

This article is downloaded from



<http://researchoutput.csu.edu.au>

**It is the paper published as:**

**Author:** L. J. Aldridge and M. Rabiul Islam

**Title:** Cultural differences in athlete attributions for success and failure: The sports pages revisited.

**Journal:** International Journal of Psychology      **ISSN:** 0020-7594

**Year:** 2012                      **Volume:** 47                      **Issue:** 1                      **Pages:** 67-75

**Abstract:** Self-serving biases in attribution, while found with relative consistency in research with Western samples, have rarely been found in Japanese samples typically recruited for research. However, research conducted with Japanese participants to date has tended to use forced choice and/or reactive paradigms, with school or university students, focusing mainly on academic performance or arbitrary and/or researcher-selected tasks. This archival study explored whether self-serving attributional biases would be shown in the real-life attributions for sporting performance made by elite Olympic athletes from Japan and Australia. Attributions (N = 216) were extracted from the sports pages of Japanese and Australian newspapers and rated by Australian judges for locus and controllability. It was hypothesised that Australian, but not Japanese, athletes would show self-serving biases such that they attributed wins to causes more internal and controllable than the causes to which they attributed losses. Contrary to predictions, self-serving biases were shown to at least some extent by athletes of both nationalities. Both Australian and Japanese men attributed wins to causes more internal than those to which they attributed losses. Women, however, attributed wins and losses to causes that did not differ significantly in terms of locus. All athletes tended to attribute wins to causes that were more controllable than the causes to which losses were attributed. Results are inconsistent with a large body of research suggesting that Japanese do not show self-serving biases in attribution, and are discussed in the light of differences in methodology, context and participants that may have contributed to these effects.

URLs: [http://researchoutput.csu.edu.au/R/-?func=dbin-jump-full&object\\_id=34961&local\\_base=GEN01-CSU01](http://researchoutput.csu.edu.au/R/-?func=dbin-jump-full&object_id=34961&local_base=GEN01-CSU01)  
<http://dx.doi.org/10.1080/00207594.2011.585160>

**Author Address:** rislam@csu.edu.au

**CRO Number:** 34961

Running Head: ATHLETE ATTRIBUTIONS FOR SUCCESS AND FAILURE

**Cultural Differences in Athlete Attributions for Success and Failure:  
The Sports Pages Revisited**

**Authors:** Lynley J Aldridge, Mir Rabiul Islam

**Affiliation:**

School of Psychology, Charles Sturt University, Bathurst, NSW, Australia

Correspondence concerning this article should be addressed to:

*Mir Rabiul Islam, School of Psychology, Charles Sturt University, Bathurst  
NSW 2795 Australia.*

*Email: [rislam@csu.edu.au](mailto:rislam@csu.edu.au).*

*Phone/Fax: +61 2 63384567*

### Abstract

Self-serving biases in attribution, while found with relative consistency in research with Western samples, have rarely been found in Japanese samples typically recruited for research. However, research conducted with Japanese participants to date has tended to use forced choice and/or reactive paradigms, with school or university students, focusing mainly on academic performance or arbitrary and/or researcher-selected tasks. This archival study explored whether self-serving attributional biases would be shown in the real-life attributions for sporting performance made by elite Olympic athletes from Japan and Australia. Attributions ( $N = 216$ ) were extracted from the sports pages of Japanese and Australian newspapers and rated by Australian judges for locus and controllability. It was hypothesised that Australian, but not Japanese, athletes would show self-serving biases such that they attributed wins to causes more internal and controllable than the causes to which they attributed losses. Contrary to predictions, self-serving biases were shown to at least some extent by athletes of both nationalities. Both Australian and Japanese men attributed wins to causes more internal than those to which they attributed losses. Women, however, attributed wins and losses to causes that did not differ significantly in

terms of locus. All athletes tended to attribute wins to causes that were more controllable than the causes to which losses were attributed. Results are inconsistent with a large body of research suggesting that Japanese do not show self-serving biases in attribution, and are discussed in the light of differences in methodology, context and participants that may have contributed to these effects.

**Keywords: Cultural Differences, Sport, Social Cognition, Causal Attribution, Gender/Sex Roles**

### Acknowledgements

This article is based on the first author's honours dissertation. We acknowledge with gratitude helpful feedback received on an earlier draft of this paper by David Matsumoto and anonymous reviewers.

### Cultural Differences in Athlete Attributions for Success and Failure:

#### The Sports Pages Revisited

According to recent research, the causes to which people attribute their successes and failures may differ with their cultural background. More specifically, it has been suggested that differences in the way the self is construed across cultures can be related to cultural differences in the tendency to self-enhance (Markus & Kitayama, 1991). The tendency to maintain self-esteem through self-serving biases (i.e., attribute successes more internally than failures; Zuckerman, 1979) would be more frequent among Euro-American (i.e., “Western”) cultures, where the self is construed more independently. In East Asian societies influenced by a shared Confucian heritage, interdependent self-construals are said to be more common. In such societies there appears to be a tendency to focus self-critically on one’s own weaknesses, so as to better maintain and affirm relationships and fulfil role obligations.

Consistent with this suggestion, a review by Kitayama, Takagi and Matsumoto (1995) of 23 studies conducted with Japanese participants, and a recent meta-analysis (Mezulis, Abramson, Hyde, & Hankin, 2004), found virtually no evidence of self-serving biases in Japanese samples. In laboratory

studies (e.g., solving anagrams) conducted mostly with university students, Japanese tend to attribute failures to internal factors (e.g., ability and effort), whereas successes are attributed to factors which are external (e.g., task difficulty, luck, or the situation), or internal but relatively unstable (e.g., mental or physical “shape” of the day). Failures in naturalistic studies (e.g., academic achievement) tend to be attributed, as much as successes, to internal causes such as ability and (particularly) effort (e.g., Miyamoto, 1985; Yamauchi, 1989).

Where direct comparisons have been made, research with children discussing mathematics performance (Miyamoto, 1985) and mothers discussing parenting success or failure (Bornstein et al., 1998) suggests that Japanese tend to attribute success to internal causes (typically ability) to a lesser extent, and failure to internal causes (typically effort) to a greater extent, than Westerners (usually Americans).

The case for the absence of self-serving attributions in Japanese populations, however, relies heavily on evidence from laboratory-based and/or forced choice research paradigms of arguably limited realism and generalisability. To address such criticisms, as well as for its intrinsic interest, many Western researchers interested in attributional biases have turned their focus to the sporting arena (Lau & Russell, 1980; Mullen & Riordan, 1988).

This provides a “real life” context where tasks are more realistic and involving, and performance expectancies and outcomes more meaningful. To enhance realism, there has been a growing trend away from forced-choice and reactive paradigms requiring participants to respond directly to questions using only the four elements of ability, effort, task difficulty, and luck. Researchers have instead begun to use spontaneous attributions and/or open-ended paradigms.

Theories have also been extended to incorporate multiple dimensions of causality (e.g., Weiner, 1972, 1979): *locus* (i.e., the extent to which causes are found within the person whose behaviour is being explained vs. the external environment); *stability* (i.e., the extent to which causes remain relatively constant vs. fluctuate with time); and *controllability* (i.e., the extent to which causes are under the volitional control of an actor or co-actor).

In particular, it has been suggested that situational norms in a sporting context might discourage external attributions for losses, while attributions remain self-serving in terms of their stability and controllability (Grove, Hanrahan, & McInman, 1991; Mark, Mutrie, Brooks, & Harris, 1984). Losses might be attributed to internal but temporary factors out of one’s own control, while wins are attributed to factors both stable and personally controllable.

Research in this vein has found considerable evidence of self-serving biases in the attributions of athletes from Western cultures. Winning or



successful athletes across a range of sports tend to make more internal and/or controllable attributions than losing or unsuccessful athletes (Grove et al., 1991; Lau & Russell, 1980; Mark et al., 1984; Mullen & Riordan, 1988; Roesch & Amirkhan, 1997).

Despite potential advantages in terms of realism and generalisability, however, research on cross-cultural differences in self-enhancement does not yet appear to have been extended into more realistic contexts such as the sporting arena. This study therefore sought to explore whether postulated cultural differences would emerge when the attributions for Olympic performance of Australian and Japanese athletes (as reported in the sports pages of the newspapers) were considered on the locus and controllability dimensions. Only attributions from solo athletes were included, given suggestions that attributional patterns may vary depending on whether athletes are competing in individual or team sports (Mullen & Riordan, 1988; Roesch & Amirkhan, 1997).

Researchers have identified gender differences in attributions for performance, with some studies suggesting that females tend to be less self-serving than males. There is some evidence that women and girls make more external and unstable attributions (e.g., luck) for success than men and boys and/or more internal and stable attributions (e.g., ability) for failure (Deaux & Farris, 1977; Forsyth & Schlenker, 1977; Zuckerman, 1979). Other studies have

failed to find such gender differences in attributions in sport (e.g., Grove et al., 1991; Mark et al., 1984). It was therefore considered of interest to explore whether the self-derogatory attributional patterns identified over 20 years ago in women and girls participating in laboratory research or playing social sport would generalise to elite sportswomen today.

It was hypothesised, based on the literature reviewed above, that the attributions of Australian but not Japanese athletes would show self-serving biases, with wins attributed to causes more internal and controllable than those to which losses were attributed.

An additional hypothesis considered the possibility that attributional patterns might differ by gender, such that male – but not female – athletes would attribute their wins to causes more internal and controllable than those to which losses were attributed.

## Method

### *Participants*

Participants were 114 athletes, 59 from Japan (30 male and 29 female) and 55 from Australia (35 male and 20 female), who competed in the Sydney Olympics (2000).

As shown in Table 1, attributions came from athletes competing in a variety of sports, the most popular of which were athletics (26%), swimming (15%), and Judo (10%).

---

Insert Table 1 about here

---

### *Procedure*

For the purposes of this study, an attribution was defined as (i) a direct quotation, (ii) from an Australian or Japanese competitor in an individual sport, (iii) spoken after their event, (iv) which could plausibly be seen as explaining the cause of this specific *win* (winning an initial round robin match, qualifying for subsequent rounds of competition, or winning a medal) or *loss* (losing an initial round robin match, failing to qualify for subsequent rounds, or failing to win a medal) (adapted from Zaccaro et al., 1987).

Because subjective perceptions of success and failure (as well as objective placings) are thought to influence attributions (Rejeski & Brawley, 1983), attributions made by apparently dissatisfied “winners” (i.e., those who expressed disappointment or criticism about their result or performance) were excluded from analyses. Attributions from apparently satisfied “losers” (i.e., those who expressed satisfaction or pleasure at their result or performance)

were similarly excluded. This precaution was consistent with the suggestion of Schulman, Castellon, and Seligman (1989) that event-explanation units extracted for causal analysis must be unambiguously good or bad from the individual's point of view. Overall, 17% of the total attributions extracted for screening were excluded due to ambiguity. This was considered to be particularly important because of the ways in which wins and losses were defined for the purposes of this study. For example, an athlete could 'scrape through' to the semi-final or secure a silver medal (both 'wins' by our criteria), but be disappointed with his or her performance because he or she had hoped to do better, or he or she could just miss out on a berth in the final but with a personal best time (a 'loss' by our criteria). McGraw, Mellers, and Turlock (2005) offer interesting discussion and analysis of the ways in which context and expectations might interact in determining happiness after Olympic competition, further underscoring the need for caution in this area.

A total of 216 attributions meeting the above criteria were extracted from Australian and Japanese newspapers. The first author (who reads Japanese fluently) extracted attributions from articles in four major Australian newspapers available in Sydney (The Sydney Morning Herald and its Sunday edition, The Sun-Herald, The Australian (marketed as a national newspaper), and the Sydney-based The Sunday Telegraph), and two Japanese language

newspapers available through her place of work (the Asahi Shimbun, a major Japanese language newspaper published daily in Japan, and the Nichigo Press, a Japanese language newspaper published monthly in Sydney) according to the guidelines outlined above. Attributions for the Australian athletes were extracted only from the Australian newspapers listed above, while attributions for the Japanese athletes were extracted only from the Japanese newspapers.

Some athletes offered more than one attribution for their performance, and many athletes competed in more than one event, or more than one round of competition in the same event. Multiple attributions from a single athlete were therefore permitted. Overall, an average of 1.9 attributions were extracted for each athlete.

The Japanese attributions were first translated into English by the first author. They were then translated back into Japanese by native Japanese speakers and compared with the original, to verify the accuracy of the translation. Discrepancies were resolved by discussion between author and translator, and translations refined until agreement was reached.

Two independent raters (both Australian) rated all attributions blind to the source (i.e., gender and nationality) and the research hypotheses, in terms of locus and controllability. Raters used 5-point scales adapted from Schulman et al. (1989)<sup>1</sup>. Locus ratings were elicited by the question “Is the cause something

that is external to the speaker, or is it characteristic of the speaker?" (1 = *external to the speaker*, and 5 = *characteristic of the speaker*). Controllability ratings were obtained by asking "Is the cause something that is out of the speaker's control, or is it controllable?" (1 = *uncontrollable*, and 5 = *controllable*). The level of significance was set at .05 for all statistical analyses. Interrater reliabilities were consistent with those found by Roesch and Amirkhan (1997), with Pearson correlations of  $r(214) = .77, p < .001$ , for locus and  $r(214) = .70, p < .001$ , for controllability.

As ratings for analysis were provided by Australian raters, addressing their cross-cultural reliability was thought to be an important issue. A subsample of 40 attributions were purposively selected (in equal proportions for each combination of athlete nationality, gender, and outcome, for maximal variability in the perception of causes by the Australian raters). These attributions were then rated by two bi-lingual Japanese raters using the standard instructions used by the Australian judges. As with the Australian raters, these Japanese raters were blind to the source of the attributions (i.e., gender and nationality) and the research hypotheses. Japanese interrater reliabilities resulted in Pearson correlations of  $r(38) = .76, p < .001$ , for locus and  $r(38) = .83, p < .001$ , for controllability. Interrater reliability between the Australian and Japanese raters' ratings (using average scores for each pair of raters) was

quite high, with Pearson correlations of  $r(38) = .92, p < .001$ , for locus and  $r(38) = .87, p < .001$ , for controllability.

### Results

Overall, collapsing over nationality, outcome, and gender, attributions tended to be internal ( $M = 3.58, SD = 1.51$ ), and uncontrollable ( $M = 2.80, SD = 1.30$ ). Ratings for locus and controllability were positively correlated,  $r(214) = .70, p < .001^2$ . Two 2 (nationality: Australian, Japanese)  $\times$  2 (outcome: win, loss)  $\times$  2 (gender: male, female) between-subject ANOVAs were used to explore whether attributions varied with nationality, outcome, and gender. Ratings for locus and controllability respectively served as dependent variables. Cell means for these analyses are displayed in Table 2.

---

Insert Table 2 about here

---

There was a significant main effect for nationality on the locus dimension,  $F(1, 208) = 4.78, p = .03, \eta_p^2 = .022$ , such that the attributions of the Japanese athletes ( $M = 3.83, SD = 1.37$ ) were more internal than those of their Australian counterparts ( $M = 3.33, SD = 1.60$ ). There was also a significant main effect for outcome  $F(1, 208) = 7.60, p = .006, \eta_p^2 = .035$ ,

which was qualified, however, by the significant interaction described below. Contrary to the first prediction, the interaction between nationality and outcome was not significant,  $F(1, 208) = 1.18, p = .28, \eta_p^2 = .006$ . Consistent with the second hypothesis, however, the interaction between outcome and gender was significant,  $F(1, 208) = 6.67, p = .01, \eta_p^2 = .031$ . A test of simple main effects showed that the means of locus differed significantly by outcome for men,  $F(1, 208) = 18.08, p < .001, \eta_p^2 = .13$ , but not for women,  $F(1, 208) = 0.07, p = .79, \eta_p^2 = .001$ . Men who won their events ( $M = 4.05, SD = 1.24$ ) made attributions that were significantly more internal than the attributions of men who lost their events ( $M = 2.95, SD = 1.58$ ).

There was a significant main effect for outcome on the controllability dimension,  $F(1, 208) = 36.11, p < .001, \eta_p^2 = .148$ , which was qualified, however, by the significant interaction described below. Contrary to the first prediction, the interaction between nationality and outcome was not significant,  $F(1, 208) = 0.07, p = .79, \eta_p^2 = .000$ . As described in the second hypothesis, the interaction between outcome and gender was significant,  $F(1, 208) = 4.50, p = .035, \eta_p^2 = .021$ . A test of simple main effects showed that the controllability of attributions differed by outcome for both men,  $F(1, 208) = 39.98, p < .001, \eta_p^2 = .257$ , and women,  $F(1, 208) = 6.89, p = .009, \eta_p^2 = .069$ . Men attributed wins ( $M = 3.56, SD = 1.18$ ) to causes that were more



controllable than the causes to which they attributed losses ( $M = 2.19$ ,  $SD = 1.16$ ). So did women but to a lesser extent ( $M = 3.06$ ,  $SD = 1.24$  vs.  $M = 2.40$ ,  $SD = 1.16$ ).

### Discussion

This study extended the scope of the literature on cross-cultural differences in attribution to consider cultural differences in the real life attributions of an elite group of solo athletes on both the locus and controllability dimensions. Like their Australian counterparts, and contrary to predictions, Japanese athletes attributed wins to causes that were more controllable than those offered for losses. Japanese and Australian men, furthermore, attributed wins to causes that were more internal than those they offered for losses. In these respects, the attributions of elite Australian and Japanese athletes were actually surprisingly consistent across cultures. The attributions of Japanese athletes, however, tended overall to be more internal than those of their Australian counterparts. Gender differences in attribution were also identified, such that men, but not women, attributed wins to causes more internal than the causes to which they attributed their losses. Both male and female athletes attributed their wins to causes more controllable than those

to which they attributed their losses, however this difference was larger among men than among women.

The apparent self-serving biases found in the attributions of these Japanese athletes on the controllability and (for men only) locus dimensions are difficult to reconcile with the almost total absence of self-serving attributional biases reported in previous research with Japanese participants (Bornstein et al., 1998; Kitayama et al., 1995; Mezulis et al., 2004; Miyamoto, 1985; Yamauchi, 1989).

Variations in methodology and/or context between this study and previous research might help explain the inconsistency in results. This study focused on attributions spontaneously offered for sporting performance in the naturalistic context of elite Olympic competition. Previous research has generally used forced-choice and reactive paradigms, often focusing on academic performance or researcher-selected laboratory tasks. This study used an open-ended paradigm (Rejeski & Brawley, 1983). Controllability was also considered, as opposed to traditional models focusing solely on locus of control (Mark et al., 1984; Roesch & Amirkhan, 1997). Further research employing similar methodological and contextual variations might also identify self-serving biases in Japanese samples (and perhaps particularly in Japanese men). Indeed, a recent archival study exploring attributions extracted from corporate

annual reports found that both Japanese and American companies explained positive events in terms of internal causes, showing similar tendencies towards self-enhancement in a naturalistic context (Hooghiemstra, 2008).

Participants in this study were elite athletes, and there are a number of factors that might account for the differences between their attributions and those of Japanese participants in previous research (typically students). These athletes are likely to have been particularly high on ego involvement, which has been suggested to make self-serving attributions more likely (Luginbuhl & Bell, 1989). Japanese who are attracted to elite individual sporting competition may tend to construe the self more independently and/or may develop more independent self-construals through their sporting experiences. These athletes may also have been more influenced by Western culture, through interaction with coaches and fellow athletes and experience training and/or competing overseas. It is possible that athletes competing in traditionally Eastern sports (e.g., Judo, taekwondo) may have offered different attributions for performance than athletes competing in traditionally Western sports, and future research might specifically explore this possibility.

There has been much debate as to whether self-enhancing attributional biases generally are absent or weaker in Japanese populations, or whether such tendencies are universal yet appear only in certain contexts (e.g., see Sedikides

Gaertner, & Toguchi, 2003). Results from this study are consistent with the latter suggestion. They suggest, for example, that Japanese might be more likely to show self-enhancement when offering attributions in front of strangers, or to people who they do not know very well (Hooghiemstra, 2008; Takata, 2003). Results are not altogether consistent, however, with suggestions that self-presentational concerns (i.e., perceived situational pressures to show modesty when making attributions in public) might be responsible for attenuating self-enhancement in Japanese samples (e.g., Kudo & Numazaki, 2003). This particularly did not seem to be the case for the male athletes, whose attributions appeared to be self-serving on both the locus and controllability dimensions. Research in other contexts has, however, found a tendency for women to be more modest when speaking publicly about their achievements (e.g., Beyer, 1998). Results therefore raise the possibility that such self-presentational concerns may have been more salient for female participants, and perhaps especially with respect to the locus of causes to which they attributed their performance publicly. Further investigation of gender differences in self-enhancement may therefore be warranted, in both Western and Japanese samples.

One consideration that must be taken into account when interpreting these results, however, is the nature of the data involved. As outlined above,

attributions made in such a public context are likely to be influenced by self-presentational concerns rather than true representations of the causal beliefs of athletes. A further potential confound is the way in which journalistic interviewing, selection, transcription and editing processes may favour the publication of certain types of attributions (Lau & Russell, 1980; Roesch & Amirkhan, 1997). In particular, press reports may distort actual athlete perceptions of causes, by selectively focusing on details for the purpose of creating stories that appeal to the preferences and expectations of their audience (Matsumoto, 2006). Using only direct quotations (i.e., attributions in the athlete's own words) goes some way to addressing these criticisms. However, Matsumoto (2006) also outlines the way in which such pressures might serve to accentuate the extent to which Japanese athletes appear to attribute successes to external causes. It is therefore particularly interesting and noteworthy that even in the presence of such pressures, Japanese athletes in this study showed self-serving biases similar to those of their Australian counterparts.

Furthermore, archival studies have a number of unique strengths that make them especially suited for use in this context, particularly given the criticisms of the realism and generalisability of laboratory research outlined above. Such studies uniquely allow researchers to observe attributional patterns as they occur naturally, without unduly influencing participants (Lau & Russell,

1980; Weiner, 1985). Such methods also have the advantage of being able to pick up subtle differences in the choice of phrasing that may help in more accurately identifying attributional biases (Luginbuhl & Bell, 1989). Archival research also allows access to samples and contexts that would otherwise be unavailable to researchers (Lau & Russell, 1980; Roesch & Amirkhan, 1997). These samples may be of particular interest because they represent extremes on dimensions thought to influence attributions, such as ego-involvement. Although their limitations should be acknowledged, such methods may thus complement and extend existing laboratory research in this area.

The ratings analysed in this study should also be interpreted with a degree of caution, because of the way in which the attributions of the Japanese athletes were first translated into English, and then rated by Australian judges. Interpretation of results is more difficult because of the potential danger that ratings might mean different things in different cultures (see, for example, Heine et al. (2001)). Careful back translation and training of raters were implemented to ensure translations and ratings reflected the intent of the speaker as accurately as possible. Results can also be interpreted with somewhat more confidence because of inter-rater reliability analyses suggesting that native Japanese speaking raters perceived the causes cited by athletes similarly to Australian raters. However, any tests of the inter-cultural reliability

of these ratings will by their very nature be always inextricably confounded with cultural differences.

The results of this study suggest that self-serving attributions may indeed be found in Japanese samples, and especially Japanese men, under certain circumstances. In particular, further research focusing on naturalistic tasks, spontaneous attributions, and open-ended paradigms might also identify self-serving biases in Japanese samples (and especially Japanese men). Future research might also consider measuring variables such as ego involvement, motivation to succeed, competitiveness of context, whether the audience for whom attributions are being made is known or unknown to the attributor, and extent of exposure to Western culture to determine whether they do in fact influence the extent to which Japanese show self-serving biases. In particular circumstances, where context may be held constant to a greater extent, and real world consequences are more tangible and meaningful, this study shows that Japanese samples may indeed show self-serving biases in attribution. Its results therefore suggest that further research might be warranted to more clearly delineate the particular variations in method, context and participants that might be associated with such attributional biases, and with Japanese self-enhancement more generally.

## Footnotes

1: We also used stability as a third dimension, by asking “in the future when the speaker is competing, will this cause be present again?” However, interrater reliability was found to be rather low ( $r(214) = .45, p < .001$ ) which precluded us reporting the results related to this dimension.

2: Roesch and Amirkhan (1997) found a similarly high correlation between the dimensions of locus and controllability. It is possible that raters found it difficult empirically distinguishing the two dimensions, and results for each dimension may need to be interpreted with caution. However, the replication of this finding across different studies lends support to the suggestion that the locus and controllability of the causes of performance cited by elite athletes may indeed covary.



## References

- Beyer, S. (1998). Gender differences in self-perception and negative recall biases. *Sex Roles, 38*, 103 – 133.
- Bornstein, M. H., Haynes, O. M., Azuma, H., Galperín, C., Maital, S., Ogino, M., et al. (1998). A cross-national study of self-evaluations and attributions in parenting: Argentina, Belgium, France, Israel, Italy, Japan, and the United States. *Developmental Psychology, 34*, 662-676.
- Coco, M., Gurrisi, L, Nicotra, R., & Perciavalle, V. (2010). Gender, motivation and type of sport. *Acta Medica Mediterranea, 26*: 41-46.
- Deaux, K., & Farris, E. (1977). Attributing causes for one's own performance: The effects of sex, norms, and outcome. *Journal of Research in Personality, 11*, 59-72.
- Forsyth, D. R., & Schlenker, B. R. (1977). Attributional egocentrism following performance of a competitive task. *The Journal of Social Psychology, 102*, 215-222.
- Grove, J. R., Hanrahan, S., J., & McInman, A. (1991). Success/failure bias in attributions across involvement categories in sport. *Personality and Social Psychology Bulletin, 17*, 93-97.
- Heine, S. J., Kitayama, S., Lehman, D. R., Takata, T., Ide, E., Leung, C., &

- Matsumoto, H. (2001). Divergent consequences of success and failure in Japan and North America: An investigation of self-improving motivations and malleable selves. *Journal of Personality and Social Psychology, 81*, 599-615.
- Hooghiemstra, R. (2008). East-West differences in attributions for company performance; A content analysis of Japanese and US corporate annual reports. *Journal of Cross-Cultural Psychology, 39*, 618-629.
- Kitayama, S., Takagi, H., & Matsumoto, H. (1995). Seiko to shippai no kiin: Nihonteki jiko no bunka-shinrigaku [Causal attribution of success and failure: Cultural psychology of the Japanese self]. *Shinrigaku Hyoron, 38*, 247-280.
- Kudo, E., & Numazaki, M. (2003). Explicit and direct self-serving bias in Japan: Reexamination of self-serving bias for success and failure. *Journal of Cross-Cultural Psychology, 34*, 511-521.
- Lau, R. R., & Russell, D. (1980). Attributions in the sports pages. *Journal of Personality and Social Psychology, 39*, 29-38.
- Luginbuhl, J., & Bell, A. (1989). Causal attributions by athletes: Role of ego involvement. *Journal of Sport and Exercise Psychology, 11*, 399-407.
- Mark, M. M., Mutrie, N., Brooks, D. R., & Harris, D. V. (1984). Causal

attributions of winners and losers in individual competitive sports:

Toward a reformulation of the self-serving bias. *Journal of Sport Psychology*, 6, 184-196.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.

Matsumoto, D. (2006). Culture and cultural worldviews: Do verbal descriptions about culture reflect anything other than verbal descriptions of culture? *Culture & Psychology*, 12, 33-62.

McGraw, A. P., Mellers, B. A., & Tetlock, P. E. (2005). Expectations and emotions of Olympic athletes. *Journal of Experimental Social Psychology*, 41, 438-446.

Mezulis, A. H., Abramson, L. Y., Hyde, J. S., & Hankin, B. L. (2004). Is there a universal positivity bias in attributions? A meta-analytic review of individual, developmental, and cultural differences in the self-serving attributional bias. *Psychological Bulletin*, 130, 711-747.

Miyamoto, M. (1985). Parents' and children's beliefs about children's achievement and development. In R. Diaz-Guerrero (Ed.), *Cross-cultural and national studies in social psychology* (pp. 209-223). North-Holland: Elsevier Science.

Mullen, B., & Riordan, C. A. (1988). Self-serving attributions for performance

in naturalistic settings: A meta-analytic review. *Journal of Applied Social Psychology, 18*, 3-22.

- Rejeski, W. J., & Brawley, L. R. (1983). Attribution theory in sport: Current status and new perspectives. *Journal of Sport Psychology, 5*, 77-99.
- Roesch, S. C., & Amirkhan, J. H. (1997). Boundary conditions for self-serving attributions: Another look at the sports pages. *Journal of Applied Social Psychology, 27*, 245-261.
- Schulman, P., Castellon, C., & Seligman, M. E. P. (1989). Assessing explanatory style: The content analysis of verbatim explanations and the attributional style questionnaire. *Behaviour Research and Therapy, 27*, 505-512.
- Sedikides, C., Gaertner, L., & Toguchi, Y. (2003). Pancultural self-enhancement. *Journal of Personality and Social Psychology, 84*, 60-79.
- Takata, T. (2003). Self-enhancement and self-criticism in Japanese culture: An experimental analysis. *Journal of Cross-Cultural Psychology, 34*, 542-551.
- Weiner, B. (1972). *Theories of motivation: From mechanism to cognition*. Chicago: Rand McNally.
- Weiner, B. (1979) A theory of motivation for some classroom experiences. *Journal of Educational Psychology, 71*, 3-25.

- Weiner, B. (1985). "Spontaneous" causal thinking. *Psychological Bulletin*, 97, 74-84.
- Yamauchi, H. (1989). Congruence of causal attributions for school performance given by children and mothers. *Psychological Reports*, 64, 359-363.
- Zaccaro, S. J., Peterson, C., & Walker, S. (1987). Self-serving attributions for individual and group performance. *Social Psychology Quarterly*, 50, 257-263.
- Zuckerman, M. (1979). Attribution of success and failure revisited, or: The motivational bias is alive and well in attribution theory. *Journal of Personality*, 47, 245-287.

Table 1

*Frequency of Attributions (as Percentages) by Sport, Athlete Nationality and Gender**In descending order of overall frequency, by type of sport<sup>a</sup>*

| Sport                | Nationality                     |                               | Gender                     |                           | Total      |
|----------------------|---------------------------------|-------------------------------|----------------------------|---------------------------|------------|
|                      | Australian<br>( <i>n</i> = 108) | Japanese<br>( <i>n</i> = 108) | Female<br>( <i>n</i> = 93) | Male<br>( <i>n</i> = 123) |            |
| <i>Placings</i>      |                                 |                               |                            |                           |            |
| Athletics            | 25%                             | 27%                           | 37%                        | 18%                       | 26%        |
| Swimming             | 14%                             | 16%                           | 18%                        | 12%                       | 15%        |
| Shooting             | 6%                              | 6%                            | 10%                        | 4%                        | 6%         |
| Cycling <sup>b</sup> | 6%                              | 1%                            | 1%                         | 6%                        | 4%         |
| Other                | 11%                             | 6%                            | 5%                         | 11%                       | 9%         |
| <b>Total</b>         | <b>63%</b>                      | <b>56%</b>                    | <b>71%</b>                 | <b>51%</b>                | <b>60%</b> |
| <i>Opponent</i>      |                                 |                               |                            |                           |            |
| Judo                 | 5%                              | 16%                           | 8%                         | 12%                       | 10%        |
| Taekwondo            | 6%                              | 6%                            | 10%                        | 4%                        | 6%         |
| Boxing               | 12%                             | 0%                            | 0%                         | 11%                       | 6%         |
| Wrestling            | 2%                              | 10%                           | 0%                         | 11%                       | 6%         |
| Tennis               | 7%                              | 4%                            | 5%                         | 6%                        | 6%         |
| Other                | 5%                              | 7%                            | 6%                         | 6%                        | 6%         |
| <b>Total</b>         | <b>37%</b>                      | <b>44%</b>                    | <b>29%</b>                 | <b>49%</b>                | <b>40%</b> |

<sup>a</sup> Following a typology loosely based on Coco, Gurrisi, Nicotra and Perciavalle (2010), sports were classified into those where athletes competed for *placings*, *scores*, or *times* vs. those where they competed directly against a specific *opponent*. There was no significant association between type of sport and nationality of athlete,  $\chi^2 (1, N = 216) = 0.94, p = .33$ . Type of sport was significantly associated with gender,  $\chi^2 (1, N = 216) = 8.59, p = .003$ , such that female athletes were more likely than male athletes to be participating in events where they competed for placings. However, when we repeated our main analyses with type of sport included, we found no significant main effect for type of sport and no interaction effect involving this variable, while other results remained as reported.

<sup>b</sup> Excluding sprint cycling - classified as involving an opponent.

Table 2

*Mean Attribution Ratings by Nationality, Outcome, and Gender*

| Gender    | Nationality                  |                  |                  |                  |
|-----------|------------------------------|------------------|------------------|------------------|
|           | Australian                   |                  | Japanese         |                  |
|           | Win                          | Loss             | Win              | Loss             |
|           | Locus of causality           |                  |                  |                  |
| Male      |                              |                  |                  |                  |
| <i>M</i>  | 3.82                         | 2.68             | 4.39             | 3.35             |
| <i>SD</i> | 1.37                         | 1.65             | 0.95             | 1.40             |
|           | ( <i>n</i> = 33)             | ( <i>n</i> = 40) | ( <i>n</i> = 23) | ( <i>n</i> = 27) |
| Female    |                              |                  |                  |                  |
| <i>M</i>  | 3.79                         | 3.36             | 3.66             | 4.02             |
| <i>SD</i> | 1.57                         | 1.45             | 1.61             | 1.19             |
|           | ( <i>n</i> = 21)             | ( <i>n</i> = 14) | ( <i>n</i> = 31) | ( <i>n</i> = 27) |
|           | Controllability <sup>a</sup> |                  |                  |                  |
| Male      |                              |                  |                  |                  |
| <i>M</i>  | 3.50                         | 2.20             | 3.65             | 2.19             |
| <i>SD</i> | 1.21                         | 1.30             | 1.14             | 0.95             |
| Female    |                              |                  |                  |                  |
| <i>M</i>  | 2.98                         | 2.32             | 3.11             | 2.44             |
| <i>SD</i> | 1.22                         | 1.12             | 1.28             | 1.20             |

*Note.* Higher scores indicate more internal and controllable attributions.

<sup>a</sup> Cell sizes for controllability were identical to those for locus.