sun protection policy documents were very similar, as shown in the comparison of the *Clothing* components in Table 5.2, a closer comparison of
the terms and phrases used demonstrates notable differences. For example, the comparison of the *Hats* component of sun protection policy, as illustrated in Table 5.2, indicates that both documents state “Students are encouraged to wear sun-safe hats that protect the face, neck and ears...” However, only the SunSmart Program’s sun protection policy states “when outside” and “recommended sun-safe hats include legionnaire, broad-brimmed and bucket hats. Baseball caps are not recommended.” Conversely, the HGPS sun protection policy adds content to the *Scheduling outdoor activities* component, indicating that the school will plan activities to take place in the shade or indoor areas in addition to the SunSmart Program’s recommendations of scheduling outdoor activities outside of peak UV times where possible.

A difference in wording within the *Sunglasses* component suggests the HGPS sun protection policy may not encourage the use of sunglasses. While the SunSmart Program indicates “staff and students are encouraged” to wear appropriate sunglasses, the sun protection policy of HGPS indicates “consideration will be given” to staff and students wearing appropriate sunglasses.

The four components compared in Table 5.2 represent the most substantial differences between the behavioural guidelines of staff and students detailed within the two policy documents. In addition to these four components, the evaluation procedures of the HGPS policy document also represent a notable variation from the SunSmart Program policy. While the SunSmart Program indicates a school’s sun protection policy is to be reviewed by the school’s parent body and staff every three years and submitted to CCNSW to maintain SunSmart status, the sun protection policy of HGPS indicates the review is conducted by the parent body, staff *and students* every three years. Thus, students are integrated into the review of the HGPS sun protection policy despite not being recommended by the SunSmart Program. Furthermore, there is also no indication of submitting the policy to CCNSW to maintain their SunSmart status. As the HGPS sun protection policy document was dated September 2012, it would have been within the three year period of operation.

**Community**

As detailed thus far, the HGPS sun protection policy reflects the components and general structure of the SunSmart Program’s sun protection policy, but includes some differences that represent adjustments in the application of the policy. The first and second sections of the
HGPS sun protection policy (*Rationale* and *The Goals of the Sun Protection Plan*) represent a substantial difference between this document and the SunSmart Program’s sun protection policy, as they were not evident in the SunSmart Program. Therefore, the content within these areas has been devised and integrated into the HGPS sun protection policy, despite no recommendations from the SunSmart Program. Considering the strong emphasis on school community within these areas, it is evident that the HGPS sun protection policy was extended beyond the recommendations of the SunSmart Program to further address the partnerships and services component of the HPS framework.

The *Rationale* of the HGPS sun protection policy presents a brief overview of the dangers of sun exposure, the incidence of skin cancer in Australia, and the susceptibility of children and adolescents to sun exposure risks. *The Goals of the Sun Protection Plan*, which encompass the second section of the HGPS sun protection policy document, indicate that the integration of the school community represents a valued objective of the policy. The goals of the HGPS sun protection plan are as follows:

- Increase student and community awareness about skin cancer and sun protection;
- Encourage the entire school community to use a combination of sun protection measures whenever UV Index levels are 3 and above;
- Work towards a safe school environment that provides shade for students, staff and the school community; and,
- Assist students to be responsible for their own sun protection.

While all four of these goals target students, three of *the Goals of the Sun Protection Plan* specifically target the school community. These three goals include increasing the community’s sun protection awareness, encouraging their sun protection behaviour, and creating an environment that supports these behaviours. The remaining goal of the HGPS sun protection policy, which does not integrate the community, indicates that developing students’ responsibilities for their own sun protection behaviour was an objective of the HGPS sun protection policy. Facilitating students’ responsibility allows them control over their lifestyle, and such empowerment is valuable for health promotion efforts (Macnab et al., 2014).
Comparatively, the integration of the school community within the SunSmart Program’s sun protection policy is only evident in two areas. Firstly, the SunSmart Program indicates the school community is committed to providing shade and consulted about future plans for shade, and secondly families and visitors are encouraged to use a combination of sun protection practices when attending or participating in outdoor activities. These two areas are replicated in HGPS’s sun protection plan, in addition to community integration within the first two sections of the HGPS sun protection policy detailed previously.

**Uniform policy**

The HGPS uniform policy was analysed to determine the clothing requirements of students and school staff, and how these requirements may impact the SunSmart procedures of the school community. The HGPS uniform policy collected for this study was a three page document which predominantly detailed the *Dress Code* that students were to adopt. The *Dress Code* included a summer uniform for girls and boys, a winter uniform for girls and boys, and a unisex sports uniform. This section will firstly provide an overview of the HGPS uniform policy document, specifically its structure and contents, then detail the results of the content and thematic analyses.

The first page of the HGPS uniform policy document categorises information under the following subheadings:

1. **Rationale**; which explains that the establishment of a school uniform reinforces students’ pride in their appearance and representing their school, and also supports their perceived association with the school community. Furthermore, the *Rationale* states the *Dress Code* was established in consideration of “issues of equality, health and safety, and expense.”

2. **Aims**; these reflect the *Rationale*, as they encompass promoting equality among students, developing pride and an ability to identify with the school, providing cost effective, practical and durable clothing, and maintaining and enhancing the positive image of the school community.
iii) Implementation Strategies; this section details a number of factors which influenced the establishment and enforcement of the Dress Code. These factors included the individuals and groups who were consulted to develop the Dress Code, the periods when the Dress Code must be worn, the communication of uniform-related information to the community, the management of the school’s uniform shop, how parents can seek exemption to the Dress Code for their children, and the regulations associated with jewellery, hairstyles and hats. The areas which were relevant to the implementation of SunSmart practices and procedures at HGPS were identified by the content and thematic analyses, and will therefore be examined later in this section.

iv) Evaluation; which indicates that the HGPS uniform policy will be reviewed as part of the school’s three-year review cycle.

The second and third pages of the HGPS uniform policy detail the students’ Dress Code. The content in this section is categorised into a number of sub-headings; accessories, summer uniform, winter uniform, sports uniform. Each of these categories outlines the clothing requirements associated with their title. For example, the accessories category specifies the uniform requirements relating to a number of clothing accessories, such as hair accessories. Some information, such as the socks, hats and shoes required to be worn, were identified in multiple sections. While the summer and winter uniform categories are divided into “Girls” and “Boys” to differentiate their uniform requirements, the sports uniform is unisex, which means there is only one description for this uniform. The Dress Code of HGPS, as described by the uniform policy, is detailed in Table 5.3.
Table 5.3: An overview of the HGPS uniform policy

<table>
<thead>
<tr>
<th>Uniform</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accessories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hat</td>
<td>Navy blue school hat with light blue HGPS school crest on the front; “a cricketer style hat”</td>
<td></td>
</tr>
<tr>
<td><strong>Hair accessories</strong></td>
<td>Should be in school uniform blue.</td>
<td></td>
</tr>
<tr>
<td>Socks</td>
<td>Ankle fold over grey socks</td>
<td>Ankle fold over “mid saxe blue” socks</td>
</tr>
<tr>
<td>Stockings and tights</td>
<td>In navy blue</td>
<td></td>
</tr>
<tr>
<td>Shoes</td>
<td>Black joggers, black leather shoes with minimal heel (no ballet style shoes or Raben(^6)). Any type of jogger is acceptable for sport.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Season</th>
<th>Tops</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>Polo shirt</td>
<td>Winter tunic with a long sleeved Peter Pan collared shirt(^7) or long trousers with polo shirt. Stockings are also permitted</td>
<td></td>
</tr>
<tr>
<td>Bottoms</td>
<td>Trousers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoes</td>
<td>Black shoes</td>
<td>Black shoes</td>
<td></td>
</tr>
<tr>
<td>Additional</td>
<td>Jacket (fleece) and school hat</td>
<td>Jacket (fleece) and school hat</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Season</th>
<th>Tops</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>Polo shirt</td>
<td>Polo shirt</td>
<td></td>
</tr>
<tr>
<td>Pants</td>
<td>Shorts</td>
<td>Culottes(^8)</td>
<td></td>
</tr>
<tr>
<td>Shoes</td>
<td>Black shoes</td>
<td>Black shoes</td>
<td></td>
</tr>
<tr>
<td>Additional</td>
<td>Jacket (fleece) and school hat</td>
<td>Jacket (fleece) and school hat</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Season</th>
<th>Tops</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sport</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pants</td>
<td>Shorts (“the same material as the sport shirt”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoes</td>
<td>Sport shoes or joggers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional</td>
<td>Light-weight zipper jacket and school hat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is worthwhile examining the sun protection provided by the school uniform, especially considering the HGPS sun protection policy refers to school uniform in the following statement:

\(^6\) The term “Raben” typically refers to a canvas shoe that features a small rubber sole

\(^7\) A “Peter Pan collar” is larger and more rounded than a typical shirt collar

\(^8\) Culottes are similar to skorts; they are a garment that appears to be a skirt, but is split beneath the fabric to feature individual pant legs
Sun safe clothing is included in our school uniform and sports uniform. This will include shirts with collars (or covered necklines) and sleeves, longer style dresses and shorts, rash vests or t-shirts for outdoor swimming.

As detailed in Table 5.3, the winter uniform offers greater protection from sun exposure compared to the other uniforms as it increases the length of the clothing worn on the legs and torso, specifically for females. Boys’ winter uniform includes trousers and a polo shirt, while girls have the option of trousers and a polo shirt or a winter tunic with a long sleeved peter pan collared shirt. The use of the long sleeved Peter Pan collared shirt would provide additional sun protection for the arms. Although, both boys and girls also have the option to wear jackets, which would also provide sun protection for their arms.

The summer uniform for girls requires culottes (knee length trousers) and a polo shirt, while the summer uniform for boys requires shorts and a polo shirt. This reduces the amount of sun protection provided for the legs and arms, although jackets are still listed as optional additions. The sports uniform for boys and girls requires shorts/tracksuit pants and a polo shirt/jacket, thus making it similar to the summer/winter uniforms.

The material of the school uniform garments, which may have an effect on the sun protection provided, is not clarified. While there is an image of the school uniforms in the newsletters, the resolution is not sufficient to determine the type of material for each garment. Furthermore, the HGPS uniform policy does not state whether students were allowed to/encouraged to put their collars up to protect their necks from sun exposure, or how rash vests or t-shirts were integrated for outdoor swimming (as mentioned in the HGPS sun protection policy). Despite the omission of swimming-related protection clothing, it is evident that there are items within the school uniform that included collars (or covered necklines), sleeves and longer style dresses/shorts, which were indicated by the school’s sun protection policy.

The content analysis of the HGPS uniform policy identified the frequency of key terms and phrases displayed throughout the document. While the term “uniform” was the most commonly used key term/phrase (n=12), the next most common term/phrase was “hat” (n=9), followed by “community” (n=4) and parent (n=2). All other key terms were either
mentioned once or not at all. It is worth noting that the term “SunSmart” was used in the HGPS uniform policy once to describe the type of hats required to be worn by students, but was not mentioned in the school’s sun protection policy at any stage.

The thematic analysis of the HGPS uniform policy identified two primary themes relevant to the focus of this thesis; i) hats; and ii) community. These themes were integrated frequently and consistently throughout the three-page uniform policy document.

**Hats**

The policy requirements associated with students’ hat-wearing practices were integrated into the *Implementation Strategies* and *Dress Code* sections of the HGPS uniform policy. Within the *Implementation Strategies* section, it is stated that “Sunsmart hats” which are “consistent with our No Hat – Shade Play Policy” are the only acceptable forms of headwear at school. It is explicitly stated that students are required to wear the school hat while outside during recess, lunch, sport and any other outdoor activity, but not while inside. Furthermore, as the school hat is a component of school uniform, it is interpreted that the hat must be worn whenever the school uniform is explicitly stated to be worn, which includes during school hours, travel to and from school, and during school excursions.

While the design of these “SunSmart hats” is not explicitly detailed in this section, the “school hat” is described in the *Dress Code* section as a navy blue “cricketer style hat” that has the HGPS school crest printed on the front. The analysis of the HGPS newsletters, detailed in the following section of this chapter, revealed an image of the students displaying the summer, winter and sports school uniforms. As this image illustrates a student wearing a navy blue broad-brimmed hat, it is assumed that the “Sunsmart hats” and “cricketer style hat” identified in the uniform policy are referring to a broad-brimmed hat.

The HGPS uniform policy also indicates that the requirement for “Sunsmart hats” is consistent with the school’s “No Hat – Shade Play Policy.” While the HGPS sun protection policy is not titled “No Hat – Shade Play,” nor does it include this specific phrase throughout the document, there is a guideline within the HGPS sun protection policy document which does suggest such a protocol is in place. Furthermore, this guideline indicates that students must wear “sun safe hats.” Therefore, it is assumed that the reference to the “No Hat – Shade Play Policy” within
the HGPS uniform policy is referring to this specific HGPS sun protection policy guideline. Also, given the HGPS uniform policy had been published a year prior to the sun protection policy, the title of the sun protection policy may have changed during this timeframe.

Community

While the term “community” is mentioned in all areas of the HGPS uniform policy document, its use has dual meanings. In some circumstances it is used to refer to the concept of a school community, while other instances of the term are used to differentiate the school from the community. This theme encompasses both of these uses, which will be described throughout this section.

The Rationale and Aims of the HGPS uniform policy suggest that the school strongly considers how it is perceived by, and integrated within, the surrounding community. The Rationale of the uniform policy document states that a student uniform “instils recognition of themselves [students] as an integral part of the school community...” It is also outlined in the Rationale section that the school uniform is designed to reinforce students’ pride in their appearance and pride in representing their school. Furthermore, one of the Aims of the HGPS uniform policy is to “maintain and enhance the positive image of the school in the community.” These statements indicate that the enforcement of school uniform is intended to impact students’ feelings of belonging and perceived privilege to represent their school community.

It is stated that the development of the HGPS school uniform occurred following consultation with the school community, specifically the Parent & Citizens (P&C) Uniform Committee. The P&C was also responsible for operating the school’s Uniform Shop. Furthermore, school newsletters were specifically identified as sources of information for parents and the community regarding the details of the Dress Code and places whereby such items can be purchased (i.e. the Uniform Shop).

While the HGPS uniform was developed to allow students to safely engage in school activities and to cater for the financial constraints of families, the policy document indicated that parents can seek exemptions from uniform due to religious beliefs, ethnic/cultural backgrounds, student disability/health condition, or economic hardship. Finally, the Dress Code of the policy stated that “wearing school uniform (including a school hat whilst in the
playground) is an expectation of the school community and is supported by the school’s P&C Association.” While this statement seemingly confined the use of a school hat to “the playground,” this may be to clarify that hats were not to be worn indoors (i.e. in classrooms). Nonetheless, it is evident from the data presented thus far that parents and the community were integrated into the initial development of the school uniform and the continued operation of school uniform management. Subsequently, the school community reportedly established expectations that students wear their school uniform, including their school hat.

Newsletters

All newsletters published in the 12 months preceding the commencement of data collection \((n=23)\) were sampled and analysed. The newsletters had been published fortnightly, and each newsletter followed a similar structure. They were usually four or six pages in length and regularly included information about the school’s upcoming/past events, each classroom’s recent achievements (academic and non-academic), the school’s P&C, activities/events in the community, and advertisements for local sporting clubs or health services. Additionally, there were regular reminders for various aspects of the school ethos, including policies, expectations and values.

The content analysis of the newsletters revealed that sun protection information had been communicated throughout the 12 month period. The most frequently used key terms/phrases were “uniform” \((n=20)\), “hats” \((n=4)\), “skin” \((n=4)\), and “sun safe” \((n=3)\). There were no other uses of key terms/phrases which were relevant to the focus of this study. The term “uniform,” which was mentioned throughout the newsletters more than any other key term/phrase, was used for a number of purposes, including reminding students to wear their school uniform \((n=9)\), publicising the Uniform Shop \((n=7)\), advertising the Uniform Coordinator position on the P&C \((n=3)\), and detailing a lesson that occurred whereby students reviewed the school’s identity. Three of the references to “hats” were associated with upcoming excursions and reminding students to wear/label their hats. The remaining instance was included in a reminder for parents to be persistent with their children’s hat-wearing behaviours:
Students are now expected to wear full summer uniforms and please be diligent about ensuring that your children have a school hat as very hot weather has been forecast this term...

All four uses of the term “skin” were included in an advertisement published in consecutive newsletters for a local medical centre that provided screening services for skin cancer. The advertisement included a rationale for regular skin checks, which emphasised skin cancer as a “year-round issue,” and provided an overview for the medical centre’s resources and services that can detect any suspected skin cancers.

All three uses of the phrase “sun safe” were included in reports of classroom activities. These references indicated that sun safety was the focus of educational content during the period the newsletters were published. The three uses of the phrase “sun safe” are detailed in the following excerpts from the newsletters:

Our health topic for Term 4 is Sunsafe and our HSIE Topic is Identifying Us. Year 2 has been looking at all the different groups that we belong to.

We are learning about being sun-safe during our PD/H/PE lessons and different groups we belong to in HSIE.

In Health we have been learning all about Sunsafe and Slip, Slop, Slap, Seek, & Slide.

The thematic analysis of the newsletters provided a deeper interpretation of the content, structure and timing of these artefacts. There were two predominant themes which arose from the thematic analysis of HGPS newsletters: i) uniform; and ii) sun safety education.

Uniform

This theme refers to the instances in which uniform was associated with sun protection behaviours within the sampled HGPS school newsletters. As the HGPS uniform policy emphasised that the school hat is an item of school uniform, any relevant references to the use of hats within the sample of newsletters were also included in this theme.

As detailed in the content analysis, the term “uniform” was the most frequently used key term/phrase within the sample of newsletters, and most of these references were associated
with reminders for students to wear their school uniforms or publicising the school’s Uniform Shop. Furthermore, three of the four references to “hats” emphasised the school hat as a mandatory item of school uniform. For example, there were multiple reminders for students to wear their school uniforms for upcoming excursions which specifically identified the school hat as an item of school uniform.

This consistent emphasis on school hats as an item of school uniform is evident throughout the sample of newsletters, as well as the HGPS uniform policy. The school hat is rarely associated with sun protection or skin cancer prevention in either of these artefacts. Furthermore, there is no reference to the use of other sun protective clothing (e.g. collars, sleeves or sunglasses) within the entire sample of newsletters. There are a number of newsletters that refer to athletics and swimming carnivals that do not mention sun protection practices. This is a notable omission as the HGPS sun protection policy indicates rash vests or t-shirts are included for outdoor swimming, and sun protection measures are considered when planning all outdoor events, including “sporting events.”

Nonetheless, the consistency of information communicated within the school newsletters regarding uniform must be acknowledged. As indicated in the HGPS uniform policy, school newsletters were identified as a resource to disseminate information associated with uniform to parents and the community, specifically at the start of each year. Within the sample of newsletters, there was only one first-edition newsletter for a school year included, which was dated “Term 1, Week 1.” On the front page of this newsletter was an image of the summer, winter and sports uniforms, as well as information regarding the location and opening hours of the Uniform Shop. The school hat was included in this image.

While the school newsletters published in terms one and two were less likely to include uniform information associated with sun protection, terms three and four were considerably more likely to feature uniform information associated with sun protection. Reminders for students to wear hats for excursions were evident from late July, while the newsletter published in the first week of the fourth term (early October) included a reminder that students were “expected” to wear their full summer uniform, which explicitly identified the school hat as a component of this uniform. The timing of the first reminder is consistent with the HGPS sun protection policy, which indicated particular care for sun protection is needed
from “the beginning of August.” However, the lack of information in terms one and two is inconsistent with the HGPS sun protection policy, as it advised sun protection should be considered until “the end of May.”

Finally, the role of the Uniform Coordinator on the P&C, as described throughout a number of school newsletters, indicates that the parent body was represented and integrated into the development and maintenance of uniform procedures. The position was described in multiple newsletters that were published in the first school terms of 2014 and 2015. The following statement, taken from an advertisement of the position, provides the best description of the role:

The Uniform Co-ordinator is responsible for stocktaking of all uniform items held on the school property at least once per school term. The Uniform Co-ordinator is required to provide a report to the P&C Committee meeting each month.

While this suggests that all uniform-related matters are handled by a Uniform Coordinator, which is a position is fulfilled by a single individual, the HGPS uniform policy indicates the students’ uniform was developed following consultation with the P&C Uniform Committee. The term “committee” suggests there were multiple individuals involved with these uniform-related matters. The discrepancy between these positions could have an impact on the representation of the parent body in relation to uniform procedures.

**Sun safety education**

The second theme identified by the analysis of the HGPS newsletters detailed the sun safety education provided to the school community, predominantly students. Each HGPS newsletter included a report from each classroom regarding recent academic and extra-curricular activities. Sun safety was identified as the focus of educational content in three separate classroom reports during term four newsletters, although two of these reports were from the same class. Both classes that were focusing on sun safety as an educational content area were Year 2 classes (Stage 1), and referred to the topic area as “unsafe” or “sun-safe.”

One of the classes indicated that they were learning about sun safety during Personal Development, Health and Physical Education (PDHPE) lessons, while the remaining class
indicated sun safety was the term four topic for their “Health” subject. It is assumed that the “Health” subject is also referring to the PDHPE Key Learning Area (KLA). Only one of the class reports provides further insight into the lessons, indicating that they have been learning about “Slip, Slop, Slap, Seek & Slide,” which is a reference to the updated Slip! Slop! Slap! campaign that is managed by the Cancer Council.

In addition to the sun safety education provided to students, the newsletters also included some sun safety education for parents and the community. Within four consecutively published term three newsletters, there was an advertisement for a skin cancer clinic at a local medical centre. The advertisement identifies the risks of sun exposure, such as sunburn, skin cancer and visible signs of aging, and also justifies the importance of regular checks with a doctor. The advertisement details how screening can detect skin cancers by using mole scanning technology, and that doctors can remove suspicious moles and send them for analysis. While this advertisement doesn’t focus on skin cancer prevention, it does describe the importance of early detection, which is a beneficial to reducing the impact of skin cancer.

The analysis of these artefacts throughout this section provided a thorough examination of the formal policies of the school in relation to sun protection, and detailed evidence as to how these were disseminated to parents and the community. The implications of these policies and communication procedures will be discussed further in the following chapter. However, the aim of this thesis is not to investigate the formal policies and procedures of school management, but rather explore the socially constructed concept of the SunSmart phenomenon. This requires an investigation into the understandings of individuals, and the experiences which contributed to their interpretation of the phenomenon. The following section will detail the results of the interviews that occurred with key stakeholders within the HGPS community, and their perceptions of the SunSmart phenomenon, to better understand how their constructions of meaning differ to the formal documentation and communication published by the school pertaining to this phenomenon.

**Key stakeholder interview findings**

This section will explore the results of interviews that were conducted with key stakeholders to provide a thorough insight into the perceptions and experiences which influenced their
understanding of the SunSmart phenomenon. The key stakeholders also discussed various motivations that affected their own and others’ enactment of SunSmart behaviour, and these motivations will also be detailed within this section.

There were different types of school staff who participated in the interviews, including the school principal (n=1), classroom teachers (n=4), the school administrative staff member (n=1) and the school librarian (n=1). The community member participants (n=25) comprised students’ parents and residents of the HGPS community. As the focus group interviews for community members were conducted with a mixture of parents and community residents, these individuals could not be categorised based on voice alone for the purpose of the thematic analysis, with the exclusion of statements whereby they explicitly identified this character trait.

The sample of students from the HGPS community that participated in focus group interviews were derived from a range of year groups, including Early Stage 1 (ES1) (n=4), Stage 1 (S1) (n=12), Stage 2 (S2) (n=5) and Stage 3 (S3) (n=5). Unlike the organisation of student interview groups at GSPS, which combined ES1 and S1 students as “younger” students and S2 or S3 students as “older” students, the student interview groups at HGPS were organised into stage levels. As such, students will be primarily referred to by their stage throughout this chapter. Although, students may also be referred to as “younger” or “older” students in some instances to support the inter-textual analysis of data collected from student participants at both case study sites.

The number of participants in each semi-structured interview group varied. There were six student focus group interviews, five community member focus group interviews, and seven individual interviews with staff members. As the focus group interviews were not consistently organised by gender, it was determined that this variable would not be included within the analysis of results as each participant’s gender could not be established with certainty based on the interview recordings. Subsequently, while participants have been allocated pseudonyms, these may not reflect the participant’s gender with which they are aligned. As the community members’ participation in the interviews was highly dependent on their availability, the number of participants in each focus group could not be strictly managed, otherwise participants may have been more likely to withdraw from the study.
The results of the analysis of interview data were categorised in alignment with the thesis research questions. Firstly, the participants’ understandings of the SunSmart phenomenon based on their own constructions of the meaning of the phenomenon will be detailed. Secondly, the reported experiences which influenced their understandings will be explored. Finally, the variables which impact key stakeholders’ motivations to engage in SunSmart practices will be examined.

**Key stakeholders’ understandings of the SunSmart phenomenon**

This section will detail key stakeholders’ understandings and interpretations of the concept of “SunSmart.” While most participants were aware of the term “SunSmart,” they indicated they were relatively unaware of any formal SunSmart requirements. Furthermore, their responses illustrated very similar understandings of the SunSmart phenomenon. These understandings were predominantly associated with an awareness of the dangers of sun exposure and/or enabling methods to protect against sun exposure. The thematic analysis of the interview data identified four key themes associated with key stakeholders’ understandings of SunSmart: i) sun protection practices; ii) policy; iii) sun safety education, and iv) SunSmart membership.

**Sun protection practices**

The SunSmart phenomenon was strongly associated with sun protection practices, as evidenced by key stakeholders’ descriptions of their understandings. The participants interviewed at HGPS interpreted SunSmart as a phenomenon that encouraged and/or enforced a number of sun protection practices to limit skin damage caused by sun exposure. This perception was highlighted by Mrs Gordon, a community member, who provided the following explanation of her understanding of the term “SunSmart”:

Well, obviously preventing sun damage, really. So hat, sunscreen, shade, those sorts of things would be my interpretation, yes.

Similarly, staff members also provided understandings of SunSmart which associated the phenomenon with an awareness of the dangers of sun exposure and/or enabling methods to protect against sun exposure. The staff members at this site were able to identify the five primary sun protection practices encouraged by the SunSmart Program; hats, sunscreen,
protective clothing, seeking shade and wearing sunglasses. Most students also indicated they were aware of the term “SunSmart,” and it was evident from the interview data that older students were more likely to be aware of the term “SunSmart” than younger students. Further, students’ interpretations of the SunSmart phenomenon varied more than other key stakeholder groups, as shown in the following statements:

It means that you have to wear some clothes. (Zoe; S1)

Wear hats, put on sunscreen all the time not just when it’s hot. (Blake; S2)

If you forget your hat you get no play. (Kyle; S1)

It is evident from the students’ comments that there were a variety of experiences that had influenced their understandings of the SunSmart phenomenon. Zoe’s and Blake’s understandings of SunSmart were aligned with sun protection, similarly to community members and school staff. These students also indicated that it’s important for individuals to protect themselves from the sun, otherwise they “get sunburnt” (Zoe) or “can get cancer” (Blake). Unlike Zoe and Blake, Kyle referred to a policy item that enforces sun protection practices, whereby students’ are not permitted to play unless they are wearing a hat. The following theme provides an insight into how key stakeholders understand SunSmart as a facilitator of sun protection policy.

**Policy**

Sun protection policy was identified by all key stakeholder groups as an integral aspect of the SunSmart phenomenon. However, while their perceptions of SunSmart encompassed sun protection policy, the key stakeholders’ understandings of the HGPS sun protection policy were limited. The following comments highlight the understandings of school staff and community members in regards to policy:

I suppose [SunSmart membership] ties in with the policy that I’m not aware of. (Mr Maloney; teacher)

I would be assuming that it would be you’d have your policies in place. (Mrs Bickmore; teacher)
[Having a SunSmart membership is] just saying that we have a policy that says that we attempt to be SunSmart and protect our students and keep them safe from prolonged periods of exposure to direct sunlight. (Principal Morrison)

I think it’s [SunSmart] about having policies in place that prevent excessive sun exposure but still having sun which is healthy. (Mrs Lyon; community member)

Despite self-reports that the staff members were unaware of any policy document, they were able to identify a number of the HGPS sun protection policy sections and components, including the policy rationale, hat-wearing requirements and associated shade-seeking behaviour, avoiding sun exposure during peak UV radiation periods, and the provision of sunscreen. The only policy components that the staff members were unable to identify were the encouragement of sunglasses (which is an optional component), regularly reviewing the policy, and the integration of the broader school community.

While these results indicate staff were aware of multiple areas of sun protection policy, they were inclined to discuss hat-wearing requirements and sunscreen in much greater depth. The dominance of hat-wearing requirements within school policy was also expressed by students, as evidenced in the following conversation with S1 students:

[Interviewer: if I said, “Name three reasons why this school is a SunSmart school,” what would you say?]

That if you have no hat, no play. (Sophia)

If you have no hat you can stay on the COLA and you don’t get sun burnt. (Jody)

If you don’t have a hat you have to sit under the shade but you can play hand games. (Emma)

All three students’ explanations of a SunSmart school align with hat-wearing requirements. In addition to these three students, the hat-wearing guidelines of the HGPS sun protection policy was identified by all key stakeholder groups, who all provided very similar descriptions of the policy item. These guidelines were often referred to as “No Hat, No Play,” and the participants agreed that No Hat, No Play was a policy item which mandated students wear an
appropriate hat, otherwise they were required to relocate to a shaded area. It was established that the school broad-brimmed hat was recommended by school staff, while other hats were discouraged. Subsequently, a cap did not meet No Hat, No Play guidelines, and students wearing a cap would face identical consequences as if they were not wearing any hat at all.

Most key stakeholders agreed that while spare hats were sometimes provided by the school for younger students, it was difficult for older students to obtain a spare hat. The S3 student focus group explained this was to support younger students who were more likely to forget their hat, while older students were expected to take responsibility for remembering to bring their hat to school. This perspective aligns with the HGPS sun protection policy document as increasing students’ responsibility for their sun protection behaviour was indicated as one of the Goals of the Sun Protection Plan. However, in contrast to the perceptions of stakeholders who believed spare hats were available in specific circumstances, Mr Crews indicated that spare hats were not available for any students due to head lice concerns. Mr Crews’ perception was not supported by other participants.

In the event that students were not wearing an appropriate hat, school staff would relocate them to a shaded area. This element of the policy guideline caused debate among key stakeholders, particularly students and staff. It was argued whether students were required to sit once they had been relocated, or whether they were allowed to play. The following responses highlight key stakeholders’ conflicting perceptions:

We have to sit in the office the whole of recess and lunch. (Noah; ES1)

You sit up at the COLA and not play. (Sophia; S1)

If they don’t have a hat, they have to, not even play in the shade, they have to sit in the shade. (Mrs Hounsell; administrative staff member)

So if you don’t have your hat you can either be there (the COLA), and you’re allowed to play. (Ms O’Malley; teacher)

If you don’t have a hat you have to go to the COLA, play under the shade. (Oscar; S3)
In addition to these contrasting perceptions of students’ ability to play in the shade, Mrs Hounsell explicitly referred to the hat-wearing policy as “No Hat, No Play,” while Mr Crews argued “we don’t have that (No Hat, No Play).”

While community members recognised that the school broad-brimmed hats were enforced for sun protection purposes, they also associated the school hat with the school uniform. The following statements highlight community members’ perceived importance of enforcing the school hat due to uniform regulations:

Yeah, it’s [the hat] part of their uniform. It’s like you wouldn’t come without your shorts on. (Mrs Turner)

...You can’t keep coming with a cap because it’s not part of the uniform. (Ms Jennings)

Many community members emphasised the importance of the school broad-brimmed hat due to its associated with uniform, rather than its value for sun protection.

As outlined in the first theme of this section, key stakeholders understood SunSmart as a phenomenon that encouraged and enforced sun protection practices. Sun protection policy was recognised as one of two aspects that facilitated the SunSmart phenomenon. Key stakeholders also recognised sun safety education as a vital component of the SunSmart phenomenon, which will be described in the following theme.

**Sun safety education**

This theme highlights key stakeholders’ understandings of how education forms a component of the SunSmart phenomenon. The staff members described their understandings of the SunSmart phenomenon as the enforcement/encouragement of sun protection practices, which is facilitated by sun protection policy and sun safety education. While students also detailed the sun safety education that occurred within the formal curriculum, community members were less likely to identify this theme as a component of the SunSmart phenomenon. The perceived relationship between policy and education as components of SunSmart is evidenced by a staff member in the following statement:

[SunSmart membership is a] commitment the school would make to try and both enforce and educate certain rules to do with sun safety. (Mr Maloney; teacher)
Despite Mr Maloney’s perceived association between SunSmart and sun safety education, staff members debated the extent of sun safety education that occurred at HGPS. Although Mr Crews described the content delivery of sun safety education as an “off the cuff sort of thing” which was not taught in the formal curriculum of the school, Principal Morrison indicated SunSmart content was “taught in the classrooms every year.” Mrs McLain and Mr Maloney also agreed sun protection education was provided within the PDHPE KLA. Mr Maloney described an example as to how he had integrated sun safety education into the curriculum:

We did one [activity] two weeks ago, which the kids had to pick what side of the fence they were on; we should have to wear hats or we shouldn’t have to wear hats at school, and the kids could choose which argument they wanted. (Mr Maloney)

[Interviewer: How’d they go?]

Yeah. Really, really good. The kids – it was quite interesting, ‘cause straight up they buck up and go, “We don’t want to wear hats,” this is fantastic. But when I say, “Right. You’ve got to come up with really good reasons to explain arguments for why that is,” most of the kids who had chosen to say we shouldn’t wear hats ended up saying that we should, because it was easier to think of reasons why we should than why we shouldn’t. (Mr Maloney)

The majority of students indicated they had been provided sun protection education at school, which reportedly occurred in younger grades. Multiple student focus groups discussed a classroom activity which was associated with the *Slip! Slop! Slap!* campaign. The perceived relationship between this campaign and the SunSmart phenomenon will be explored in further depth later in this chapter. Students described various educational activities which aligned with sun protection education, including persuasive writing (Oscar; S3) and designing posters (Jody; S1). Furthermore, Marielle (S2) suggested two representatives from the Cancer Council “came in to teach us about sun safety.” While this statement wasn’t supported by other students, Principal Morrison stated “we might have someone visit or something that will talk about those sort of things.” A focus group of S3 students collectively agreed that they’re sufficiently educated about sun protection.
There were also two students (both S1) who indicated their parents provided them with sun protection education. Kyle indicated he had not been provided any sun safety education from the school, instead sourcing it from his father, while Chloe indicated her mother taught her about sun safety in addition to learning about it from the school.

**SunSmart membership**

Although most key stakeholders from this case were aware of the term “SunSmart,” they indicated they were relatively unaware of any formal SunSmart requirements. This theme outlines the participants’ perceptions of formal SunSmart membership, including documentation and relationships with organisations. As illustrated in the following quote, Tyler (S2) recognised the relationship between SunSmart and an organisation:

> Is it [SunSmart] a company where they help you, like, give you tips about what’s good to keep you away from the sun...? (Tyler; S2)

A focus group of community members also recognised a relationship between formal SunSmart membership and an organisation, which they correctly identified as the Cancer Council. The following excerpt from an interview highlights these community members’ interpretations of responsibility and support among the school sector for sun protection:

> I think it’s the school [advocating sun protection more so than CCNSW], yeah. I won’t say that the Cancer Council hasn’t done anything... I think they [the school] just do it out of, you know, general concern for the children. (Ms Reynolds)

> It’s got to be some sort of government, is it, some sort of government thing? (Ms Keary)

> Like a curriculum sort of ... (Mrs Gordon)

> But there must be guidelines they have to follow that has a rating, I’m guessing. (Mrs Turner)

There were no school staff members who were aware of the more specific formal SunSmart membership guidelines or procedures. Furthermore, one staff member suggested the school had not completed any formal process to become registered as a SunSmart school:
I don’t think we have any accreditation for it [SunSmart membership], and I don’t even know if there is any accreditation you can do, but we just raise awareness with the kids... (Mr Crews; teacher)

Ms O’Malley also indicated she was not aware of any formal SunSmart membership or accreditation process, but later stated she believed HGPS was a SunSmart school due to the sun protection policy enforced at the site. Mr Crews suggested the site’s SunSmart membership progressed following the development of a school ethos that valued sun safety behaviour, which was facilitated by a previous school principal who was personally motivated to encourage students’ sun protection behaviours. Principal Morrison confirmed that she was not employed at the school when it initially became a member of the SunSmart Program. She suggested membership commenced following “Sun Cancer [CCNSW] getting in contact with schools and asking them to participate.” Principal Morrison recognised SunSmart membership was easy to continue following her employment at the site as the SunSmart procedures were “already in progress.” The other staff at this site indicated they were not aware of how HGPS became a SunSmart school.

The thematic analysis of the interview data revealed key stakeholders understand SunSmart as a phenomenon that encourages and enforces sun protection practices using multiple approaches. The following section of this analysis will explore the various influences on key stakeholders’ interpretations of the SunSmart phenomenon to provide a deeper understanding of how they constructed meaning associated with the concept. In addition to providing insight into the understandings of the SunSmart phenomenon, these reported influences will assist examining the motivations of key stakeholders’ to engage in SunSmart practices.

Influences on key stakeholders’ understandings of the SunSmart phenomenon

While the previous section detailed the key stakeholders’ similar understandings of the SunSmart phenomenon, it was evident that there were a variety of lived experiences which influenced each key stakeholder group differently and impacted their understandings. These influences included: i) communication between the school and community; ii) media
campaigns; and iii) other educational settings. This section will describe these themes to determine how they constructed key stakeholders’ understandings.

**Communication between the school and community**

As described by school staff and community members, the relationship between HGPS and the broader community, specifically parents, was strong. This relationship was attributed to the community being welcomed into, and expected to support, the school. It was also evident that the communication from the school was consistent, varied, and allowed for community feedback. This section will report on the school’s communication of SunSmart information, and how it influenced staff and community members’ understandings of the SunSmart phenomenon.

As identified by school staff and community members, communication methods from the school to the community included face-to-face communication, fortnightly newsletters, emails, and noticeboards. There were also reports of SunSmart information being passed on from students to their parents, in the form of a note from school staff or verbal communication. Community members commonly described instances of SunSmart information in the school’s fortnightly newsletter, as evidenced in the following statements:

That little *Slip! Slop! Slap!* thing... And just for the change of season, so when summer’s approaching, then reminders. (Ms Keary)

Yeah, there’s a little thing, like a little blurb with bullet points or something, isn’t there... Just like Cancer Council New South Wales, they’ll have a little thing on there about, yeah, the same as the road rules, like it comes on the newsletter every now and then. (Ms Reynolds)

In addition to the newsletter, an orientation pack provided to students when they began school also included SunSmart information. Mrs Gordon, a community member, described the pack as “a Cancer Council bag with stuff in it ... to do with diet as well as sun information and things like that.” However, it seemed that other community members were not aware of this pack as Dianna recommended implementing a SunSmart orientation pack as an addition to the SunSmart Program.
The community members at this site were also able to recall instances where students, who were often the community members’ children, communicated aspects of the school’s SunSmart practices. This communication was primarily associated with the practices of teachers in regards to education and role-modelling. The following statements outline examples of communication between students and community members in relation to SunSmart practices:

Mine [children] talk about the whole *Slip! Slop! Slap!* thing. I think there’s even another aspect to it. They had a lesson in class last year. (Mrs Gordon; parent)

My children come home with complaints about that [school staff not wearing hats]. But they would not be game enough to say anything to a teacher, but they would come home and... say, “Mum, that’s not fair.” (Mr O’Davis; parent)

The sun protection role-modelling behaviour of school staff will be examined in further depth later in this chapter. In regards to the relationship between HGPS and the broader community, Mr Crews described the value of a supportive school community regarding the enforcement of policy, stating:

All the parents love our little school, and they love the teachers, and they love everything about it. So if we, and you know, we’ve been here so long, most of us, they trust us. So if we say something has to happen they’ll pretty much back us up. (Mr Crews; teacher)

Mrs McLain, who was a teacher at HGPS, believed the communication of SunSmart information from children to parents was vital as it facilitated the education of parents. She suspected many students’ parents had insufficient awareness and knowledge of sun protection practices. Mrs McLain then inferred that providing sun safety education to students prompted them to discuss this knowledge with their parents in the home environment.

The key stakeholders’ identified a noticeboard displayed at the front of the school which communicated information to the community. In addition to this noticeboard, it was reported that a SunSmart sign was displayed at the entrance of HGPS which was used to advertise the
SunSmart membership of the school. This advertisement and other sun protection campaigns were also found to have influenced key stakeholders’ understandings of the SunSmart phenomenon.

**Media campaigns**

The publication of sun protection awareness campaigns, specifically within the Australian media, influenced key stakeholders’ understandings of the SunSmart phenomenon. While there were multiple types of campaigns and advertisements discussed, participants most frequently identified the *Slip! Slop! Slap!* campaign. In addition to media campaigns, this section will also explore how the campaigning of the SunSmart brand within and beyond the school setting facilitated key stakeholders’ construction of meaning.

The SunSmart sign, displayed at the entrance to the school, was identified by multiple groups of community members when discussing the source of their familiarity with the term “SunSmart.” The community members were aware of the positioning of the SunSmart sign, as evidenced by the following comments:

- We have a sign out front. (Mrs Turner & Ms Reynolds)

- It is on the front gate but it’s not on the back gate. (Mr Hughes)

- I know they’ve got a thing out the front, a chart out the front about the fact that it is a SunSmart school. (Mrs Lyon)

This promotion of the school’s SunSmart membership to the broader community was described by Mr Crews as a method to attract prospective students. However Ms O’Malley, who was a teacher at HGPS, argued the parental community no longer recognised the SunSmart sign or considered it when selecting a school for their child, stating:

- I think once things are there for ages people don’t [take notice]. Like the first time you walk through school you might but then after that you’re not going to... if every school has them up, which most schools do, then it’s just ticking another box.

In addition to the advertisement of HGPS as a SunSmart school, the community members also recalled their own experiences with sun protection campaigning from beyond the school
setting. Mrs Lyon was familiar with the *Slip! Slop! Slap!* campaign, stating that “over the years we [community members] all grew up” with the campaign. She was also able to recognise that additional sun protection practices had been added to the catchphrase, but was unable to specifically identify these practices. Ms O’Malley and Mr Maloney were able to correctly identify the five sun protection practices encouraged by the updated *Slip! Slop! Slap!* campaign, now recognised as *Slip! Slop! Slap! Seek! Slide!* Both of these staff members associated the practices with SunSmart, and Ms O’Malley referred to them as “the big five.” In addition to this reference, Ms O’Malley provided a description of the campaign:

The ads on TV... by the Cancer Council and there was like – are they cartoons of people? I think. There’s some like that. Because there used to be the three when I was at school; *Slip! Slop! Slap!*

Students also indicated they were aware of SunSmart advertising, which was published via a number of media outlets. The following conversation with S2 students highlights their awareness of SunSmart advertising:

[Interviewer: where have you seen SunSmart then?]

On buses. (Tyler)

At the shops. (Alec)

We had this poster down on our wall on sun safety. (Tyler)

Alec and Tyler suggested SunSmart-branded sunscreen was known to the community as high quality sunscreen, and Blake (S2) indicated this sunscreen was available at a Cancer Council shop in the local shopping centre. In addition to these students’ observations of SunSmart advertising, an ES1 student also described a television advertisement that aimed to encourage individuals’ sunscreen use when they were “going in the pool and going to play outside” (Jackson). While Ms Jennings, a community member, was aware of sun protection campaigns that had been promoted on television, she was sceptical of their benefit:

Because all the ads they put on TV, they spend millions admittedly, but how much of that comes across to people to make people ...?
Following this statement, Ms Jennings debated whether the information provided to individuals via television advertisements was influential on their behaviour. Mrs McLain believed campaigning was responsible for improved sun protection attitudes and behaviour between generations of the Australian population. These concepts are examined in further depth later in this chapter.

In addition to media campaigning, the key stakeholders had identified the application of the SunSmart-brand within other educational settings. These experiences also had an impact on their perceptions of the SunSmart phenomenon. As such, the enactment of SunSmart in other educational settings and its influence on key stakeholders’ understandings of the SunSmart phenomenon will be explored in the following section.

**Other educational settings**

The inconsistent application of the SunSmart Program across educational settings was discussed in-depth by the community members at this site. They recognised that childcare settings regularly adopted SunSmart procedures, whereas high school settings were unlikely to be members of the SunSmart Program. This theme was not discussed by students or school staff. While one student associated SunSmart and his sister’s childcare setting, this relationship was not discussed. Subsequently, this section will present community members’ perceptions of SunSmart within the contexts of childcare and high school settings, then explore how their construction of meaning was subsequently influenced.

Mrs Matai believed SunSmart was a mandatory policy for childcare centres in order for a centre to be accredited. The SunSmart practices of childcare settings were primarily associated with sunscreen application. Mrs Cayless indicated sunscreen was available for parents to apply to their child each morning, and staff at the childcare settings also applied sunscreen to children before going outdoors during the day. Ms Rudder agreed that the emphasis on combining hat-wearing behaviours and sunscreen application was important for sun protection, as outlined in the following statement:

So if they go out morning and afternoon; it’s hat and sun cream on each child. I don’t apply sun cream in the morning and if I did, it wouldn’t be effective by lunch play anyway, so it’s just like, “Oh well, we put on a hat and that’s enough.” I’m by no means
suggesting it should be a teacher’s responsibility to put cream on everybody, but the hat only protects the bit it’s shading.

There were other community members who dismissed the sunscreen practices of childcare settings as they believed application immediately prior to sun exposure limited the effectiveness of sun protection. Mrs Lyon and Mrs Matai indicated sunscreen should be applied 20 minutes prior to exposure. Despite these criticisms, the community members were generally supportive of the SunSmart practices that occurred in childcare settings. Mrs Bell indicated these practices developed children’s habitual sun protection behaviour which supported their transition to primary school. While community members supported the application of the SunSmart Program in childcare settings, they were strongly opposed to the limited application of the SunSmart Program in high school settings.

As their understandings of SunSmart were strongly associated with hat-wearing policy, there were numerous criticisms regarding the lack of hat-wearing policy in high school settings, which was described as “dreadful” (Ms Reynolds) and “terrible” (Ms Stewart). There were also parents of students attending high school settings who had observed their children return home with sunburn. The following statements highlight these parents’ descriptions:

   They [high school] don’t have a hat policy, and he’s come home quite a few times from school, mostly on sport days, with a red face, and that upsets me because they were always so strict about it here [at HGPS] and then he’s gone onto high school; no hat. And so that affects me because I’ve seen him burnt and I don’t allow him to get burnt when I’m looking after him. (Ms Keary)

   My teenagers, they all came home burnt. (Mrs Matai)

Ms Kennedy also described the contrast between sun protection behaviour in different settings, and how it influenced her son, who has recently began attending high school:

   There is no encouragement to wear a hat at all and it’s killing him because he has that rule at home and this school, and then he gets there and it’s like, “Oh no, you don’t need a hat” and I just think that’s such a mixed message that in that six weeks they go
from having to wear a hat and this really strong message, to they’re not even being worn as part of the uniform.

These experiences positively influenced community members’ understandings of the SunSmart phenomenon. In settings where the SunSmart Program was active (childcare and primary school settings) they were aware of sun protection behaviours being enforced and encouraged. However, in settings where the SunSmart Program was not active (high school settings) they indicated sun protection practices were not being enforced or encouraged, and they had observed negative effects of sun exposure on their children. This had an extensive impact on key stakeholders’ sun protection behaviour as it encompasses a variety of motivators, including policy, health, and support from the home environment. These themes, in addition to others, will be examined in the following section of this analysis.

Key stakeholders’ motivations to engage in SunSmart practices
The analysis of interview data revealed that key stakeholders’ had a number of diverse motivations for enacting SunSmart behaviour. These motivations were often dependant on their understandings of the SunSmart phenomenon and the influences on these understandings. As a result, these motivations included positive and negative incentives that enabled or constrained SunSmart behaviour. The thematic analysis of semi-structured interviews identified six themes which represented the motivations for key stakeholders to engage in SunSmart practices: i) formal partnerships with external organisations; ii) health; iii) policy; iv) school-home partnership; v) peer acceptance; and vi) discomfort associated with SunSmart practices.

**Formal partnerships with external organisations**
This theme comprises key stakeholders’ reports of the motivations that affected the formal registration of HGPS as a SunSmart school, and also the role of formal SunSmart membership in motivating SunSmart behaviours. As the school procedures were reportedly handled primarily by school staff, this theme details their account of the membership procedures, which resulted in mixed positive and negative motivators for SunSmart practices.

While Ms O’Malley had only been employed at the site for approximately six months, she suggested the lack of resources, support or direction provided from any external
organisations regarding the implementation of the SunSmart Program made membership “pointless.” As Principal Morrison had been employed at the site longer than Ms O’Malley, she was able to provide insight into the past benefits of SunSmart membership. She indicated the school had been provided signage, sunscreen and “a little bit of information” in the past, which she estimated occurred approximately five years prior to data collection (circa 2010). Principal Morrison also discussed the influence of the NSWDE and media organisations as motivators for HGPS to become SunSmart accredited. The following statements from Principal Morrison highlight both the positive motivations and the negative motivations to adopt SunSmart membership:

Well, it was pretty well media-wise part of the process of, you know, I’d say four or five years ago... it was a big thing then, so it was a big thing and schools were really conscious of being part of the programme.

Well, [SunSmart] came about through Sun Cancer getting in contact with schools and asking them to participate, yeah...

Our school’s not as strong at trying to revise the policy and do all that sort of stuff, so that’s sort of the school’s fault not the... but also it’s, I don’t think that’s being pushed at the other level either... it was a government issue, initiative and the government initiative did the push originally, but there really hasn’t been a lot of re-pushing... [The SunSmart Program] had that buzz, but now it’s sort of died off a little bit.

The school principal also suggested that the government had since shifted their focus to encouraging schools to implement health promotion programs aimed at “healthy eating and fitness and looking at obesity.” Due to this adjustment in health promotion focus, Principal Morrison’s main recommendation for CCNSW to provide additional support for SunSmart schools was to re-establish the previous benefits of SunSmart membership. The principal specifically identified the provision of sunscreen and regular reminders to promote sun protection and access information available on the CCNSW website which could be integrated into teaching strategies.

Despite the reported adjustment in government focus from sun protection to healthy eating, Principal Morrison, Mrs Hounsell, Mr Crews and Ms O’Malley indicated advocacy of the
SunSmart Program within the school had continued due to the school community’s interest in sun protection, which they also indicated would likely continue regardless of formal SunSmart membership. It was suggested by Mr Crews that the school community’s interest and dedication to promoting sun protection had been motivated by a previous school principal, rather than the SunSmart Program. It was explained that this principal had been diagnosed with several skin cancers due to his limited sun protection efforts as a young person, which had motivated the principal to advocate sun protection for young people. Mr Crews described the positive methods used by the principal to encourage students’ sun protection behaviours:

He used to just do it in a nice way, not that he was the boss, but he’d not go crook on them; “Go and grab a spare hat, or go to your bag and find your own hat first. If you can’t find it go to the office.” I know we don’t have second hand hats anymore because of the head lice issue, but I think that started it because he was aware of SunSmart activities and stuff like that.

Unlike the motivations highlighted by Principal Morrison, who suggested the school’s SunSmart membership was a result of external organisations promoting the Program (i.e. CCNSW, the Government and the NSWDE), Mr Crews believed the school community’s advocacy for sun protection was motivated by concerns for health. Although Principal Morrison and Mr Crews debated the motivations that led to HGPS’s formal SunSmart accreditation, the principal did agree that health concerns acted as a motivation for the school community’s advocacy for sun protection. More specifically, Principal Morrison recognised there were a number of individuals within the school community who had experienced skin cancer, which motivated their advocacy for sun protection. The influence of health will be explored in the following theme.

Health

Unlike many other motivations, health and wellbeing acted as both an incentive and deterrent for key stakeholders’ engagement in SunSmart practices. While it was most commonly reported that sun protection behaviour was increased to prevent sunburn, skin cancer and other health risks associated with sun exposure, some key stakeholders expressed concerns
that sun protection resulted in vitamin D deficiency, which motivated them to decrease their sun protection behaviour. This theme is also linked to the influence of campaigning, as many key stakeholders suggested the efforts of sun protection campaigns increased the Australian population’s awareness of the health risks associated with sun exposure, which subsequently acted as a motivation to engage in SunSmart behaviour.

All student focus groups identified sunburn as a result of excessive sun exposure, and all except for ES1 students also identified cancer as a risk of sun exposure. In general, students indicated they would prefer to attend a SunSmart school than a non-SunSmart school due to the protection provided against sun exposure. This preference is highlighted in the following statements, which were provided by students when prompted to identify the benefits of attending a SunSmart school:

Because you don’t get sunburnt. (Lilly; ES1)

‘Cause it’s so we don’t get skin cancer. (Grant; S1)

What I think the best thing about being here in a SunSmart school is that they’re really protective over your skin and also they really push for our hats to be on. (Tyler; S2)

[At a SunSmart school] you get told, you get reminded to put your hat on so you don’t get sunburnt. (Mr Johns; S3)

Similarly, school staff most frequently identified the reduction of students’ future risk of sunburn and skin cancer as the main benefit of SunSmart membership. Mrs McLain suggested sun protection is an aspect of a broader health approach adopted by the school community to ensure students are “happy and healthy,” which will result in optimal educational outcomes.

As evident in the previous theme, Mr Crews perceived the school community’s interest and dedication to promoting sun protection was partly due to the experiences and actions of a previous school principal who had been diagnosed with skin cancer. The impact of knowing someone who had been diagnosed with skin cancer, and the subsequent motivation it had on improving sun protection behaviour, was evident within the interviews with key stakeholders. Chloe, Sophia (both S2) and Oscar (S3) each described one of their grandparents being
affected by skin cancer, while Marielle (S2) and Paige (S3) explained their mothers had experienced cancers. These participants acknowledged the cancers were the result of limited SunSmart behaviours, specifically when the family member was a young person. These experiences reportedly often led to increased SunSmart practices among the students and their affected family members. Ms Reynolds, a community member, and Paige, a S3 student, described how personal experiences with skin cancer can motivate behaviour:

I think it makes the kids more aware though, too, because kids have experiences with relatives and things with cancer so much more frequently now. And I think they’re very aware about the consequences of getting sunburnt and things. (Ms Reynolds)

I know my mum’s had skin cancer before, so she’s always talking about being SunSmart with wearing sun cream and hats and being appropriate and things like that. (Paige)

Following from Ms Reynolds’s comment, another community member discussed her own experiences with skin cancer, which she perceived was due to “damage from when I was a kid, because we didn’t wear hats” (Mrs Turner). Mrs Matai, a community member who participated in a different focus group interview, indicated her engagement in SunSmart practices was the result of experiencing her father and grandmother being diagnosed with skin cancer. There were staff members who also discussed their own experiences of skin cancer, as outlined in the following comments:

I’m very conscious of the fact that I’ve got skin cancers that have been cut off myself. (Principal Morrison)

We’ve had people that have had sun skin cancers cut out and we talk about it at assembly. (Mrs McLain)

While not being directly affected by skin cancer, Mr Maloney indicated his grandparents’ experiences with skin cancer made him an advocate for sun protection.

The participants also recognised older individuals were more likely to be diagnosed with skin cancer, particularly those who grew up prior to the introduction of sun protection awareness campaigns. The participants agreed that previous generations of the Australian population
were not aware of the health risks associated with sun exposure, which resulted in poor SunSmart practices when they were younger and who were subsequently now being diagnosed with skin cancers. This perception was discussed by students, staff and community members; some of whom admitted they were members of these past generations and had not engaged in SunSmart practices, which they confirmed was due to a lack of awareness of the health risks associated with sun exposure. The key stakeholders agreed that due to various health promotion campaigns, such as SunSmart, and first-hand accounts of individuals’ experiences with skin cancer, the current generation of the Australian population was aware of the health risks associated with sun exposure and had adjusted their behaviour accordingly. This perception is highlighted in the following statements:

But again I think it’s a generational thing. As the generations move on, I’m saying you know children of the eighties like me, didn’t really care about the sun. The sun was great. These kids are going to think different. As generations move on sun awareness and sun protection will be, they’ll be more aware of it... (Ms Norman; community member)

The younger ones are growing up in that generation so they think it’s quite like normal to be doing it [engaging in sun protection behaviour], whereas, it wasn’t normal for us to be doing it back then. (Mrs McLain; teacher)

Now we know that we can be sun safe when others can’t, so now we’re better educated about it because we have the research showing us that if we wear hats and sun cream we’re less likely to get it. (Paige; S3 student)

Following Paige’s comment, the S3 students collectively agreed their current generation was sufficiently educated about sun protection and was in the ideal situation to prevent skin cancers, compared to previous generations. Mrs McLain suggested that the increased awareness of the health risks associated with sun exposure was “definitely” a major influence on external organisations encouraging schools to become members of the SunSmart Program.

The perceptions analysed in this theme thus far have addressed how health concerns have motivated key stakeholders to engage in SunSmart practices. While the majority of
participants’ health beliefs provided motivation to engage in SunSmart practices, there were some whose health beliefs motivated them to limit their sun protection behaviours. The remainder of this theme examines how and why some key stakeholders’ perceptions of health motivated them to limit their engagement in SunSmart practices. However, these perceptions were only expressed by school staff and community members. As such, students’ perceptions will not be featured.

There were school staff and community members who expressed the importance of sun exposure to prevent vitamin D deficiency. As these participants suggested sun protection could cause vitamin D deficiency, they believed it could negatively affect individuals’ health. Community members’ perceived value of sun exposure for vitamin D intake is highlighted in the following statements:

- It is still important to get the vitamin D. (Mrs Slater)
- And I’ve been in early childhood for 20 years, I wear hats, sunscreen, all those years thinking protection of cancer, and here I am with [vitamin D deficiency]. (Mrs Hindmarsh)
- We’re a country where the sun is so harsh yet, is it vitamin D? Vitamin D deficient you know. How does that happen? (Ms Norman)

In addition to advocating sun exposure for vitamin D intake, Ms Norman also suggested an hour of sun exposure will result in “a lovely nice tan.” Despite these community members’ advocacy for health sun exposure, they were unable to detail the recommended vitamin D requirements. Ms Norman suggested optimal sun exposure for vitamin D absorption was based on a percentage of body exposed, but was unable to identify the percentage. Ms Jennings indicated 10-15 minutes of daily sun exposure is recommended, but Mrs Hindmarsh argued this was incorrect as it only takes the same amount of time for sunburn to occur.

Due to concerns regarding students’ insufficient sun exposure, school staff indicated the school’s sun protection policy was less strictly enforced during colder periods of the year, as evidenced in the following statements:
In the winter months we kind of sometimes turn a blind eye to it [students not wearing their hat] because they need that vitamin from the sun. (Mr Crews)

You’re not going to need to put your hat on to go out in the middle of winter, and a little bit of sunlight on their skin is not going to hurt. We have to get a happy medium. (Principal Morrison)

You get the conflict now, it’s a beautiful day and you need vitamin E. The sun is not strong but what do you say to them? (Mrs Bickmore)

Similarly to community members, the staff members’ knowledge of vitamin D and associated guidelines for absorption were limited. Some staff members were unable to identify the specific vitamin obtained from sun exposure, which was incorrectly referred to as vitamin E by Mrs Bickmore, and there were no staff members who were able to describe the recommended sun exposure guidelines to obtain sufficient vitamin D absorption while maintaining adequate sun protection. However, while Principal Morrison indicated that sun protection behaviour was less strictly enforced during winter for this reason, she insisted sun protection behaviour during summer was “a massive issue.”

The varied perceptions of key stakeholders associated with health indicated they could provide contrasting motivations for engaging in SunSmart practices. Nonetheless, health concerns acted as a motivation to engage in SunSmart practices for the majority of key stakeholders. In particular, there were no students who indicated their perceptions of health led to a decrease in sun protection behaviour. However, health was not the strongest motivation for students’ engagement in SunSmart practices. It was evident from the analysis of interviews with key stakeholders that the HGPS sun protection policy was the strongest motivation for students’ sun protection behaviour.

Policy

The HGPS sun protection policy was a strong motivation for students’ engagement in SunSmart practices, specifically wearing a broad-brimmed hat at school. It also influenced staff members’ SunSmart practices. This section will examine how students’ and school staff members’ behaviour was influenced by the HGPS sun protection policy, and in particular the
hat-wearing guidelines. Additionally, the various procedures used to enforce the policy and how community members support students’ policy compliance will also be portrayed.

The school’s sun protection policy document was analysed earlier in this chapter, while key stakeholders’ understandings of the policy were detailed in the first section of this analysis. It was generally agreed that school staff directed students to relocate to a shaded area if they were not wearing a broad-brimmed hat. This perspective is consistent with the documented procedures of the HGPS sun protection policy.

Key stakeholders agreed that the hat-wearing guidelines of the HGPS sun protection policy motivated the majority of students to consistently wear a broad-brimmed hat. Principal Morrison attributed the effectiveness of the policy to the demographics of the school community, particularly students’ compliance with policy requirements. This motivation was discussed in detail by Principal Morrison, who explained the influence of socioeconomic factors on sun protection policy:

[The policy] works with our kids... I’ve been to other schools where it’s an issue, and sometimes low socio-money problem, so if they’ve got a hat that’s not a school hat, sometimes that can be accepted, but at least they’ve got a hat. This school, they’re really good at wearing their school uniform.

This statement also reiterates the viewpoint of the school hat predominantly as an aspect of school uniform, rather than a sun protection practice. While Principal Morrison suggested students’ high compliance with the policy was the result of the school community’s demographics, students and community members described the strictness of the policy as a strong motivator.

It was perceived by students that non-compliance with the hat-wearing policy meant they were in “trouble” (Jody; S1, Alec; S2), which Kyle (S1) stated made him feel “a little bit scared.” Students and community members described a practice whereby students were publically degraded for non-compliance with the policy. S2 students discussed this practice in the following conversation:
When they always force you to do all this stuff or putting your hat on and they yell at you if you don’t have a hat. They used to do at assembly, they’d say “Stand up if you don’t have a hat.” (Blake)

“Stand up if you don’t have a hat.” And if you stand up you’d get yelled at for the next five minutes and then you get detention. (Marielle)

These students identified this specific procedure as the most challenging aspect of attending a SunSmart school. Community members also discussed this procedure, as outlined in the following conversation:

What about all the names and shames mornings when you get a teacher at the front in the assembly who makes them all stand up if they don’t have a hat? They have had days like that... at the beginning of the year sometimes they just have like a bit of a shame, I don’t know, depends on the mood. (Mrs Matai)

If they don’t have a hat they’re asked to stand up at just the morning assembly... I don’t like that. (Mrs Myles)

It’d be pretty traumatic for a kindy wouldn’t it. (Mrs Lyon)

And embarrassing for the older ones. (Mrs Myles)

Mrs Myles, Mrs Matai and Mrs Bell explicitly indicated they didn’t agree with the procedure. Mrs MacDougall, a community member from a different focus group, referred to it, stating students were “publicly shamed in front of the other kids.” School staff did not identify or discuss this procedure.

As reported by community members, the strictness of hat-wearing guidelines often led to reportedly desperate measures by students to obtain a hat, especially if they were unable to wear their own hat. Mrs Matai indicated students would “steal someone else’s hat just so they can have a hat.” Students’ strong motivation to comply with the hat-wearing guidelines of the policy also resulted in parents taking measures to support their children’s compliance. Ms Keary, Mrs Turner and Ms Kennedy indicated parents were recommended by the school and other parents to purchase spare hats for their children, which were then kept in the car.
for students had they forgotten their regular hat. Ms Keary indicated it was “traumatising” for students who forgot their hat and realised they would not be allowed to play for the day. Ms Rudder discussed the measures she had taken to support her child’s compliance with the policy:

Well, last week or the week before, no hat at home so I thought, “Okay, it must be at school.” It was the day after cross country, so up I come to school. I went through that disgusting lost property smelly thing; not there. Looked in the classroom; not there. Went home; still not there. Got the spare hat that I’ve got stashed away, brang it up, his hat’s been returned to him on his bag. So like that’s half the day for me thinking, “Oh he’s going to miss his play.” (Ms Rudder)

The policy item also motivated some school staff members’ hat-wearing behaviours, as they perceived they were unable to enforce students’ behaviour without engaging in the behaviour themselves. This perception is highlighted in the following comments from staff:

I don’t want to be a hypocrite. (Mrs McLain; teacher)

I feel a bit hypocritical as a teacher standing out there and going, “Where’s your hat? Where’s your hat?” and the kid could turn around and go, “Well, where’s yours?” (Mr Maloney; teacher)

The contrast between students’ and staff members’ expected behaviours was briefly addressed in the second section of this analysis by Mr O’Davis, a parent of a student, who discussed the complaints of her children who had experienced school staff enforcing the hat-wearing policy while not role-modelling hat-wearing behaviours. Unlike Mr O’Davis, most community members agreed school staff hat-wearing behaviour was good, as Mrs Turner and Ms Rudder suggested “most” teachers wear hats. Principal Morrison agreed with this assessment, suggesting that staff role-model hat-wearing behaviours “most of the time.”

However, the community members debated whether it should be an expectation that staff role-model hat-wearing behaviours. Although Mrs Gordon and Mrs Turner initially agreed teachers should be expected to wear broad-brimmed hats to enforce the school’s policy, they later reversed their decision, as outlined in the following statements:
Well, I don’t, I mean, I think as adults we can make choices for ourselves. (Mrs Turner)

They know the risk and everything. And they might already have 50+ sunscreen on and assume the kid probably doesn’t. (Mrs Gordon)

Ms Keary and Ms Reynolds agreed that teachers shouldn’t be expected to role-model hat-wearing behaviours, as Ms Keary stated “it wouldn’t bother me” if a teacher was enforcing the hat-wearing policy without role-modelling hat-wearing behaviours. Many students disagreed with these perceptions and expressed their dislike of the contrasting expectations between student and school staff behaviour. The following statements detail students’ perceptions regarding this issue:

That's really unfair. (Kyle; S1)

It’s not really [a SunSmart school] because the teachers don’t put a hat on and they tell every—all the kids to put their hat on... It’s no fair. (Emma; S1)

I think it’s kind of a bit unfair because they should set a good example if they’re enforcing and saying that you have to wear one, they should lead by example. (Paige; S3)

While this issue was discussed by S1, S2 and S3 students, ES1 students were more likely to identify teachers as positive role models for hat-wearing behaviour. Unlike these participants, whose perceptions of staff role-modelling were associated with morality, Mr Crews believed staff role-modelling could provide a motivation for students’ behaviour and lead to improved health outcomes:

[Role-modelling is] the biggest thing. If you put it [a hat] on, if they [students] see you wearing it they’ll never take their hat off... (Mr Crews)

Despite the hat-wearing policy guidelines being identified as one of the most challenging aspects of attending a SunSmart school, students indicated they were supportive of the implementation of the policy item within their school. S3 students explained the policy item taught them values beyond hat-wearing behaviour, as evidenced in the following statements:
I think it teaches us a lesson for not bringing a hat... I think it’s just a responsibility (Tom)

They [teachers] expect more. (Paige)

Community members also supported the implementation of the policy item. There were some community members who suggested it should be more strictly enforced as they believed students were not required to wear their hats during sporting activities, which were referred to as Primary School Sports Association (PSSA). However, the community members debated whether the hat-wearing behaviours were applied outside of the school setting, where school policy was not enforced. The transfer of SunSmart practices to settings beyond HGPS was discussed by many key stakeholders. The role of parents and the broader community in regards to encouraging these practices outside of the school setting were debated by key stakeholders. These perceptions will be examined in the following section.

**School-home partnership**

The holistic application of SunSmart practices within and beyond the HGPS setting was strongly associated with the support of the community, specifically the parents/guardians of the students. Students’ responses detailed how their parents’ behaviour positively or negatively motivated them to engage in SunSmart practices. The community members and school staff also discussed how the support of the parental community plays a substantial role in influencing students’ short-term and long-term SunSmart behaviours. This theme will examine these perceptions to determine how they motivate key stakeholders’ SunSmart practices.

The students recognised the role of their family in motivating them to engage in SunSmart practices, particularly parents. This motivation included the role-modelling behaviours of parents in addition to their encouragement of SunSmart practices. While students’ reports of their parents’ sun safety behaviour varied, the majority of students indicated they had at least one parent who role-modelled and encouraged sun protection. The following statement reflects Blake’s (S2 student) mother’s advocacy for his sun protection:
Even if we’re in the shade, Mum would literally grab a hat off the door and go plop on my head and it used to push me down.

However, Blake indicated that this reinforcement had not motivated him to engage in SunSmart practices. Mrs Smith, a community member, believed that parental reinforcement of SunSmart awareness and practice was an important factor to motivate students’ behaviour. She also indicated this was the most challenging aspect of attending a SunSmart school. Community members expressed the value of parental role-modelling and enforcing school policy in the home environment to consistently encourage SunSmart practices. Mrs Cayless and Ms Hayne detailed these concepts:

Same rule; No Hat, No Play. Now it’s just putting it broader outside of school. Like, I’ll go back and say, “You’ve got to put your hat on?” “No I don’t want to put a hat on.” “Well what happens at school?” And just associating that it’s not just a school thing, it’s a lifestyle thing. It’s a, “this is what we do when we’re outside in the sun.” (Mrs Cayless)

Absolutely [role-modelling is important]. So if he’s [child] the only one in our group, like, in the school environment, he’s in a group that’s conforming to that policy. But again at a home environment or going out for a picnic and he’s the only one I put a hat on... “Why? Why?” Do you know what I mean? So again at this age; five, six, whatever impressionable for my son; if we as a family aren’t setting that role model; “Okay, I need to do it at school because it’s part of the uniform,” but he still doesn’t connect why. And so I feel that if we don’t enforce those policies outside of school, like when we’re at the beach, at a park, whatever... then there’s, and instil the reason why... (Ms Hayne)

These statements also provide insight into the perceptions of students and their motivations to wear a hat. It is evident from Mrs Cayless’ and Ms Hayne’s comments that their children associated hat-wearing practices with the school setting due to the sun protection policy. When removed from the school setting, the children’s associations between hat-wearing behaviour and policy result in them refraining from engaging in the behaviour beyond the HGPS setting. Ms Hayne specifically describes how her child only associates the school hat
with school uniform, rather than a practice that protects them from harmful sun exposure. Both Mrs Cayless and Ms Hayne described the importance of developing their children’s knowledge of sun safety so that their association between hat-wearing behaviour extends from the HGPS setting to any setting that encompasses sun exposure.

Ms Hayne also described her child’s father as a poor role model for SunSmart behaviour, which made motivating her child to engage in SunSmart practices difficult. Conversely, Mrs Hindmarsh indicated her child’s father was a good role model for SunSmart behaviour, which positively motivated her son to engage in SunSmart practices. While they believed that consistent parental role-modelling would have a significant effect on children’s motivations to engage in SunSmart practices, some of the community members believed it to be too difficult to adjust adults’ behaviours. Ms Jennings perceived media campaigns were ineffective in adjusting adults’ behaviours, while Ms Hayne suggested the only way her child’s father would adjust his behaviour was if he was diagnosed with skin cancer and made directly aware of the damage sun exposure can cause.

School staff agreed that the parents of students generally supported the HGPS sun protection policy and procedures enacted within the school. Principal Morrison indicated this support was a “massive help” to staff members’ efforts to enforce the policy. The parental support was associated with purchasing school broad-brimmed hats for their children to wear and encouraging students to comply with policy guidelines. While it was commonly suggested that there were a small number of parents who did not cooperate or engage with the school community, the school staff believed this was to be expected as it reflected any typical school community. Ms Bickmore described how a lack of parental support can negatively influence student behaviour:

If they [students] go home then and they get parents that say, “Well, don’t worry about it [SunSmart practices],” they’re in a real conflict of interests. “We have to have a hat at school but we don’t have it at home.”

This statement reflects the previously detailed perceptions of Mrs Cayless and Ms Hayne, who described the importance of extending sun protection behaviour beyond the school environment. Ms Bickmore also suggested that a holistic approach to SunSmart policy,
engaging and interactive education, and community support would be effective. However, Mrs Hounsell (an administrative staff member) suggested the influence of parental support can be diminished when contrasted by students’ motivations to decrease engagement in SunSmart practices, stating:

The parents can be as strong as you can to wear a hat, but as soon as they [students] walk out the door they’ll have a hat on, but if they don’t want to wear a hat, they’ll stick it in their bag whenever they can.

This scenario was specifically referring to older students, who were reportedly strongly motivated by their desire for peer acceptance. Mrs Hounsell perceived that once students progressed into high school, where SunSmart policy is unlikely to be enforced, peer acceptance will become the dominant motivation for students’ SunSmart practices. This motivator is examined in the following theme.

Peer acceptance

The role of students’ peers in regards to their motivation to enact SunSmart behaviour was substantial. It was evident that broad-brimmed hats were less preferred by students compared to caps or no hat, as a result of peer influence. It was suggested that this motivation was likely to become more influential as students aged, and peaked during adolescence. Peer influence was identified and discussed by all key stakeholder groups.

Staff members indicated older students perceived the school broad-brimmed hat to be “daggy” (Mr Crews) or “dorky” (Ms O’Malley). While this affects the behaviours of older students, Mrs McLain indicated younger students “just do what they’re told.” The staff members also suggested that baseball caps were more popular than broad-brimmed hats among older students. Principal Morrison had identified this preference, which resulted in her decision to make the broad-brimmed hat the mandatory type school hat, as it provided better protection from the sun and eliminated students’ ability to wear a baseball hat at school.

Consistent with staff members’ views, older students were the only student focus groups to provide a discussion regarding this theme. A S3 focus group provided an insightful discussion
regarding this concept. While they had suggested they were sufficiently educated about sun protection, the majority of S3 students who were interviewed indicated they were unlikely to wear a hat when they transferred to secondary school, where hat-wearing policy is unlikely to be enforced. Paige (S3) suggested these students’ preferences were influenced by their peers, which she believed “the vast majority” of students agreed.

In addition to predicting the future impact of peer influence on students’ hat-wearing behaviours, Paige specifically identified the HGPS school hat as a positive aspect of going to a SunSmart school. More specifically, as students were not provided with a choice of the type of hat they were allowed to wear, they were reportedly not motivated by their peers in this regard. This perception is evidenced in the following statement:

I know some schools, they give you the option to wear a hat that’s better sun safe than in others, so one’s kind of just a small bit at the front, and others aren’t... so I think people think they’re cooler wearing the other ones [cap], and so then I like that this school, they don’t give you the option, they just say, “You have to wear this hat,” and so that’s better for you. (Paige)

Paige’s perception reflects Principal Morrison’s decision to make the broad-brimmed hat mandatory, which was also addressed and supported by community members. Ms Hayne suggested that consistent reinforcement across contexts and settings could adjust cultural norms so that students and their peers were more accepting of SunSmart behaviour, as described in the following passage:

[Referring to student’s perspective] “I don’t want to be standing out in any measure.” So if everyone, they want to look the same, they want to be same. And it probably gets worse as he gets older. So I think it’s about a cultural change or a community change, not enough it starts with your own family, and this is what we do when we go out as a family and then the wider group of hopefully his friends. (Ms Hayne)

School staff agreed that students’ desire for peer acceptance became a stronger motivation as they aged. They agreed that this motivation constrained the likelihood of students to continue sun protection behaviours beyond the HGPS setting, specifically within a high school setting, as evidenced in the following statements:
I found that high schools, once the kids go to high school they don’t have to wear a hat, and the hat becomes a non-entity, and then it’s not cool to wear a hat. (Principal Morrison)

They’re getting towards high school so they’re probably thinking that’s more cooler or something and rather have a cap or something. (Mr Crews)

When you get to high school it’s not just about learning to be sun safe. It’s a lot of – “what do I look like in front of my friends?” No, I would probably say [students’ sun protection behaviour does not continue beyond this school setting]... And so high schools, I suppose, to a certain extent ... Would probably just give up because there’s better things to spend your time and energy doing. (Mr Maloney)

While peer acceptance predominantly provided motivation for students to adjust their hat-wearing behaviours and subsequently limit their sun protection behaviour, there was a contrasting motivation associated with peer acceptance which positively motivated students’ hat-wearing behaviour. It was clarified that students who complied with hat-wearing policy guidelines were unlikely to voluntarily relocate to a shaded area and accompany a peer who had been relocated due to non-compliance with the policy item. Subsequently, a student who was relocated to a shaded area would be isolated from their peer group. As peer influence increased students’ desire to maintain a close proximity to their peers, the possibility of isolation provided additional motivation for students to comply with HGPS hat-wearing policy guidelines.

As described by staff members, the motivational impact of peer influence was expressed by both male and female students. While students were less likely than school staff and community members to recognise the influence of peer acceptance, they highlighted another motivation that negatively affected their desire to engage in SunSmart practices. Younger and older students frequently referred to the discomfort associated with wearing the school hat and applying sunscreen.
**Discomfort associated with SunSmart practices**

While community members and school staff indicated that students’ preference to limit their broad-brimmed hat-wearing behaviour was associated with peer acceptance, students were more likely to suggest this was due to the discomfort associated with wearing the school hat. Additionally, they described their dislike of sunscreen application. This theme encompasses the reported discomfort associated with these two practices, and how students’ SunSmart behaviours were subsequently motivated.

Students identified negative aspects of the school hat design, specifically the neck cord used to keep the hat fastened. There were students who indicated they had removed the neck cord from their hats because they were a choking hazard or because the cords were impractical when engaging in physical activity. The following comment by Chloe (S1) highlights the impracticality of the hat design, specifically when engaging in physical activity:

> [The cord] was really annoying and when you run; it kept hitting your chest.

While removing the cord reduced the choking hazard, it made wearing the hat while engaging in physical activity more difficult. As the cord was no longer present, the hat would often blow off the students’ heads while they were running as there was nothing to keep it fastened. This frustration was highlighted by Tyler (S2) in the following statement:

> But they also don’t make our hats to fit our head properly, they just order a bunch of sizes and hope that it fits and then my hat, because it’s the only one that will fit on my head but it kind of doesn’t fit on my head and it just flies off when I run and then I have to stop and go back about five metres, pick it up...

Students identified additional criticisms of the school hat design, including limited comfort for individuals with long hair (Jody; S1 & Marielle; S2) and increased perspiration (Jackson; ES1).

In addition to criticisms of the hat design, students also described their dislike of sunscreen application. Time constraints and the physical discomfort associated with sunscreen were identified as the two main motivations which reduced students’ application of sunscreen. While Lucas (S2) and Dean (S1) both indicated they did not have enough time to apply
sunscreen before school, other students expressed their dislike of how sunscreen felt on their skin. Lilly and Noah (both ES1) indicated they did not like applying sunscreen because it tickled.

In addition to these descriptions of sunscreen, Regan and Oscar (S3) described sunscreen as “greasy,” and indicated they were unlikely to apply it. Furthermore, Carly (S3) expressed she “hated” sunscreen due to the discomfort caused when it went in her eyes.

In addition to students, some school staff members discussed sunscreen composition and how it motivated their application probabilities. While Mrs McLain indicated she encouraged students to apply sunscreen when it was “really, really hot,” she also highlighted the difficulty associated with young students and sunscreen application as “they tend to smear it on.” Mr Maloney expressed his dislike of sunscreen application and indicated he preferred to wear a hat instead. This perception indicates that the discomfort associated with these sun protection practices does not only motivate students’ behaviour.

**Chapter summary**

Chapter Five detailed the results of the case study that was conducted at HGPS. A thorough overview of the HGPS community was presented so that the contextual features of the setting were better understood. This thick description of the site highlighted a number of important characteristics that previous research suggests may impact the school’s capacity to enact the HPS framework. In particular, the school-community relationship was strong due to the relatively small size of the school compared to other schools in the Blacktown region, and also the population of the HGPS community encompassed a variety of culture and ethnicities. The former of these two characteristics was reinforced by the analysis of data collected from the HGPS site. These characteristics are discussed further in Chapter Six.

The data that were collected from HGPS and analysed for the purpose of this study included a number of relevant artefacts and interviews with key stakeholders from the school site. The analysis of the school’s policy documents indicated all of the SunSmart Program’s guidelines had been addressed within the sun protection policy, and additional components had been included to further support the integration of the students, parents and the community within both the sun protection and uniform policy. The analysis of newsletters indicated SunSmart
information had been communicated to the community in a number of instances throughout
the year prior to data collection, particularly in relation to sun safety education, reminders
for hat-wearing practices, and advertisements for local health services that supported the
prevention of skin cancer.

The thematic analysis of the interview data revealed key stakeholders understood SunSmart
as a phenomenon that encourages and enforces sun protection practices using multiple
approaches, specifically policy and education. As a result of key stakeholders’ interpretations
of the SunSmart phenomenon, they believed HGPS was a SunSmart school due to the
perceived effective implementation of sun protection policy and education practices. While
the HGPS hat-wearing policy was reportedly strict, the school’s approach to both policy and
education were supported by the majority of key stakeholders that were interviewed for this
case study.

It was evident that the key stakeholders’ understandings of the SunSmart phenomenon were
impacted by a number of similar experiences. For instance, most stakeholders associated the
SunSmart phenomenon with various sun protection media campaigns, specifically the Slip!
Slop! Slap! campaign. Furthermore, it was apparent that there were various types of
communication between the school and community which supported the clarification of
procedural guidelines. Despite these similar experiences, it was evident that the community
members’ interpretations of the SunSmart Program were also informed by their experiences
of the SunSmart Program in childcare settings, which were positive, and high school settings,
which were negative.

Key stakeholders’ motivations to engage in SunSmart practices were impacted by a number
of variables. Many of the key stakeholders of the HGPS community had experienced skin
cancer personally (either themselves, a family member or a friend), which strongly influenced
their attitudes and beliefs regarding sun protection, and subsequently their support of the
enactment of the SunSmart Program at HGPS. Many parents indicated their support of the
school’s enactment of the SunSmart Program led to them enforcing the same hat-wearing
guidelines within the home environment, while staff were motivated to role-model
appropriate SunSmart practices. However, while health and school policy were strong
motivations for students to engage in SunSmart practices, it was apparent there were a
number of conflicting motivations that decreased SunSmart behaviour. In particular, as students’ aged increased, their motivation to engage in SunSmart practices decreased, due to the impact of peer acceptance. Furthermore, students of all ages disliked hat-wearing behaviours and sunscreen application due to their impracticality. Chapter Six will present a discussion of these findings, compare them to the findings from the case study of the GSPS community, and then conclude this thesis by highlighting the implications for future practice.
Chapter Six: Discussion and Conclusion

Introduction

The purpose of this chapter is to compare the results of the case studies that were conducted at the Grove Street Public School (GSPS) and Henry Gilbert Public School (HGPS) communities, and examine the implications of these findings for the SunSmart Program. These case studies were conducted to investigate the following research questions:

1. What do key stakeholders understand by the term “SunSmart”? 

2. What experiences have informed key stakeholders’ understandings of the SunSmart phenomenon? 

3. What motivations do key stakeholders have for enacting SunSmart behaviour? 

4. How can SunSmart schools be further supported to implement the Health Promoting Schools framework? 

The review of literature in Chapter Two highlighted the lack of research relating to the holistic implementation of the SunSmart Program in New South Wales (NSW) primary schools. While previous reviews of the SunSmart Program have provided in-depth investigations of one specific aspect of the school-based health promotion program, such as policy (Jones et al., 2008; Turner et al., 2014a) or hat-wearing behaviour (Turner et al., 2014b), these studies have not fully recognised the diverse and dynamic contextual elements of individual school settings, nor the complex interrelationships between the features of comprehensive school-based health promotion efforts, such as education, policy and intersectorial partnerships (St Leger & Nutbeam, 2000b; Rowling & Jeffreys, 2006). Considering the contextualisation of comprehensive health promotion efforts has been shown to have a substantial impact on the health-related knowledge, attitudes and behaviours of school communities (McIsaac et al., 2015; Rowling & Samdal, 2011; Turunen et al., 2017), this study addressed the gap in existing research by using the Health Promoting Schools (HPS) framework to examine the intersection of these elements.
Furthermore, as the complex interrelationships between education, policy and intersectorial partnerships are largely affected by the school’s underlying social environment (Keshavarz et al., 2010), phenomenology was selected to provide the mechanism to better understand how and why key stakeholders’ interpretations of the SunSmart phenomenon were informed by their experiences. A deeper understanding of these interpretations provides meaning to their decisions, and subsequently their behaviour. By understanding the positive and negative motivations that impact the enactment of the SunSmart Program in school communities, target areas for improvement can be established. The findings of this research provide an unparalleled, comprehensive representation of the SunSmart school, which could have significant implications for skin cancer prevention efforts nationally and internationally.

Furthermore, this thesis provides a unique contribution to health promotion research by establishing a framework that supports the initial strategic planning of a health promotion initiative. While Bauman and Nutbeam (2014) have proposed a contemporary model for health promotion that supports the integration of complexity as well as scientific rigour, the majority of research pertaining to the HPS approach, and especially the SunSmart Program, aligns exclusively with the third and fourth phases of their model; program implementation and outcome measurement. The methodology adopted by this research compliments Bauman and Nutbeam (2014) by providing a comprehensive framework as to how the first and second phases of their health promotion evaluation model can be effectively applied. The breadth and depth of insight provided by this thesis establishes this methodology as a valuable asset for understanding the context in which a health promotion initiative will be implemented.

The results of the case studies that were conducted in each of the school sites were presented in Chapters Four and Five, respectively. The richness of stakeholders’ descriptions provide an extensive representation of the SunSmart Program which has not been previously established in the research literature. Most notably, these findings clarify how and why the components of the HPS framework interact to influence the implementation of the SunSmart Program. An appreciation of these interactions will formulate the construction of specific, practical recommendations for schools’ implementation of the SunSmart Program. As there were an exorbitant number of themes identified from the data analysis, this chapter will consolidate
themes to provide a comprehensive discussion as to how schools’ implementation of the SunSmart Program could be enhanced.

This chapter is organised by firstly presenting a brief comparison of the case studies that were conducted within the GSPS and HGPS settings. Secondly, the findings of the case studies will be thoroughly discussed using the HPS framework as a structural and explanatory frame. Finally, the broader implications of these findings for schools, the education sector and the health sector will be presented. As there are limitations regarding the generalisability of case study research, which are detailed in the Research limitations section of this chapter, the broader implications of this research have been presented in a manner that could be extrapolated to any school or health promotion agency that aims to apply the settings approach for health promotion to the school environment, providing relevant contextual features are considered.

**A comparison of the case studies**

The use of purposive sampling ensured the two case study sites exhibited demographically diverse school communities. GSPS was a culturally and ethnically homogenous community that was located in the Blue Mountains area of the Greater Western Sydney (GWS) region, whereas HGPS was a diverse community comprising stakeholders from a range of ethnic and cultural backgrounds, situated in the Blacktown area of the GWS region. However, the findings of the case studies conducted in these two settings did not explicitly identify culture or ethnicity as a notable variable in regards to the research questions of this thesis. Otherwise, the geographic location of these settings had a substantial impact on stakeholders’ sun protection attitudes and behaviours, and will be reviewed within this section. A table illustrating the prominent similarities and differences between the two case studies has been included as Appendix 7.

**Policy documentation**

The analysis of policy documents from both sites indicated that sun protection was addressed more comprehensively at HGPS. However, the analysis of interview data indicated that key stakeholders’ from both sites were generally unfamiliar with their school’s sun protection policy documentation or the SunSmart Program. It is worthwhile noting that neither school
had communicated their sun protection policy documentation within the newsletters during the 12 months prior to data collection, nor were any staff members aware of the location of their school’s sun protection policy documentation. These findings indicate that stakeholders’ understandings of the SunSmart phenomenon had not been influenced by policy documentation.

**The SunSmart phenomenon**

While stakeholders’ knowledge of policy documentation was limited, they were able to identify a number of features they believed encompassed the SunSmart phenomenon, such as formal sun protection education, the encouragement of sun protection practices, staff role-modelling and parental support. In addition to these features, a key finding from this research was that all stakeholders from both sites had experienced extensive interactions with the enactment of hat-wearing policy at their respective school, and these experiences had a significant impact on their interpretations of the SunSmart phenomenon. All stakeholders from both sites exhibited a strong association between the SunSmart phenomenon and their school’s hat-wearing policy.

Key stakeholders from both sites indicated their school’s hat-wearing policy encompassed a No Hat, No Play rule, whereby students’ non-compliance with hat-wearing guidelines resulted in their relocation to a shaded area of the school playground. At both sites, stakeholders agreed with this aspect of their school’s hat-wearing policy but debated whether students who had been relocated due to non-compliant behaviour were allowed to play or were required to remain passive.

Although hat-wearing policy represented a key similarity of the two school sites, it was evident that the HGPS’s hat-wearing policy was stricter than the GSPS’s hat-wearing policy, which impacted stakeholders’ interpretations of the SunSmart phenomenon. While students from GSPS were permitted to wear any type of hat, students from HGPS were required to wear a school-issued broad-brimmed hat. Furthermore, it was reported that students from HGPS were also publically confronted by staff at school assemblies if they did not have a hat, which was described by a HGPS community member as “traumatic.” This contrasting approach to policy enforcement not only impacted stakeholders’ interpretations of the
SunSmart phenomenon, but also influenced their motivation to comply with policy, which will be reviewed in this following section of this comparison of the case studies. Nonetheless, it is worthwhile recognising that key stakeholders from HGPS were more likely to support their school’s hat-wearing policy compared to key stakeholders from GSPS, despite the punitive approach to non-compliance.

Although key stakeholders from both sites also identified additional features of the SunSmart phenomenon, such as formal sun protection education, the encouragement of additional sun protection practices (e.g. sunscreen), staff role-modelling, and parental support, it was apparent that the expectations surrounding the enactment of these features were considerably fewer than hat-wearing policy. At both school sites, sun protection education did not occur regularly, sunscreen was not broadly provided or encouraged, and parental support was mixed. While both schools’ principals reportedly encouraged staff to role-model sun protection behaviours, stakeholders from both sites debated the consistency of staff role-modelling.

The similarities between the two school sites are clear. Within each school setting, stakeholders’ limited knowledge of SunSmart policy documentation resulted in misunderstandings of policy features, which subsequently influenced their compliance with, and enforcement of, the features they perceived comprised the SunSmart phenomenon. For instance, the artefact analysis found that neither school’s sun protection policy document included a “No Hat, No Play” rule, yet this phrase represented a large proportion of stakeholders’ interpretations of the SunSmart phenomenon at both sites. As a result, the SunSmart Program had not been holistically implemented within either school communities, which had a considerable impact on stakeholders’ attitudes and motivations to support the SunSmart phenomenon. While these similarities are clearly apparent, it was important to reiterate there were notable differences between the school sites, such as the extent of hat-wearing policy enforcement, which had an impact on stakeholders’ interpretations of, and motivations to support, the SunSmart phenomenon.
Motivations to support the SunSmart phenomenon

The stakeholders from both school sites expressed similar motivations to support the features they believed encompassed the SunSmart phenomenon, which were detailed in the previous section. It was evident that older stakeholders from both sites, such as staff, community members and some older students, were aware of the link between sun protection behaviour and the risk of skin cancer, and were subsequently motivated to support the SunSmart phenomenon due to health concerns. The motivational impact of health concerns was substantially increased among stakeholders who had known someone diagnosed with skin cancer.

While some younger and older students from both sites were aware of the link between sun protection behaviour and the risk of skin cancer, the predominant factor that influence their motivation to support the SunSmart phenomenon was the consequence associated with non-compliance of hat-wearing policy. Due to the contrasting approaches to each schools’ enforcement of hat-wearing policy, it was apparent that students from HGPS were more strongly motivated to comply with their school’s hat-wearing policy, as opposed to students from GSPS. Furthermore, the strong motivations of students from HGPS to comply with their school’s hat-wearing policy also increased their parents’ support of their compliance. The increased support of parents and community members from HGPS, as opposed to those from GSPS, represented a notable difference between the two school sites, and will be discussed in further depth later in this chapter.

In addition to the motivations which increased stakeholders’ compliance of policy, there were a number of similarities across both school sites in regards to the motivations that constrained stakeholders’ support of the SunSmart phenomenon. These constraining factors included peer pressure among students regarding hat-wearing behaviour, the influence of the NSW Department of Education on school agendas, the lack of support among some parents, reliance on triggers as cues for SunSmart behaviour, and the discomfort caused by sunscreen and hats.

In addition to these barriers, which were evident at both case sites, stakeholders from GSPS were strongly motivated by the climate experienced at their geographic location. It was
evident that stakeholders from GSPS perceived the regular cold temperature and overcast conditions minimised the intensity of UV exposure. Furthermore, a number of staff and community members from GSPS also expressed misunderstandings of vitamin D absorption requirements which resulted in negative sun protection attitudes, and subsequently constrained their motivation to support the SunSmart phenomenon.

In summary, the thorough analysis of key stakeholders’ understandings and experiences highlighted a number of similarities among their interpretations of the SunSmart phenomenon at both case study sites. However, there were also a number of variables which resulted in distinct interpretations of the SunSmart phenomenon, such as stakeholders’ beliefs and unique personal experiences, which were partly determined by their geographic location. As these understandings and experiences affected the attitudes and motivations of key stakeholders to engage with the SunSmart phenomenon, it is evident that the implementation of the SunSmart Program is predominantly dependent on the contextual characteristics of individual school settings. Further, it was apparent from the data analysis that the enactment of the SunSmart Program in GSPS and HGPS was constrained by the ineffective application of the HPS framework at both sites. Subsequently, the components of the HPS framework will be used to structure the following discussion regarding the implications of these findings for the SunSmart Program.

Implications for the SunSmart Program

This section of the discussion clarifies how the contextual features of the two case study sites affected the implementation of the SunSmart Program in these settings, particularly pertaining to the structure of the HPS framework, which informs the recommendations for schools and health agencies. As the HPS framework is a holistic, tripartite model, many of the findings and recommendations presented will have implications for multiple components of the HPS framework.

Curriculum, teaching and learning

While students, school staff and community members from both sites were aware of the risks associated with excessive sun exposure and were able to identify a number of sun protection practices, they had limited understanding of the more complex areas of sun safety, such as
the UV Index and recommended guidelines for healthy sun exposure. Thus, while the key stakeholders within these school communities were knowledgeable of skin cancer prevention practices, they did not have the confidence or capacity to apply this knowledge. This finding indicates stakeholders’ sun protection health literacy was minimal, which is concerning considering health literacy is essential for health promotion action due to its impact on community empowerment (Lee, 2009; Nutbeam, 2008; World Health Organization [WHO], 1986).

It has been established that there is a disconnect between sun protection knowledge and behaviour within Australia (Hamilton et al., 2016; Koch et al., 2016; Potente et al., 2011; White et al., 2015). The results of this research not only provide further evidence of this disconnect, but also provide insight into why this disconnect has occurred and how it could be resolved. Despite stakeholders’ identification of sun protection education as a primary feature of the SunSmart phenomenon, the analysis of the data from the two case studies revealed that sun safety education was addressed in an ad-hoc manner at both sites. While Sharplin et al. (2012) found that 79% of Australian primary schools reportedly incorporated sun protection education into the curriculum of all year levels, it was evident that the content area was not taught across all year levels at the two case study sites. This irregular attention to the teaching of sun safety opposes the explicit recommendations of Cancer Council NSW ([CCNSW], 2015) and the NSWDE (2013), and provides further evidence that policy documentation does not necessarily govern school procedures (Keshavarz et al., 2010). Furthermore, this finding has implications for the validity of previous reviews of the SunSmart Program that used sun protection policy documentation as a single data source (Dono et al., 2014; Jones et al., 2008; Sharplin et al., 2012).

In addition to the irregular delivery of sun protection education, the quality of educational activities at each school was unlikely to impart the necessary skills required to improve students’ health literacy, as indicated by literature (Nutbeam, 2008; Tones, 2005; Turunen et al., 2006). It was evident that the *Slip! Slop! Slap!* campaign was adopted as a resource for sun protection education at both sites, which was likely due to teachers’ experiences of the campaign and their subsequent association between sun safety and the *Slip! Slop! Slap!* campaign. Previous research has shown the associations between sun safety and the *Slip!
The *Slap! Slop! Slop!* campaign are potentially detrimental for sun protection efforts as individuals prioritise the three practices recommended by the outdated campaign (i.e. hats, sunscreen and protective clothing) and overlook more recently recommended sun protection practices, such as sunglasses (Hamilton et al., 2016). While the mass-media advertising approach adopted by the *Slip! Slop! Slop!* campaign was effective for raising awareness of skin cancer prevention and three sun protection practices during the 1980s (Montague et al., 2001), it does not provide opportunities to comprehensively develop sun protection knowledge and skills relating to the more complex areas of sun safety that have been detailed. Additionally, documentation pertaining to sun protection education indicated that the teaching of content was primarily confined to the Personal Development, Health and Physical Education (PDHPE) Key Learning Area (KLA). Considering the development of health literacy requires dynamic learning experiences that are distributed effectively across all learning areas and embedded within school organisation (Peralta et al., 2017), it is unlikely that the health education approaches adopted at either school will facilitate the development of health literacy amongst students.

Previous research pertaining to the implementation of the HPS approach has shown curriculum delivery is dependent on the interests and abilities of the teacher (McIsaac et al., 2015; Nordin, 2016). As teachers from both sites had limited sun protection health literacy, their ability to develop and deliver high quality sun protection education for students was constrained. Additionally, the teaching staff from both schools felt pressured to address other areas of curriculum which were prioritised over sun protection and felt hindered by time constraints (Brady et al., 2005; St Leger, 1999; St Leger, 2004). Although the teaching staff at both case study sites were willing to promote sun protection as a health and wellbeing issue, these barriers constrained their capacity to address sun safety in the curriculum, and therefore future efforts must support teachers to overcome these challenges.

In order to improve the quality of sun protection education at the two case study sites, it is recommended both schools undergo a process of comprehensive curriculum mapping and coordinated programming of learning experiences in order to address the perceived time constraints and the crowded curriculum constraining sun protection education. Literature indicates that optimal health literacy outcomes are most likely to occur when education
programs are scheduled over several years of schooling and across curriculum subjects, integrate current and accurate content that is appropriate for the learners’ ability level, and involve opportunities for critical thinking, problem-solving, communication, decision-making, and the practical application of knowledge (Cushman, 2008; McIsaac et al., 2015; Nutbeam, 2008; Peralta et al., 2017).

As a result of the interrelated components of the HPS framework, improving the curriculum, teaching and learning of SunSmart-related content could have positive implications for other aspects of the SunSmart Program. For instance, students could be provided opportunities to develop and apply their health-related knowledge and skills by becoming actively involved in the decision-making process of their school, regarding areas such as the school’s curriculum, physical and social environments, and partnerships with parents and health services (St Leger, 2001). By promoting student involvement in policy development, implementation and review processes, their awareness and understanding of sun protection policy documentation would be enhanced.

Furthermore, peer influence represented a notable motivation that constrained SunSmart behaviour, which could be overcome by increasing health literacy. Nutbeam (2008) explains that advanced levels of health literacy can prompt adjustments in social organisation and management, such as social norms. These potential implications highlight the interrelated nature of the HPS approach, as the health literacy developed via curriculum, teaching and learning can influence policy and the social environment of the school community, which are features of the school ethos, organisation and environment component of the HPS framework.

In regards to partnerships and services, students can act as health promotion change agents by sharing the learned concepts and practices with siblings and parents, and subsequently enhance health literacy among the broader school community (Macnab et al., 2014). Finally, partnerships and services could also support teachers to overcome the barriers that constrain their capacity to address sun safety in the curriculum. Additional support from external sources could improve teachers’ health literacy and also minimise the time required to design and prepare effective SunSmart learning experiences. The implications for external support will be detailed further in the partnerships and services component of this discussion.
School ethos, organisation and environment

The SunSmart culture and climate of the two school environments examined for this research were predominantly informed by stakeholders’ interpretations of policy, specifically hat-wearing guidelines. Furthermore, the enactment of hat-wearing policy deviated from policy documentation at both schools, which suggests that hat-wearing policy had been reconstructed as an internalised school rule rather than an enacted guideline of documented policy. While the contrast between documented school policy and enacted school policy has been previously identified within HPS literature (Colquhoun, 2005; Keshavarz et al., 2010), the results of this research provide insight into how and why distinct interpretations had occurred, the impact they had on the sun protection efforts, and also how this issue may be resolved.

Consistent with previous research (Sharplin et al., 2012), hat-wearing behaviour was a predominant focus within the case study schools. Previous research has suggested hat-wearing behaviours are emphasised within school procedures due to the financial costs associated with other sun protection practices (Parisi & Turnbull, 2014; Sharplin et al., 2012). It is likely that financial costs were an influence within the GSPS community, which had a lower median income per household compared to the NSW average (Australian Bureau of Statistics [ABS], 2017), as evidenced by stakeholder reports that the subsidised cost of the school hat was appreciated by parents. Additionally, the price of the school hat represented the predominant focus of the single instance of SunSmart-related content evident among the sample of GSPS newsletters.

However, there were a number of additional elements that influenced the prioritisation of hat-wearing behaviours evidenced by the findings of this research, which have not been identified previously. Firstly, stakeholders from both schools commented on the convenience of enforcing students’ hat-wearing behaviours as they were easily observed and could be adjusted in various environments. A distinct feature of the HGPS school ethos was that stakeholders from this setting perceived hat-wearing behaviour as predominantly students’ responsibility, which taught students to be accountable for their actions and also minimised the amount of time required by school staff to support the behaviour. Secondly, sunscreen was explicitly opposed at both sites due to the substantial application time required, the
potential mess involved, and reported discouragement by the NSWDE. This final perspective opposes the NSWDE (2013) Sun Safety for Students guidelines, which advise schools support the use of sunscreen for students during recess and lunch breaks. Thirdly, there was an apparent association between hat-wearing protocols and uniform policy, which established a sense of credibility regarding hat-wearing enforcement within the school setting, particularly among parents from the HGPS community. These parents adopted extensive measures to support hat-wearing behaviour, such as increasing the availability of spare hats in commonly frequented locations. The results of Hamilton et al.’s (2016) study mirrors these findings.

However, as hat-wearing was associated with uniform rather than health and wellbeing, it confined students’ motivation for hat-wearing behaviour exclusively to the school setting rather as an everyday behaviour. The likelihood of stakeholders to develop lifelong, habitual sun protection behaviour beyond school is considerably decreased as a result, and this finding highlights a substantial limitation to the settings approach to health promotion. This finding provides insight into the results of previous research, which found students’ and adult role models’ hat-wearing behaviours at SunSmart schools were substantially lower upon arrival and dismissal from school compared to during school hours (Turner et al., 2014b). Nonetheless, it is concerning that hat-wearing behaviour was prioritised over other sun protection practices, such as shade, sunscreen, sunglasses and protective clothing, as it is advised by relevant health agencies, such as CCNSW (2015) and the WHO (2003), that these practices are enacted collectively for maximised sun protection.

The disconnect between documented and enacted policy, which was evident at both sites, is a notable finding as it severely constrained the shared vision of the school community. While documented policy represents the formal rules of the school, the everyday actions of stakeholders are guided by the internalised school rules, which are rarely made explicit and are characterised by the informal social environment of the setting (Keshavarz et al., 2010). The establishment of hat-wearing policy as an internalised school rule at both case study sites is evidenced by stakeholders’ interpretations of policy enforcement despite their unfamiliarity with policy documentation, thus suggesting they had constructed these interpretations purely via their experiences. Colquhoun (2005) explains that internalised rules are often misinterpreted as individuals within the school community are expected to
understand and appreciate these rules by association. As this process of constructing meaning is highly subjective and dependent on the experiences of individual stakeholders (Reid et al., 2005), it is evident that the establishment of hat-wearing policy as a poorly-communicated internalised school rule led to stakeholders’ diverse interpretations of how the policy was enacted, why the policy was enacted, and their roles and responsibilities in regards to policy support.

Considering the use of specific terminology and language is also a characteristic of internalised schools rules (Colquhoun, 2005), the establishment of hat-wearing policy as an internalised school rule at GSPS and HGPS is further evidenced by the strong association between stakeholders’ understandings of hat-wearing policy and the “No Hat, No Play” phrase. While the correlation between the “No Hat, No Play” phrase and the encouragement of children’s sun protection behaviours has been identified in previous research (Hamilton et al., 2016; Turner et al., 2014a), the phrase is no longer encouraged by CCNSW (2015) or the NSWDE (2013) due to its affiliation with punitive measures, rather than supportive practices. The misunderstandings and outdated interpretations of policy generated by the establishment of hat-wearing policy as an internalised school rule highlight the fragmented school ethos of GSPS and HGPS. Consistent with previous literature (Inchley et al., 2007; Keshavarz et al., 2010; Tones, 2005), a fragmented school ethos severely inhibited the holistic support of sun protection attitudes and behaviour and subsequently increased stakeholders’ susceptibility to opposing motivations.

In order for these two case study sites to establish a positive and holistically supportive school environment, it is suggested they should redevelop their approach to SunSmart Program implementation. Both of the case study sites neglected the initial preparation and planning phase of a HPS initiative, which is a crucial stage for the development of school ethos. When stakeholders are collaboratively engaged in an effective HPS planning process, their commitment to, motivation for, and perceived ownership of school procedures are enhanced, which results in a supportive school ethos (Cushman, 2008; Inchley et al., 2007; Macnab et al., 2014). It is advised that sun protection policy redevelopment at GSPS and HGPS involves the establishment of a SunSmart committee representing staff, students, parents and community members (Macnab et al., 2014; Rowling & Samdal, 2011). Each school’s SunSmart
committee should be involved in the planning and implementation of the SunSmart Program to ensure all key stakeholders’ perspectives are considered. Furthermore, it is important that the roles and responsibilities of these committee members are made explicit so that their expectations are clear (Rowling & Samdal, 2011). The SunSmart committee should be consulted by the school for matters relating to policy development, physical and social environments, and the partnerships with parents and health services pertaining to the SunSmart Program. As curriculum standards in NSW primary schools are determined by the NESA, school-based SunSmart committees would be unable to drive curriculum change. The SunSmart committees may be consulted regarding the use of curriculum resources, although this level of involvement would need to be carefully considered.

In addition to enhancing the school ethos, these collaborative opportunities for school community empowerment would ensure that the enactment of the SunSmart Program was contextualised within their setting, so that it supported and aligned with existing policies, and also addressed the needs and resources of the school community (Rowling & Samdal, 2011; Scriven & Hodgins, 2012).

**Partnerships and services**

The partnerships and services component of the HPS framework could have been addressed more effectively at both case study sites. This was particularly evident within the case study of the GSPS community, whereby the component was largely disregarded. Although the governing body of the education sector (NSWDE) reportedly had an impact on both schools’ enactment of the SunSmart Program, the integration of parents and the interactions between the school communities and health services were minimal. Subsequently, many of the issues relating to ineffective partnerships and services, such as limited commitment and the absence of a shared vision, were apparent at both school sites (Inchley et al., 2007; Rowling & Samdal, 2011). As such, the *partnerships and services* component of the HPS framework represented the most significant opportunity for improving the application of the SunSmart Program, and also enhancing the sun protection knowledge, attitudes and behaviours of key stakeholders from both sites. This section of the discussion will: i) describe the implications of how *partnerships and services* were maintained at both sites; ii) present recommendations as to how these *partnerships and services* could be improved; and iii) explain why these
recommendations would likely have an impact on the sun protection knowledge, attitudes and behaviours of the school communities.

**Parents and community members**

It was reported that parents and community members had a positive relationship with their respective school, and it was evident they were generally supportive of the sun protection procedures that were enacted. However, the findings of this research provided further evidence that these stakeholders were not adequately informed of school sun protection policy documentation, nor were they invited to participate in the development of SunSmart policy (Sharplin et al., 2012). This led to the development of diverse understandings and expectations of their school’s sun protection procedures, particularly in regards to their roles and responsibilities, and subsequently had a significant impact on parents’ and community members’ motivations to support SunSmart attitudes and behaviour. Furthermore, parents’ and community members’ distinct understandings of the SunSmart phenomenon represented a notable difference between the two case study sites, and represents a focal point of discussion throughout this section.

While the application of the SunSmart Program at both case study schools was relatively similar, the different perceptions and attitudes exhibited by the GSPS and HGPS communities affected their motivations to support the SunSmart Program. At GSPS, the majority of community members believed their geographic location was associated with lowered levels of harmful sun exposure compared to other areas of Australia, and therefore concluded they were less susceptible to the risks of sun exposure, such as sunburn and skin cancer. These perceptions were likely constructed from their incorrect associations between harmful sun exposure, temperature and visible sunlight, rather than UV Index. Furthermore, the GSPS community members were more likely to identify vitamin D deficiency as a more immediate health concern than skin cancer. Despite being unaware of the recommended sun exposure guidelines for optimising health benefits, GSPS community members advocated sun exposure for vitamin D absorption as a result of this perception. There is evidence that vitamin D misunderstandings are common among the Australian population (Vu et al., 2010), and incorrect information has been perpetuated by health professionals and media (Bonevski, 2012; Scully et al., 2008). Therefore, these findings indicate that future efforts to improve sun
protection health literacy must target vitamin D knowledge, as the misunderstandings associated with the health issue had a strong, negative effect on these stakeholders’ attitudes and reported behaviour.

In contrast to the perceptions of the GSPS community, many students, staff, parents, and community members from the HGPS community displayed positive sun protection attitudes as a result of personal experience with skin cancer. These individuals were far more likely to have positive perceptions of the SunSmart phenomenon and reportedly advocate SunSmart behaviour. This finding highlights the influence of lived experiences on individuals’ constructions of meaning, and subsequently their attitudes and behavioural intentions (Reid et al., 2005). It was evident that parents of children enrolled at HGPS were more likely than those from GSPS to support sun protection beyond the school setting, and also support students’ compliance with their school’s hat-wearing policy.

While previous research has identified the link between experiences with skin damage from overexposure to sunlight and sun protection advocacy (Hatmaker, 2003; Olson et al., 2007), these findings shed light on the impact of this motivation on stakeholders’ attitudes and reported behaviour. While a number of motivations constrained stakeholders’ SunSmart behaviour, such as limited sun protection knowledge, social norms, and perceptions of health benefits, it was apparent that these motivations had minimal effect on stakeholders who had personally experienced skin cancer. Thus, it could be concluded that the motivational impact of personally experiencing skin cancer was stronger than any other motivation identified within this research. This represents an area that could be targeted by CCNSW to promote school community commitment to the SunSmart Program.

Nonetheless, the distinction between the attitudes and motivations of the GSPS and HGPS school communities reflect the informal school characteristics that facilitated the development of internalised rules enacted at each site. The attitudes of the GSPS school community, which suggested a lack of concern for skin cancer prevention, constrained the application of SunSmart within this setting. Conversely, the internally motivated skin cancer prevention attitudes of the HGPS community reportedly resulted in stricter SunSmart procedures at this site. Therefore, while parents and community members were not integrated into the development process of school policy, their attitudes indirectly impacted
the informal sun protection procedures of their respective school. Given this finding, it can be concluded that SunSmart membership alone is insufficient to enhance school communities’ sun protection attitudes and motivations to enact the SunSmart Program; the entire school community must be engaged and committed to addressing the health issue (Macnab et al., 2014; Mclsaac et al., 2015; Rowling & Samdal, 2011).

It was previously recommended in this chapter that both case study sites redevelop their sun protection policy following the establishment of a SunSmart committee comprising students, staff, parents and community members in order to enhance these stakeholders’ engagement and empowerment. This recommendation would likely have a beneficial effect on the partnerships between the school, parents and community members, which reinforces the need for an interrelation between the HPS framework’s components. The involvement of all school community stakeholder groups within the planning process of the SunSmart Program would facilitate their development of health literacy, understanding of school policies and procedures, clarification of roles and responsibilities, sense of ownership, and subsequently their commitment to the shared vision of the SunSmart Program (Macnab et al., 2014; Rowling & Samdal, 2011).

While these important features were absent within the two case study communities, the establishment and integration of a coordinated committee comprising all school community stakeholder groups requires effective leadership and an extensive investment of time (Inchley et al., 2007; Macnab et al., 2014; Rowling & Samdal, 2011). As time constraints were identified as substantial barriers to both schools’ implementation of the SunSmart Program, this area represents an opportunity for external health promotion agencies, such as CCNSW, to provide additional support, especially given stakeholders from the two case study schools did not perceive their existing partnerships with external organisations to be beneficial.

**Organisations and services**

External partnerships between the two case study sites and external organisations and services were limited. In regards to the enactment of the SunSmart Program at GSPS and HGPS, it was evident that the most relevant and influential partnerships were between the schools and the NSWDE and CCNSW.
Staff from both schools identified the NSWDE as a strong influence on their schools’ agendas, protocols and procedures. Considering the explicit recommendations from the NSWDE (2013) for schools to adopt the SunSmart Program, it is understandable that the NSWDE was identified by staff as the primary determinant for both schools’ initial SunSmart membership. It is likely that the sun protection policy documentation of GSPS and HGPS was developed to satisfy these recommendations (Brady et al., 2005; Colquhoun, 2005), which may explain why both sites had created sun protection policy documentation but were not fully enacting it.

The majority of stakeholders, including staff, were unfamiliar with SunSmart membership requirements, benefits or resources, and were unable to identify CCNSW as the organisation that managed the SunSmart Program. While the NSWDE were a catalyst for the schools’ initial SunSmart membership, it was reported that the NSWDE’s health and wellbeing agenda has since transitioned from sun protection to nutrition and physical activity. Alongside CCNSW’s lack of communication and support during this period, the SunSmart Program became a somewhat neglected component of the schools’ day-to-day activities as a result. This partially explains how the SunSmart phenomenon was reduced to an internalised school rule, centred on hat-wearing policy, rather than the enactment of all procedures associated with sun protection policy documentation. The lack of communication and support from CCNSW may also explain why the distinction between the attitudes of the GSPS and HGPS communities had such an extensive impact on the SunSmart procedures enacted at each site.

As a result of the limited interactions between the schools and CCNSW, staff from both sites were unlikely to indicate that SunSmart membership provided benefits. One staff member described their school’s SunSmart membership as “pointless” and simply “ticking another box.” Furthermore, staff believed the high prevalence of SunSmart membership among NSW primary schools resulted in SunSmart membership shifting to an expectation rather than a distinguishable characteristic for schools. As a result, these influential stakeholders were unlikely to perceive the promotion of their school’s SunSmart membership as a worthwhile feature to publicise, thus contradicting previous research (Sharplin et al., 2012). Conversely, parents and community members were more likely to identify SunSmart membership as a valuable promotional tool, despite not fully understanding what SunSmart membership entailed. Many of these stakeholders believed SunSmart membership advocated their
school’s commitment to sun safety and also acted as a reminder for the school community to enact SunSmart behaviour.

Consistent with previous research, health promotion programs which add to teachers’ workload without offering adequate support resources have a negative impact on teachers’ motivation and commitment to implement/sustain such a program (Brady et al., 2005; Rowling, 1996; St Leger, 2004). However, it is also possible that staff members’ negative perceptions of the SunSmart phenomenon were established by their own unrealistic expectations of membership benefits. While the SunSmart Program is a resource for schools’ development of a comprehensive sun protection policy, it is apparent that school staff expected an array of free resources (e.g. sunscreen) and curriculum workshops conducted by CCNSW, which are not documented components of SunSmart membership (CCNSW, 2015). Additional communication and interaction from relevant organisations and agencies, specifically CCNSW and the NSWDE, would have supported the clarification of SunSmart membership as neither case study site exhibited protocols that reflected an effective partnership, such as shared resources, collaborative decision making, active feedback, committed improvement, clarified goals, and accountability (Scriven & Hodgins, 2012). Any future endeavours by CCNSW to improve the SunSmart Program must consider the support strategies for SunSmart schools.

**Recommendations for the SunSmart Program**

The recommendations offered in this section are devised to enhance the two case study sites’ implementation of the SunSmart Program via the lens of the HPS framework. However, as 80% of NSW primary schools are members of the SunSmart Program, it is possible that the contextual characteristics which constrained the enactment of the SunSmart Program within the case study sites are experienced by a number of other school communities (Berg, 2009; CCNSW, 2016; Simons, 2009). Therefore, there are opportunities to extrapolate the principles of these recommendations more broadly for other schools or partnering organisations to enhance the implementation of the SunSmart Program. Given the flexibility of the HPS framework, these recommendations may be useful beyond the scope of the SunSmart Program, and support the design and implementation of other health promotion programs.
that target school communities using the settings approach to address a range of health issues.

The findings of this research indicate the initial development phase of the SunSmart Program within individual school settings, and the intersectorial partnerships between SunSmart schools and partnering organisations (such as CCNSW), are the areas that have the most significant impact on the case study schools’ implementation of the SunSmart Program. Subsequently, this section will present a number of recommendations that specifically target these areas. Rowling and Samdal (2011) established eight components that are essential for the practical implementation of the HPS concept (examined in Chapter Two). The findings of this research indicates that the integration of these components within the case study sites was limited, which had a detrimental effect on stakeholders’ SunSmart attitudes, understandings and behaviours. Subsequently, many of the recommendations proposed for the case study sites and health promotion agencies, in light of this study, reflect Rowling and Samdal’s (2011) guidelines for HPS implementation.

**Recommendations for schools**

There have been a number of recommendations presented throughout this chapter regarding the two case study sites’ enactment of the individual components of the HPS approach. These included: i) comprehensive curriculum mapping to ensure sun protection education is adequately addressed; ii) redevelopment of sun protection policy to establish community vision, commitment and understandings; and iii) increasing the collaborative opportunities of all school community stakeholders. Perhaps more importantly than these individual recommendations is the need to connect each strategy in order to support the holistic implementation of the SunSmart Program.

Stakeholders’ lived experiences had a significant impact on their motivation and commitment to enact health promotion strategies within their school environment, and thus necessitate health promotion strategies reflect the needs and interests of the surrounding community. While this is not a unique recommendation (Cushman, 2008; Gugglberger & Dür, 2011; Rowling & Samdal, 2011), it demonstrates that health promotion programs adopted from external sources, such as the SunSmart Program, cannot be implemented without reflection
into a school setting. Rather, schools must take responsibility for undergoing a process of HPS planning and development prior to implementation so that the program aligns with the current policies and procedures of the schools setting, and is made relevant to the specific circumstances of the school community.

Thus, in order for SunSmart schools to effectively adopt the HPS framework, three key areas must be addressed during the planning and development stage of SunSmart Program implementation. Firstly, key stakeholders (i.e. students, staff, parents and community members) and relevant partnering organisations (e.g. CCNSW, local skin cancer health services) are engaged to raise awareness and develop commitment to promoting the health issue. Secondly, a representative committee of these key stakeholders contribute to the establishment of roles and responsibilities, and also the development of sun protection policy and procedures, so that they address the needs and shared vision of the school community. Lastly, teachers collaborate with the committee of key stakeholders and relevant partnering organisations to develop a comprehensive approach to addressing sun protection education within the curriculum (Rowling & Samdal, 2011).

Throughout each stage of program implementation, it is necessary for schools to actively support and encourage communication between stakeholders. Consistent and comprehensible communication between the schools and community members could address many of the issues that inhibited these key stakeholders’ support. More specifically, it is recommended that schools regularly: i) clarify the roles and responsibilities of all local stakeholders and partnering health services/organisations (such as CCNSW); ii) disseminate and explain school policy; and iii) explicitly encourage community feedback. Considering the investment of time, resources and effort required to address these recommendations, effective partnerships with relevant health promotion agencies are essential.

**Recommendations for health promotion agencies**

While CCNSW manages the SunSmart Program in NSW primary schools and therefore may seem the most appropriate organisation to adopt these recommendations, the potential for this organisation to provide support is constrained by funding. As CCNSW is a non-government charity organisation, it is heavily dependent on volunteers and donations
(CCNSW, 2016), and therefore the extensive recommendations necessitated by the findings of this research may not be logistically and/or financially feasible. Subsequently, other organisations that are committed to skin cancer prevention efforts within the school setting, such as the NSWDE and Cancer Institute NSW9, are suitably placed to address these recommendations.

Effective leadership and management within both school communities is necessary to embed the SunSmart Program within the everyday life of the school (Macnab et al., 2014; Rowling & Samdal, 2011). As teachers have the strongest potential to foster their school community’s sense of program ownership, they are key agents for leadership and management (Inchley et al., 2007; St Leger & Nutbeam, 2000b). However, teachers at both case study sites exhibited critical views of SunSmart membership and had limited health literacy, which constrained their ability to act independently to address this issue. Therefore, it is advised an external agency facilitates the transition of teachers to project leaders (i.e. “SunSmart champions”) using coordinated professional development modules (St Leger, 2004). While the SunSmart Program does offer a free online training program for pre-service and current teachers (Cancer Council Western Australia, 2013), as well as access to curriculum resources (CCNSW, 2015), it is evident from stakeholders’ reports and recommendations that these resources are either not sufficiently promoted or are not appropriate for use in schools. Thus, it is recommended that professional development modules should be established to increase teachers’ health literacy, advocacy and social change skills. More specifically, SunSmart professional development modules should facilitate:

i) Knowledge of simple and complex skin cancer prevention concepts, such as UV Index, combining sun protection practices, and vitamin D recommendations;

ii) Understandings of the tripartite HPS approach, specifically the importance of school community commitment, ownership, a shared vision, and a supportive environment;

iii) Awareness of SunSmart membership and resources, including its alignment with various curriculum areas, health issues, and related NSWDE protocols;

9 Cancer Institute NSW is the primary cancer control organisation of the NSW Government.
iv) Capacity to identify and interact with within their local community pertaining to skin cancer prevention, and;
v) Project leadership skills.

Although it is the responsibility of schools to ensure sun protection education is adequately addressed within the curriculum, partnerships with external agencies could support this outcome by improving the quality, accessibility and promotion of educational resources provided to SunSmart schools. It is particularly important that external health promotion agencies support schools’ access to accurate information as there is evidence that other sources of health information, such as doctors and the media, have been found to perpetuate inaccurate information that unnecessarily increases individuals’ harmful sun exposure (Bonevski, 2012; Reeder et al., 2012; Scully et al., 2008). In addition to curriculum resources, the provision of appropriate sun protection information for schools to regularly disperse to their community would support the health literacy of the broader school community (e.g. parents).

As the language of the education sector is distinct from the health sector (Scriven & Hodgins, 2012), it would be beneficial for teacher professionals to be consulted and support the construction of the professional development module and curriculum resources so they use appropriate terminology, integrate a number of curriculum learning areas, align with the intended outcomes, and address the needs of the target audience. The Generation SunSmart online training program (Cancer Council Western Australia, 2013) provides an effective foundation for this recommendation as it allows teachers to overcome the time constraints of face-to-face professional development and also improve the accessibility of sun protection education resources for all stakeholders within the school and home environment, thus providing additional opportunities to target parents’ health literacy. However, the online training programs requires development. Firstly, this training program should be adapted to include an entire module dedicated to the teaching methods required to develop students’ health literacy. Developing teachers’ capacities to create learning opportunities that facilitate deep thinking and critical thought, and are integrated across learning areas and within the ethos of the school, should be a priority (Peralta et al., 2017). Secondly, it would be worthwhile for Generation SunSmart to include additional training regarding the
implementation of the HPS approach. The eight core components that are essential for the practical implementation of the HPS concept, established by Rowling and Samdal (2011), should be adopted as the guiding template for the Generation SunSmart training program. These components were unpacked in Chapter Two. Considering CCNSW (2016) has recently focused on improving the online delivery of the SunSmart Program, this recommendation is applicable to their current agenda. Additionally, it would be worthwhile for the NSWDE to formally endorse these features to increase schools’ engagement.

As CCNSW manages the SunSmart Program, it is necessary for the organisation to reengage with SunSmart schools to enhance stakeholder enthusiasm. Consistent communication between CCNSW and SunSmart schools is essential, and a number of areas should be explicitly promoted and mutually agreed upon, including both parties’ roles and responsibilities, available resources, opportunities for feedback, and the regular evaluative process of SunSmart schools’ procedures.

Finally, future research relating to the SunSmart Program, or other school-based health promotion initiatives, should integrate a holistic model for planning, implementation and outcome measurement. The methodology of this research compliments pre-existing models and frameworks that have been developed for this purpose, such as those established by Bauman and Nutbeam (2014), and Rowling and Samdal (2011). Both of these models emphasise the importance of planning and preparation prior to program implementation and evaluation. As such, it is recommended that future health promotion programs, interventions and/or evaluations adopt the methodology of this research as a formative measurement to develop purpose, context specificity, mutual understanding amongst stakeholders, and also clear and realistic objectives. Considering the findings of this research have shown that a lack of engagement amongst key stakeholders can have a significant impact on their motivations to support a health promotion initiative, the significance of this planning and preparation phase cannot be understated. Once planning and preparation has been completed, the subsequent phases of HPS implementation and outcome measurement can be addressed (Bauman & Nutbeam, 2014; Rowling & Samdal, 2011).

This methodology supports health promotion research to bridge the gap between planning, preparation, implementation and evaluation. Considering the disconnect between these features
had constrained the quality of evidence relating to health promotion research (Langford et al., 2015; Tang et al., 2008), the establishment of this methodology represents a timely development. It is envisaged that the application of this methodology in future health promotion research will support the validity and reliability of HPS research, and consequently build evidence of effective HPS practice.

**Research limitations**

In light of these findings, it is also necessary to identify the limitations of the research. This section will explain the nature of these limitations, specifically regarding their potential impact on the ability of the research to effectively answer the research questions.

There were several additional sources of data that would have complimented the research by providing a deeper insight into the enactment of the SunSmart Program at the case study sites. Although student work samples were unable to be sampled for this study due to ethical and time constraints, this data source would have provided valuable evidence regarding the content and delivery of sun safety education, and consequently the potential development of health literacy. Furthermore, an analysis of each school’s physical environment would have objectively identified opportunities for sun protection, and would have also supported the triangulation of data. While photographs of each school were obtained during the data collection period of this study, they were invalid sources of data. This is because the photographs could not contain any identifiable characteristics of the school site or any individual, and they were only taken when the researcher was made aware of SunSmart advertising within the school, either by a member of the school community or via their own recognition, and therefore may not represent a thorough analysis of the school environment.

The data collection and analysis procedures that were adopted by this study are also not without limitations. Firstly, the primary source of data for this study involved self-reporting data. While this approach was required to gain the necessary insight into stakeholder perceptions and understandings, the resultant data may not necessarily reflect fully accurate renditions of their attitudes, beliefs or behaviours (Yin, 2011). Issues such as the social desirability effect and the dominance of a particular participant within a single focus group interview may have affected the validity of the results (Bryman, 2012; Hamilton & Corbett-
Whittier, 2013), although appropriate considerations were made to reduce the likelihood of these issues, as explained in Chapter Three. Secondly, following the interpretation of data, it is apparent that it would have been worthwhile to collect additional data about each participant, specifically regarding their relationship with setting in which the SunSmart phenomenon was situated, but also including more generic information. The following participant characteristics may have provided a deeper insight into each participant’s responses: gender, age, length of time associated with the school/community, teachers’ teaching experience, specific relationship to the school (i.e. parent/guardian/community member), and relevant training. Thirdly, despite the inclusion of specific measures to improve research reliability and validity, such as phenomenological bracketing and theoretical saturation, the subjectivity of data collection and analysis methods meant that the research cannot devise an objective outcome, and had a higher risk of interpretive bias (Berg, 2009; Bryman, 2012). The researcher acknowledges that their preconceptions may have had a minor influence on the thematic analysis of data, which is an accepted feature of phenomenological research (Gearing, 2004; Gill, 2014).

Finally, while this chapter has described a number of broader implications for school-based health promotion efforts, it must be acknowledged that the external validity of these implications is partially constrained by the use of case study methodology. As the unique contextual factors that distinguish the two school sites have been the focus of the research, the generalisability of results has not been prioritised (Stake, 2000). However, there have been suggestions from researchers that the issues faced in a single setting are likely experienced in other, similar settings, and that the findings of case study research can be generalised to some extent following the consideration of contextual factors (Berg, 2009; Simons, 2009). Therefore, readers can draw their own implications and relevance from the recommendations produced from the findings of this research.

Final comment

The findings of this thesis have considerable implications for future health promotion strategies and research. The case studies conducted in two NSW primary school communities provided a thorough insight into the SunSmart phenomenon, and highlighted a number of influential features that could either constrain or support the enactment of the SunSmart
Program in these specific sites. It is apparent that key school community stakeholders’ commitment to supporting and facilitating the SunSmart Program is limited without the collective and holistic application of the HPS framework.

Perhaps more importantly, this thesis provides evidence of the successful application of a contextual-focused research methodology. It has been established that school communities comprise a number of intricate, complex characteristics which not only distinguish individual school settings but also affect their implementation of health promotion strategies, and the recognition of schools’ contextual distinctiveness was a focal point of this thesis. Rather than evaluating the SunSmart Program via behavioural outcomes, this thesis investigated how and why the contextual features of a school community affected stakeholders’ interactions with the SunSmart Program. The application of phenomenology as the theoretical framework, in combination with the HPS concept as a methodological framework, provided a comprehensive insight into the key factors that impact health promotion efforts within the school setting.

In conclusion, this thesis provides further evidence-based insight to the argument that health promotion should be viewed as a process, not as an outcome. The collective application of phenomenology and the HPS framework highlighted the alignment between stakeholders’ lived experiences, their interpretations of the SunSmart phenomenon, their understandings and attitudes, and subsequently their reported behaviour. Thus, the explanation of stakeholders’ behavioural decisions could be traced to their initial experiences and interpretations of the SunSmart phenomenon. This relationship provides a specific focus for further research in order to enhance the enactment of the SunSmart Program. On the basis of these findings, it is feasible that this methodology could be applied more broadly in future studies which aim to better understand the process of health promotion within a particular context.
References


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Shepherd, J., Pickett, K., Dewhirst, S., Byrne, J., Speller, V., Grace, M., . . . Roderick, P. (2016). Initial teacher training to promote health and well-being in schools – A systematic


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Appendices

Appendix 1: Participant information statements

Information Statement for Principals

What is a SunSmart school?

<table>
<thead>
<tr>
<th>PhD Candidate – Mr Brad Wright</th>
<th><a href="mailto:bwright@csu.edu.au">bwright@csu.edu.au</a></th>
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<tr>
<td>Lead Supervisor – Dr Mathew Winslade</td>
<td><a href="mailto:mwinslade@csu.edu.au">mwinslade@csu.edu.au</a></td>
</tr>
<tr>
<td>Co-Supervisor – Dr Deb Clarke</td>
<td><a href="mailto:dclarke@csu.edu.au">dclarke@csu.edu.au</a></td>
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(SCHOOL’S NAME) has been invited to participate in a study conducted by Charles Sturt University.

This study is designed to explore the concept of a SunSmart school. The SunSmart Program is managed by Cancer Council NSW and encourages a community approach to sun safety, which involves cooperation between students, teachers and parents/guardians. As there is no previous research detailing the concept of a SunSmart school from the perspective of the entire school community, this research aims to investigate what the school community thinks of their SunSmart school and what SunSmart means to them. This information could be used to improve the future direction of the SunSmart Program and sun protection approaches in education.

This study will form the basis of a PhD student’s thesis and results may be published.

Why am I receiving this letter?

As a principal, your consent for this study to take place in your school, and the individual contribution we ask you to provide, is essential. As a leading school staff member, you represent a fundamental link between your school and the community. It is this relationship that underpins a significant component of the SunSmart school concept. Also, your thorough understanding of your school’s SunSmart status and the sun protection measures it provides is vital to understanding how the SunSmart Program can be actioned in schools.

What is my school being asked to do?

A copy of your school’s sun protection policy will be compared to the SunSmart Program to determine the degree of alignment between the two documents. This analysis will assist the understanding of how the SunSmart Program is actioned in schools. It will not be an evaluation of your school’s sun protection policy.

Additionally, all students, parents/guardians, and teachers will be invited to participate in interviews. As a principal, you will also be invited to participate in an interview to discuss the link between your school and local community. Interviews with students, parents and teachers aim to examine what they understand by the notion of a SunSmart school, specifically how it is actioned in the school, and what factors enable or constrain the actioning of the SunSmart Program. Whilst students and parents/guardians will be divided
into separate focus groups of approximately 5-6 participants, teachers will be interviewed individually. You will also be interviewed individually.

This data collection process is likely to begin in Term 4 2014 and be complete by the end of Term 1 2015.

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<th>Sources of Data from (SCHOOL’S NAME)</th>
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<td>Document Analysis</td>
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<td>Sun Safety Program</td>
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What am I specifically being asked to do?

As mentioned in the previous section, this study invites you to participate in a 30 minute individual interview to discuss your understandings of the SunSmart school concept, and how your school addresses sun safety within the formal curriculum, the ethos of the school and the surrounding community. The interview will take place at a time and area convenient to you and may be conducted via telephone for convenience purposes.

Will my school or any school community member be identified in the research?

The interview will be audio taped so the researcher can refer to the interview for analysis and inspection. The transcribed recording will be analysed only by the researchers. You will not be identified by name in any of these publications. The researcher will assign your interview responses under a pseudonym.

Whilst others may know that you are participating in an interview, no one, other than the researcher, will be aware of the responses you provide. All reference to you following the interview will be via a pseudonym and your name will not be included in the transcription, or any future presentations or publications.

Your school will also be assigned a pseudonym. Although demographic information may be revealed describing the profile of your school, such as amount of teaching staff or amount of time your school has been a member of the SunSmart Program, your school’s name and exact location will never be revealed.

Is it compulsory for me or my school to participate in the research?

Involvement in this research activity is voluntary, which means you are free to withdraw consent for your personal contribution or your school’s contribution at any time.

What if I need to ask questions about the research or have a complaint?

More information about this research is available from the researchers listed at the beginning of this letter. If you have any complaints or concerns about this research, please
do not hesitate to contact the Human Research Ethics Committee (HREC) on the contact
details below.

**What next?**

If you would like to participate in this research, you must read and sign the attached
Consent Form by **(DATE DUE)**, so it is ready for the researchers to collect and the study can
commence.

Charles Sturt University’s Human Research Ethics Committee has approved this study.
I understand that if I have any complaints or concerns about this research I can contact:

The Executive Officer
Human Research Ethics Committee
Office of Academic Governance
Charles Sturt University
Panorama Avenue
Bathurst NSW 2795

Tel: (02) 6338 4628
Email: ethics@csu.edu.au
Information Statement for Younger Students

What is a SunSmart school?

| PhD Candidate – Mr Brad Wright | bwright@csu.edu.au |
| Lead Supervisor – Dr Mathew Winslade | mwinslade@csu.edu.au |
| Co-Supervisor – Dr Deb Clarke | dclarke@csu.edu.au |

What is this letter?

This is an Information Statement provided to you by Charles Sturt University outlining a research study that is taking place at your child’s school. Parents/guardians, teachers and students from all ages are being invited to attend. As a parent/guardian, you should have received an invitation to this study. If you have not received your invitation, please contact your child’s school as soon as possible to arrange one to be delivered to you.

The information provided to you in this letter is designed to assist your explanation of the study to your child. Also, this letter aims to inform both yours and your child’s decision of whether they want to participate and whether you want to allow them to participate or not.

What is this study?

This study is designed to explore the concept of a SunSmart school. The SunSmart Program is managed by Cancer Council NSW and encourages a community approach to sun safety, which involves cooperation between students, teachers and parents/guardians. As there is no previous research detailing the concept of a SunSmart school from the perspective of the school community, this research aims to investigate what the school community thinks of their SunSmart school.

Why am I receiving this letter?

Your child’s understanding of their school and the sun protection measures it provides and enforces is vital to this study. Your child’s contribution could make a difference in the future of sun safety education in New South Wales by helping us determine the advantages and disadvantages of the SunSmart Program.

What is your child being asked to do?

This research invites them to participate in a 30 minute focus group interview (with other students their age) to discuss their understandings of what it means to be a SunSmart school. The group interview will take place on school grounds during school hours, with a teacher or trusted adult present.

Will your child be identified in the research?

The focus group interview will be audio taped so the researcher can refer to the interview for analysis and inspection. The transcribed recording will be analysed only by the researchers. Your child will not be identified by name in any of these publications. The researcher will assign your child a pseudonym. A pseudonym is a fake name so that their real name is never revealed.
Depending on the time and area selected for the interview, your child may not be anonymous to others as they may know that your child is being interviewed. However, as previously stated, your child’s name will not be used in any publications resulting from the interviews. Although teachers, parents or students from your child’s school may know your child is being interviewed, they will not be aware of your child’s responses to the interview questions.

Prior to participating in the focus group interviews, participants will discuss confidentiality. We encourage you to discuss this with your child to reduce the likelihood of them repeating information stated by other students in the focus group interview.

**Is it compulsory for my child to participate in the research?**

Involvement in this research activity is voluntary, which means your child is free to withdraw consent at any time. Whether you allow them to participate in the interview or not, or whether they choose to participate in the interview or not, will in no way affect any aspects of your child’s grades or your relationship with the school.

**What if I need to ask questions about the research or have a complaint?**

More information about this research is available from the researchers listed at the beginning of this letter. If you have any complaints or concerns about this research, please do not hesitate to contact the Human Research Ethics Committee (HREC) on the contact details below.

**What next?**

If your child would like to participate in this research, and you allow them to participate in this research, you must read and sign the attached Consent Form and return it to your child’s school by (DATE DUE).

Charles Sturt University’s Human Research Ethics Committee has approved this study.
I understand that if I have any complaints or concerns about this research I can contact:

The Executive Officer  
Human Research Ethics Committee  
Office of Academic Governance  
Charles Sturt University  
Panorama Avenue  
Bathurst NSW 2795  
Tel: (02) 6338 4628  
Email: ethics@csu.edu.au
Information Statement for Older Students

What is a SunSmart school?

<table>
<thead>
<tr>
<th>PhD Candidate – Mr Brad Wright</th>
<th><a href="mailto:bwright@csu.edu.au">bwright@csu.edu.au</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Supervisor – Dr Mathew Winslade</td>
<td><a href="mailto:mwinslade@csu.edu.au">mwinslade@csu.edu.au</a></td>
</tr>
<tr>
<td>Co-Supervisor – Dr Deb Clarke</td>
<td><a href="mailto:dclarke@csu.edu.au">dclarke@csu.edu.au</a></td>
</tr>
</tbody>
</table>

You have been chosen to take place in a research study. This letter is designed to help you decide whether you want to be in the research or not. If you don’t understand anything in this letter, your parent/guardian or teacher may be able to help you. You can also ask any of the researchers listed at the top of this page.

What is this study?

This study is designed to try to understand how and why your school is SunSmart.

A group named Cancer Council NSW has given your principal a Program (called the SunSmart Program). The SunSmart Program helps your school become more sun safe to protect you from the sun. We want to find out what the people at your school feel about the SunSmart Program.

Why am I receiving this letter?

How you feel about what your school does for sun protection is very important to us. It will help us understand your school better, which we could use to help your school and other schools.

What am I being asked to do?

You are invited to participate in a 30 minute focus group interview (with other students your age) to talk about what you know or don’t know about SunSmart. The group interview will take place during school time and on school grounds. A person from Charles Sturt University will ask you questions about SunSmart and a teacher or adult will also be in the room.

The focus group interview will be taped so we can refer to it later for better inspection. The results of this study may be published in book or article for other people to read.

Will people find out who I am?

The taping of the focus group interview will only be heard by the researchers. Although the things that you say may be included in publications, no one will find out who you are. You will not be identified by name in any of the books or articles that may be published. The researcher will assign your interview responses under a pseudonym. A pseudonym is a fake name so that your real name is never revealed.

Other people at your school may know you are being interviewed, but will not hear what you say. The only people that will hear you will be the researcher, the adult in the room and the other students who are in the interview. Before the interview begins, everyone will be
asked to sign a group agreement to maintain confidentiality. This includes the researcher and the teacher or adult who is also present.

**Do I have to do this?**

Involvement in this research activity is voluntary, which means you do not have to do it and can quit at any time. Whether you choose to participate in the interview or not, will in no way affect any aspects of your school life.

**What if I need to ask questions about the research or have a complaint?**

More information about this research is available from the researchers listed at the beginning of this letter. If you have any complaints or concerns about this research, please do not hesitate to contact the Human Research Ethics Committee (HREC) on the contact details below.

**What next?**

If you would like to participate in this study, read and sign the Consent Form attached to this Information Statement. Your parent/guardian also has to read this Information Statement and sign the Consent Form to allow you to participate. You must then return the Consent Form (signed by you AND your parent/guardian) to your school by (DATE DUE).

Charles Sturt University’s Human Research Ethics Committee has approved this study.

I understand that if I have any complaints or concerns about this research I can contact:

The Executive Officer  
Human Research Ethics Committee  
Office of Academic Governance  
Charles Sturt University  
Panorama Avenue  
Bathurst NSW 2795

Tel: (02) 6338 4628  
Email: ethics@csu.edu.au
Information Statement for Community Members

What is a SunSmart school?

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</tbody>
</table>

What is this study?

This study is designed to explore the concept of a SunSmart school. The SunSmart Program is managed by Cancer Council NSW and encourages a community approach to sun safety, which involves cooperation between students, teachers and parents/guardians. As there is no previous research detailing the concept of a SunSmart school from the perspective of the school community, this research aims to investigate what the school community thinks of their SunSmart school.

Why am I receiving this letter?

As a parent/guardian, your understanding of your child’s SunSmart school and the sun protection measures it provides is vital to this study. Your contribution could make a difference in the future of sun safety education in New South Wales by helping us determine the advantages and disadvantages of the SunSmart Program.

What am I being asked to do?

This research invites you to participate in a 30 minute focus group interview (with other parents) to discuss your understandings of what it means to be a SunSmart school. The group interview will take place at a time and area convenient to you and the other participants involved.

Will I be identified in the research?

The focus group interview will be audio taped so the researcher can refer to the interview for analysis and inspection. The transcribed recording will be analysed only by the researchers. The interview data collected will be reported in the researcher’s PhD thesis and publications. You will not be identified by name in any of these publications. The researcher will assign your interview responses under a pseudonym. A pseudonym is a fake name so that your real name is never revealed.

Depending on the time and area selected for the interview, you may not be anonymous to others as may know that you are being interviewed. However, as previously stated, your name will not be used in any publications resulting from the interviews. Although teachers, parents or students may know you are being interviewed, they will not be aware of your responses to the interview questions.

Prior to participating in the focus group interviews, participants will be asked to sign a

Is it compulsory for me to participate in the research?
Involvement in this research activity is voluntary, which means you are free to withdraw consent at any time. Whether you participate in the interview or not, will in no way affect any aspects of your son/daughter/ward’s grades or your relationship with the school.

**What if I need to ask questions about the research or have a complaint?**

More information about this research is available from the researchers listed at the beginning of this letter. If you have any complaints or concerns about this research, please do not hesitate to contact the Human Research Ethics Committee (HREC) on the contact details below.

---

Charles Sturt University’s Human Research Ethics Committee has approved this study.
I understand that if I have any complaints or concerns about this research I can contact:

The Executive Officer  
Human Research Ethics Committee  
Office of Academic Governance  
Charles Sturt University  
Panorama Avenue  
Bathurst NSW 2795

Tel: (02) 6338 4628  
Email: ethics@csu.edu.au
Information Statement for Teachers

What is a SunSmart school?

<table>
<thead>
<tr>
<th>PhD Candidate – Mr Brad Wright</th>
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What is this study?

This study is designed to explore the concept of a SunSmart school. The SunSmart Program is managed by Cancer Council NSW and encourages a community approach to sun safety, which involves cooperation between students, teachers and parents/guardians. As there is no previous research detailing the concept of a SunSmart school from the perspective of the school community, this research aims to investigate what the school community thinks of their SunSmart school.

Why am I receiving this letter?

As a teacher, your understanding of your schools SunSmart status and the sun protection measures it provides and enforces is vital to this study. Your contribution could make a difference in the future of sun safety education in New South Wales by helping us determine the advantages and disadvantages of the SunSmart Program.

What am I being asked to do?

This research invites you to participate in a 30 minute individual interview to discuss your understandings of the SunSmart school concept. The interview will take place at a time and place convenient to you and may be conducted via telephone for convenience purposes.

Will I be identified in the research?

The interview will be audio taped so the researcher can refer to the interview for analysis and inspection. The transcribed recording will be analysed only by the researchers. The interview data collected will be reported in the researcher’s PhD thesis and publications. You will not be identified by name in any of these publications. The researcher will assign your interview responses under a pseudonym. A pseudonym is a fake name so that your real name is never revealed.

Whilst others may know that you are participating in an interview, no one, other than the researcher, will be aware of the responses you provide. All reference to you following the interview will be via a pseudonym and your name will not be included in the transcription, or any future presentations or publications.

Is it compulsory for me to participate in the research?

Involvement in this research activity is voluntary, which means you are free to withdraw consent at any time. Whether you participate in the interview or not, will in no way affect your relationship with the school.
What if I need to ask questions about the research or have a complaint?

More information about this research is available from the researchers listed at the beginning of this letter. If you have any complaints or concerns about this research, please do not hesitate to contact the Human Research Ethics Committee (HREC) on the contact details below.

What next?

If you would like to participate in this research, you must read and sign the attached Consent Form and return it to your school by (DATE DUE).

Charles Sturt University’s Human Research Ethics Committee has approved this study. I understand that if I have any complaints or concerns about this research I can contact:

- The Executive Officer
- Human Research Ethics Committee
- Office of Academic Governance
- Charles Sturt University
- Panorama Avenue
- Bathurst NSW 2795

Tel: (02) 6338 4628
Email: ethics@csu.edu.au
Appendix 2: Participant consent forms

Consent Form for School Principals

What is a SunSmart school?

<table>
<thead>
<tr>
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<td><a href="mailto:dclarke@csu.edu.au">dclarke@csu.edu.au</a></td>
</tr>
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</table>

1. I ........................................................................... consent to the “What is a SunSmart School?” study taking place in my school, ................................................., over the indicated time frame.

2. I understand that this study requires a copy of my school’s sun protection policy and sun safety teaching program.

3. I ........................................................................... consent to participation in an individual interview as part of the “What is a SunSmart school?” study.

4. I understand the interview will be audio-recorded.

5. I understand that I am free to withdraw my personal contribution or my school’s contribution from the research at any time and that if I do, I will not be subjected to any penalty or discriminatory treatment.

6. The purpose of the research has been explained to me, including the potential risks, and I have read and understood the written Information Statement given to me.

7. I understand that any information or personal details gathered in the course of research are confidential and that neither my name nor any other identifying information will be used or published without my written permission.

8. I understand that my school’s information and all participants’ information will be de-identified in the transcription process and that no findings will be identifiable or reported in an identifiable manner.

Signature........................................................................................................

Date...........................................................................................................

Charles Sturt University’s Human Research Ethics Committee has approved this study. I understand that if I have any complaints or concerns about this research I can contact:

The Executive Officer
Human Research Ethics Committee
Office of Academic Governance
Charles Sturt University
Panorama Avenue
Bathurst NSW 2795

Tel: (02) 6338 4628
Email: ethics@csu.edu.au

270
Consent Form for Students (and Parents)

What is a SunSmart school?

<table>
<thead>
<tr>
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<td>Co-Supervisor – Dr Deb Clarke</td>
<td><a href="mailto:dclarke@csu.edu.au">dclarke@csu.edu.au</a></td>
</tr>
</tbody>
</table>

1. I ........................................................................... consent to participation in a focus group interview as part of the “What is a SunSmart school?” study.

2. I understand that I am free to withdraw from the research at any time and that if I do, I will not be subjected to any penalty or discriminatory treatment.

3. The purpose of the research has been explained to me, including the potential risks, and I have read and understood the written Information Statement given to me.

4. I understand the interview will be audio-recorded.

5. I understand that any information or personal details gathered in the course of research are confidential and that neither my name nor any other identifying information will be used or published without my written permission.

6. I understand that my information will be de-identified in the transcription process and that no findings will be identifiable or reported in an identifiable manner.

7. I .........................................................., parent/guardian of this child, have read the attached Information Statement and understand my child’s rights as a participant. I consent to their participation in a focus group interview as part of the “What is a SunSmart school?” study.

Student signature..............................................................................................

Parent/guardian signature..............................................................................................

Date..............................................................

Charles Sturt University’s Human Research Ethics Committee has approved this study.

I understand that if I have any complaints or concerns about this research I can contact:

The Executive Officer
Human Research Ethics Committee
Office of Academic Governance
Charles Sturt University
Panorama Avenue
Bathurst NSW 2795

Tel: (02) 6338 4628
Email: ethics@csu.edu.au
Consent Form for Community Members

What is a SunSmart school?

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1. I ...................................................................... consent to participation in a focus group interview as part of the “What is a SunSmart school?” study.

2. I understand that I am free to withdraw from the research at any time and that if I do, I will not be subjected to any penalty or discriminatory treatment.

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6. I understand that my information will be de-identified in the transcription process and that no findings will be identifiable or reported in an identifiable manner.

Signature..............................................................................................

Date.............................

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Office of Academic Governance
Charles Sturt University
Panorama Avenue
Bathurst NSW 2795

Tel: (02) 6338 4628
Email: ethics@csu.edu.au
Consent Form for School Staff

What is a SunSmart school?

PhD Candidate – Mr Brad Wright  bwright@csu.edu.au
Lead Supervisor – Dr Mathew Winslade  mwinslade@csu.edu.au
Co-Supervisor – Dr Deb Clarke  dclarke@csu.edu.au

1. I ........................................................................... consent to participation in an individual interview as part of the “What is a SunSmart school?” study.

2. I understand the interview will be audio-recorded.

3. I understand that I am free to withdraw my personal contribution from the research at any time and that if I do, I will not be subjected to any penalty or discriminatory treatment.

4. The purpose of the research has been explained to me, including the potential risks, and I have read and understood the written Information Statement given to me.

5. I understand that any information or personal details gathered in the course of research are confidential and that neither my name nor any other identifying information will be used or published without my written permission.

6. I understand that all personal information will be de-identified in the transcription process and that no findings will be identifiable or reported in an identifiable manner.

Signature...........................................................................................................

Date....................................................................................................................

Charles Sturt University’s Human Research Ethics Committee has approved this study.

I understand that if I have any complaints or concerns about this research I can contact:

    The Executive Officer
    Human Research Ethics Committee
    Office of Academic Governance
    Charles Sturt University
    Panorama Avenue
    Bathurst NSW 2795

    Tel: (02) 6338 4628
    Email: ethics@csu.edu.au
### Appendix 3: The interview schedule for participants

<table>
<thead>
<tr>
<th>Principal</th>
<th>Teachers</th>
<th>Community Members</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In your own words, describe what you understand by the term “SunSmart.”</strong></td>
<td><strong>In your own words, describe what you understand by the term “SunSmart.”</strong></td>
<td><strong>Have you heard of the term “SunSmart” before?</strong></td>
<td><strong>Is your school a SunSmart school?</strong></td>
</tr>
<tr>
<td>Can you explain your understanding of what it means to obtain a SunSmart membership?</td>
<td>Can you explain your understanding of what it means to obtain a SunSmart membership?</td>
<td>What is your understanding of “SunSmart”?</td>
<td>In your own words can you tell me what it means to be a SunSmart school?</td>
</tr>
<tr>
<td>Does your school have a SunSmart policy? If so, what does it involve?</td>
<td>Would you say that your school is SunSmart?</td>
<td>Do you believe your child’s school is SunSmart? Why/why not?</td>
<td>What sort of things makes a school SunSmart?</td>
</tr>
<tr>
<td>How did your school become SunSmart – Do you know the process involved to become a SunSmart school?</td>
<td>Does your school have a SunSmart policy? If so, what does it involve?</td>
<td>Has your child ever talked to you about SunSmart before?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How did your school become SunSmart – Do you know the process involved to become a SunSmart school?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Where can students or staff go for shade coverage at school?</strong></td>
<td><strong>Where can students or staff go for shade coverage at school?</strong></td>
<td><strong>Are you aware of how much shade is available for your child at school?</strong></td>
<td><strong>Do you wear a hat at recess and lunch time?</strong></td>
</tr>
<tr>
<td>If a student forgets to bring a hat to school – what are consequences, if any?</td>
<td>If a student forgets to bring a hat to school – what are consequences, if any?</td>
<td><strong>Does your child wear a hat at school?</strong></td>
<td>Does anyone else say or do anything to make you want to wear your hat?</td>
</tr>
<tr>
<td>Do students apply sunscreen at school?</td>
<td>Do students apply sunscreen at school?</td>
<td><strong>Do you know what happens to your child if they don’t wear a hat?</strong></td>
<td>Do your teachers wear hats when they are in the playground with you?</td>
</tr>
<tr>
<td>Do you role model SunSmart practices? If so, how? If not, why not?</td>
<td>Do you role model SunSmart practices? If so, how? If not, why not?</td>
<td><strong>Does your child ever wear sunscreen to school?</strong></td>
<td>Have you ever talked about sun protection?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Question</td>
<td>Question</td>
<td>Question</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Do you think role modelling for students is important to the success of a sun safe program for children?</td>
<td>Do you think role modelling for students is important to the success of a sun safe program for children?</td>
<td>Have you ever talked to your child’s teacher or to your child about what they learn in the classroom in regards to sun protection and sun safe behaviours?</td>
<td>Have you ever talked to your child’s teacher or to your child about what they learn in the classroom in regards to sun protection and sun safe behaviours?</td>
</tr>
<tr>
<td>Do you or your teachers educate students about sun protection during your lessons?</td>
<td>Do you educate students about sun protection during your lessons? If so, can you elaborate? If not, can you explain why not?</td>
<td>Do you know of any role models at your child’s school for sun safety?</td>
<td>Do you know of any role models at your child’s school for sun safety?</td>
</tr>
</tbody>
</table>
| Can you outline the SunSmart procedures of your school? | Do you think sun protection education should hold a place within the school curriculum? | Do you know what your child does at school to actually be “SunSmart”? | How did the school become SunSmart?
Is there a relationship between the school and the community, specifically parents? Is SunSmart addressed in this relationship? Why/how? Why not? |
<p>| How did the school become SunSmart? | How did the school become SunSmart? | How did the school become SunSmart? | How did the school become SunSmart? |
| Was there a driving force behind the decision to become a SunSmart school? | Was there a driving force behind the decision to become a SunSmart school? | Does your child’s school communicate with the community regarding their SunSmart Program? | Does your child’s school communicate with the community regarding their SunSmart Program? |
| Who developed it the school’s SunSmart policy? | Who developed it the school’s SunSmart policy? | Can you describe what the role of a parent is to ensure their child engages in SunSmart procedures? | Can you describe what the role of a parent is to ensure their child engages in SunSmart procedures? |
| Do you like wearing your hat? Why/why not? | What happens if you forget your hat – Are there any rules? | If you use it (sunscreen), when do you put it on? Does anyone remind you? Who? | If you use it (sunscreen), when do you put it on? Does anyone remind you? Who? |
| How did the school become SunSmart? | How did the school become SunSmart? | How did the school become SunSmart? | How did the school become SunSmart? |
| Is sun protection important to you? | How did the school become SunSmart? | Does your child’s school communicate with the community regarding their SunSmart Program? | Does your child’s school communicate with the community regarding their SunSmart Program? |
| What happens if you forget your hat – Are there any rules? | If you use it (sunscreen), when do you put it on? Does anyone remind you? Who? | Do you ever talk to your parents about sun safety? | Do you ever talk to your parents about sun safety? |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Question</th>
<th>Question</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do your parents ever talk to you about sun safety?</td>
<td>Are there any benefits of being a SunSmart school?</td>
<td>Are there any benefits to being a SunSmart school?</td>
<td>If you were to tell a student from another school about the good things your school does to protect you from the sun what would you say?</td>
</tr>
<tr>
<td>Are there any benefits of being a SunSmart school?</td>
<td>If so, can you provide examples?</td>
<td>If so, could you outline some?</td>
<td>If you were to tell a student from another school what are the difficult things about going to a SunSmart school what would you say?</td>
</tr>
<tr>
<td>Are there any challenges being a SunSmart school?</td>
<td>Are there any challenges being a SunSmart school?</td>
<td>Are there any challenges to being a SunSmart school?</td>
<td>If you were to tell a student from another school what are the difficult things about going to a SunSmart school what would you say?</td>
</tr>
<tr>
<td>If so, can you provide examples?</td>
<td>If so, could you outline some?</td>
<td>If so, could you outline some?</td>
<td>If you were to tell a student from another school what are the difficult things about going to a SunSmart school what would you say?</td>
</tr>
<tr>
<td>Have any teachers been provided the opportunity to receive any type of training or support to help them develop or implement the SunSmart policy?</td>
<td>Have you personally received any type of training or support to help implement the SunSmart policy?</td>
<td>Is there anything you can think of that may help further support the SunSmart Program at your school?</td>
<td>Do you think your school could do more to protect you from the sun? If so, what?</td>
</tr>
<tr>
<td>Do you think your school could do more to protect you from the sun? If so, what?</td>
<td>Is there anything you can think of that may help further support the SunSmart Program at your school?</td>
<td>Is there anything you can think of that may help further support the SunSmart Program at your school?</td>
<td>Do you think your school could do more to protect you from the sun? If so, what?</td>
</tr>
</tbody>
</table>
Appendix 4: Key words and phrases used for the artefact content analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Key words/phrases</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling outdoor activities</td>
<td>Schedul*</td>
<td>CCNSW (2015)</td>
</tr>
<tr>
<td></td>
<td>Outdoor</td>
<td>CCNSW (2015)</td>
</tr>
<tr>
<td></td>
<td>Outside</td>
<td>Jones et al. (2008)</td>
</tr>
<tr>
<td>Shade</td>
<td>Shade</td>
<td>CCNSW (2015)</td>
</tr>
<tr>
<td>Hat</td>
<td>Hat</td>
<td>CCNSW (2015)</td>
</tr>
<tr>
<td></td>
<td>Legionnaire</td>
<td>CCNSW (2015)</td>
</tr>
<tr>
<td></td>
<td>Bucket</td>
<td>CCNSW (2015)</td>
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<tr>
<td></td>
<td>Cap</td>
<td>CCNSW (2015)</td>
</tr>
<tr>
<td></td>
<td>Broad</td>
<td>CCNSW (2015)</td>
</tr>
<tr>
<td></td>
<td>“No Hat”</td>
<td>Turner et al. (2014a)</td>
</tr>
<tr>
<td>Clothing</td>
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<td>Term</td>
<td>Jones et al. (2008)</td>
</tr>
</tbody>
</table>
Appendix 5: The GSPS sun protection policy

SUNSMART STRATEGIES FOR SKIN PROTECTION

“NO HAT – PLAY IN THE SHADE”

Students will:

1. Wear hats in order to protect their face, neck and ears whenever they are outside.
2. Sit in the shade if they do not have a hat at school.
3. Be encouraged to use available areas of shade for outdoor play activities.
4. Be encouraged to use sunscreen.

Staff will:

1. Schedule outdoor activities at suitable times, taking into account the season and weather conditions.
2. Wear protective hats and appropriate clothing for outdoor activities.
3. Encourage students to apply 30+ sunscreen before taking part in outdoor activities.

The school will:

1. Ensure school uniform hats are appropriate and comply with Cancer Council guidelines.
2. Ensure adequate shade is provided at sports carnivals and outdoor events.
3. Provide sheltered areas and trees in play areas.
4. Limit exposure times whenever possible.
5. Incorporate sun safe programs into the curriculum. (Safe Living strand, PD/Health/PE Syllabus).
6. Reinforce Sunsmart strategies through newsletters, parent meetings and other school activities.

Parents will:

1. Be informed of the SunSmart procedures.
2. Ensure that their children have appropriate headwear for school.
3. Encourage their children to use 30+ sunscreen
4. Act as positive role models and practise skin-protection behaviour themselves.
Appendix 6: The HGPS sun protection policy

Rationale:

Ultraviolet (UV) radiation from the sun can cause sunburn, skin damage, eye damage, and skin cancer. Australia has the highest incidence of skin cancer in the world, with two in three Australians developing some form of skin cancer during their lifetime. Overexposure to the sun during childhood and adolescence is known to be a major cause of skin cancer.

The Goals of the Sun Protection Plan are to:

- Increase student and community awareness about skin cancer and sun protection.
- Encourage the entire school community to use a combination of sun protection measures whenever UV Index levels are 3 and above.
- Work towards a safe school environment that provides shade for students, staff and the school community.
- Assist students to be responsible for their own sun protection.

Our sun protection plan is:

The sun protection plan should be implemented all year and a combination of sun protection measures used when the UV Index levels are 3 and above. Particular care is needed from the beginning of August until the end of May during the peak UV times of 10am to 2pm (11am to 3pm daylight saving time) including:

1. Scheduling outdoor activities

- Where possible, we will schedule outdoor activities (e.g. assemblies, sport and physical education lessons) outside peak UV times of 10am – 2pm (11am – 3pm daylight saving time) and plan activities to take place in the shade or indoor areas.
- We will consider sun protection when planning all outdoor events e.g. assemblies, camps, excursions, and sporting events. Where possible, we have outdoor activities or events earlier in the morning or later in the afternoon, or we try to using indoor venues.

2. Shade

- The school community is committed to providing shade in the school grounds particularly in areas where students congregate e.g. canteen, outdoor lesson areas, and popular play areas.
- We will consult with the school community about future plans for shade.
- The availability of shade is considered when planning excursions and all other outdoor activities.
- Students are encouraged to use available areas of shade when outside.
- Students who do not have sun safe hats are asked to play in the shade or a suitable area protected from the sun.
3. Hats
   - Students are encouraged to wear school hats that protect their face, neck and ears.

4. Clothing
   - Sun safe clothing is included in our school uniform and sports uniform. This will include shirts with collars (or covered necklines) and sleeves, longer style dresses and shorts, rash vests or t-shirts for outdoor swimming.

5. Sunscreen
   - SPF 30+ broad-spectrum water-resistant sunscreen is available for staff and students’ use. Where possible, sunscreen is applied at least 20 minutes before going outside and reapplied every two hours.
   - Where possible, staff will remind children to apply sunscreen before arriving at school, before recess, lunch and going outside.
   - On extended outdoor events students will be encouraged to apply sunscreen every 2 hours.

6. Role modelling of staff
   Staff will be requested to role model good sun protection behaviours by:
   - Wearing sun safe hats, clothing and sunglasses when outside.
   - Applying SPF 30+ broad-spectrum water-resistant sunscreen.
   - Seeking shade whenever possible.

7. Curriculum
   - Teachers will be encouraged to include sun protection principles in teaching programs across all year levels.

8. Information to the school community
   - Sun protection information is regularly promoted to the whole school community through school newsletters, school homepage, parent meetings, staff meetings, school assemblies and on school enrolment.
   - Families and visitors are encouraged to use a combination of sun protection measures (sun safe clothing and hats, sunscreen and sunglasses) when participating in and attending outdoor activities.

9. Sunglasses (optional)
   - Consideration will be given to staff and students wearing close fitting, wrap around sunglasses that cover as much of the eye as possible and meet the Australian Standard 1067 (Sunglasses: Category 2, 3 or 4).

10. Review
    - School parent body, staff and students will regularly monitor and review the effectiveness of the sun protection plan at least once every three years.
### Appendix 7: A comparison of the two case studies

<table>
<thead>
<tr>
<th>Feature</th>
<th>HGPS</th>
<th>GSPS</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics</strong></td>
<td>Located in Blacktown area, Culturally and ethnically diverse community, Comparatively high Indian and Sri Lankan population, Average median income</td>
<td>Located in the Blue Mountains area, Culturally and ethnically homogenous community, Comparatively high English, New Zealand and Scottish population, Low median income</td>
<td>Sun safety education provided to younger students</td>
</tr>
<tr>
<td><strong>Curriculum, teaching and learning</strong></td>
<td>Sun safety education perceived as an important feature of SunSmart Program, Occurred infrequently, reported due to crowded curriculum, Low health literacy among all stakeholders and limited opportunities to develop health literacy</td>
<td>Sun safety education provided to older students</td>
<td></td>
</tr>
<tr>
<td><strong>Similarities</strong></td>
<td>Situated within the GWS region, Relatively small school communities when compared to others within their region, A high annual UV Index</td>
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</table>

- **HGPS**: High Plains Grammar School
- **GSPS**: Great Southern Primary School
<table>
<thead>
<tr>
<th>Feature</th>
<th>Similarities</th>
<th>Differences</th>
<th>GSPS</th>
<th>HGPS</th>
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</thead>
</table>
| School ethos | The enactment of policy did not align with policy documentation  
No stakeholders familiar with policy documentation,  
Stakeholders unfamiliar with features of sun protection policy other than hat-wearing guidelines,  
SunSmart was strongly associated with students’ hat-wearing guidelines; students required to wear a hat, otherwise relocate to a shaded area,  
Hat-wearing policy was a strong motivator for students’ and staff members’ behaviour in the school setting  
Sunscreen and hats caused discomfort among students,  
Peer pressure was a strong motivation for behaviour,  
No explicit indication of sun protection clothing in uniform policy | Sun protection policy addressed 8/10 areas of the SunSmart Program,  
Students required to wear any hat for policy compliance,  
Establishment lenient hat-wearing procedures for students to encourage physical activity  
Additional consideration of sun protection triggered by temperature and extended periods of sun exposure | Sun protection policy addressed 10/10 areas of the SunSmart Program,  
Students required to wear broad-brimmed hat,  
Staff strongly enforced students’ hat-wearing procedures  
Motivated by high incidence of skin cancer among community
<table>
<thead>
<tr>
<th>Feature</th>
<th>Similarities</th>
<th>Differences</th>
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<tr>
<td>Partnerships and services</td>
<td>School websites reported each school had a strong relationship with their respective broader community, Sun protection information was most commonly communicated between the school and parents via students, Community members debated their role within the SunSmart Program, Policy documentation reportedly integrated parents and community, NSWDE influenced schools’ initial SunSmart membership, Staff did not perceive SunSmart membership as a valuable asset for promoting the school</td>
<td>Single reminder for sun protection in sample of newsletters, Misunderstandings of vitamin D among parents constrained sun protection behaviour, Promotion of sun protection education, behaviour and community services in newsletter, Experiences of sunburn/skin cancer among community motivated their pro-sun protection culture</td>
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</table>