Evaluating and Measuring the Effectiveness of Business Coaching on Firm Growth

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Abstract

This study aims to evaluate the ways in which business coaching enhances entrepreneurs' confidence and ultimately firm growth. Participants are 200 entrepreneurs, forming two cohorts of small-to-medium enterprises from different industries on fast-growth trajectories. Confirmatory factor analytic techniques establish clear links between business coaching elements (coaches' style, session focus, result, satisfaction), entrepreneurial level of confidence (locus-of-control, self-efficacy), and firm growth. Structural equation modeling suggests that business coaching is a non-direct influencer of entrepreneurial self-efficacy on firm growth. With the establishment of a Business Coaching Model, important implications are demonstrated for firms querying business coaching return-on-investment. This investigation provides solid evidence-based outcomes, adding substantially to empirical literature on business coaching.

Keywords: Business coaching, entrepreneurs, firm growth, small-to-medium enterprise

Introduction

Small-to-Medium Enterprise (SME) firm founders and entrepreneurs turn to business coaches for open and honest feedback on strategy, management and leadership matters (Smyrnios & Crompton, 2007). A fundamental issue, however, centres on measurement of value and effectiveness, with firms contemplating engaging business coaches questioning return-on-investment (ROI) outcomes (Leedham, 2005). Despite an emerging empirical literature base, the cross-disciplinary nature of coaching is bereft of evidenced-based investigations (Grant, 2005). Systematic research has not assessed the effectiveness of business coaching interventions to achieve SME goals (Peel, 2004), measured performance change, effectiveness, nor measured efficacy within business contexts (Kilburg, 2000).

This study aims to bridge that gap by addressing the principal question of whether business coaching directly or indirectly enhances firm growth. Forming part of a large scale five-phase, mixed-methods investigation (Cresswell, 2003), the overall research establishes the extent to which business coaching is an enabler or driver of SME firm growth. For the purpose of this paper, findings related to the quantitative fourth-phase component are reported only. This study extends Crompton and Smyrnios (2006) by drawing on exploratory research, learning evaluation models, and business growth theories, to test relationships between business coach *role*, *session focus*, entrepreneur perceived business coaching *result*, coaching *satisfaction*, and effects of entrepreneur *locus-of- control* and *self-efficacy* on firm growth.

Literature Review

In general, coaching has been influenced by disciplines such as psychology, consulting, organisational development, and management and leadership (Brock, 2006), while mentoring originated centuries ago where masters, such as experienced craftsmen or traders, passed their wisdom and skill onto junior persons (Clutterbuck, 1991). Business

coaching emanates primarily from the business management discipline, centering on the formulation, implementation, and evaluation of cross-functional decisions through the maintenance of environments (Koontz, O'Donnell, & Weihrich, 1980), whereby people work collectively to achieve firm vision and objectives (David, 1991). Combining skills of coaching with mentoring experience, business coaching is a collaborative relationship focusing on entrepreneurs' contributions to firm performance and goals (Clegg, Rhodes, & Kornberger, 2003).

Representing a complex mix of factors including stage of growth, shareholder influence, product or service offering, customer demand, global reach, and personnel expertise, businesses operating in today's environment need the ability to react swiftly to changing elements which impact desired performance levels (Delmar, Davidsson, & Gartner, 2003). Firm success is achieved through entrepreneurs who communicate a clear purpose, allocate resources effectively and efficiently, and take responsibility for fostering and nurturing people to reach common goals (Tichy, 2002). Creating pressure on entrepreneurs to attain growth and results, Lesonsky, (2007) commented that while only two percent of US companies accounted for fast-growth firms, they created 68% of new jobs.

To offset these pressures, entrepreneurs seek experienced business coaches to work with them to attain milestones, reach market performance indicators, and achieve business goals (Leonard & Swap, 2005). In addition, entrepreneurs engage coaches for a variety of reasons including loneliness, the enormity of continually making decisions, and the sheer stress such positions place on health and family life (Kets De Vries, Korotov, & Floreant-Treacy, 2007).

Coach Role

Business coaches can perform one of a number of roles within firms, such as skill enhancement for specific tasks, job performance improvement, learning and development, or

responding to entrepreneurs' changing agenda (Witherspoon & White, 1997). However, choosing suitable coaches should be made in the context of coaches' experience and entrepreneur need for self and awareness of others, role integration, and designated leadership (Laske, 1999). For maximum effect, engagement depends on entrepreneur and client identifying current issues and gaps between desired states (Rider, 2002), thus creating partnerships built on trust and rapport, with the intention of introducing entrepreneurs to new challenges and working together to achieve outcomes (Kilburg, 2000).

Within the relationship, business coaches perform various functions suggesting ways of: reducing feelings of loneliness and isolation (Cooper & Quick, 2003); acting as sounding boards (Clutterbuck & Megginson, 1999); providing room for unstructured discussion (Devins & Gold, 2000); and assisting entrepreneurs to assess performance by giving objective feedback in order to achieve outcomes (Drucker, 2005). Representing as confidantes (Cooper & Quick, 2003), business coaches listen to entrepreneurs' concerns, conveying understanding and empathy (Clutterbuck & Megginson, 1999) in a non-judgmental manner (Whitmore, 1996).

Business coaches might also act as counsellors (Stone, 1999); advisors with expert based perceptive experience based on suitable background and business experience (Leonard & Swap, 2005); or network facilitators providing advocacy and access to capital (Bhide, 2000). In some cases business coaches take a solution-focused approach using thought-provoking questioning to engender such shifts as self-discovery and accountability, allowing entrepreneurs to view problems as opportunities to learn from, rather than inhibitors to moving forward (Creane, 2006). Collectively, this view leads to the formulation of four hypotheses concerning entrepreneurs' perception of the role performed by business coaches:

H_{1a}: The role adopted by business coaches positively influences the focus of sessions

H_{1b}: The role adopted by business coaches positively influences entrepreneurs' locus-of-control (internal)

H_{1c}: The role adopted by business coaches positively influences entrepreneurs' locus-of-control (external)

H_{1d}: The role adopted by business coaches positively influences entrepreneurs' self-efficacy

Coaching Focus

Business coaches focus conversations according to entrepreneur needs (Rider, 2002). An appropriate match between business coach and entrepreneur, in terms of skill and experience together with specific training, ensures that each party understands the nature of the relationship and expectations (Megginson, Clutterbuck, Garvey, Stokes, & Garret-Harris 2006). Business coaches have the ability to recognise firm stage of growth, and might initially concentrate on ensuring entrepreneurs have a clear vision, and strategy with appropriate goals (Leonard & Swap, 2005). Entrepreneurs with a clear-cut vision are more likely to set goals, objectives, identify tasks (Locke, 1996), and achieve outcomes (Leedham, 2005).

As firms are complex, coaching conversations might focus on: customer requirements and demand (Delmar et al., 2003); goods and services production or innovation combined with strong leadership to achieve growth (David, 1991); or processes and procedures adopted by the firm with methods and systems implemented for peak efficiency and effective management (Leonard & Swap, 2005). Equally, business coaches provide leadership development for effective cultural change (Garrett-Harris, 2006), particularly where problems with people arise owing to ineffective leadership and multi-cultural experiences (David, 1991). Some business coaches focus entirely on leadership development by enabling entrepreneurs to build relationships, manage firm politics, and communicate clearly to employees (Compernolle, 2007). Accordingly, it is hypothesised that:

H_{2a}: The session focus influences positively the result of sessions

H_{2b}: The session focus influences positively entrepreneurs' locus-of-control (internal)

H_{2c}: The session focus influences positively entrepreneurs' locus-of-control (external)

Coaching Result

Coaching results are expected to lead to sound decision making; ideas and options generated for moving forward; fulfillment of objectives and goals; and heightened self-awareness, and understanding of strengths, weaknesses, and performance needs (Witherspoon & White, 1996). However, it is estimated that less than 10% of coaching has any ROI measure (Bolch, 2001). Bush (2005) identified that effective coaching occurs when provided within a structured process using tools, models, and processes focussed on self-development and conducted with entrepreneurs motivated to achieve succeed. ROI is said to emanate from the process itself and behavioural development, and validated when entrepreneur's mental-emotional growth has been supported and enhanced through coaching Laske (2004). Table 1 shows coaching research using intangible measures such as behavioural changes and increased commitment.

Table 1. Intangible Coaching Results

Author	Coaching Objective	Intangible Outcomes
Dembkowski & Eldridge, 2008	Chief Executive's increased performance	More confidence engaging the support of internal and external stakeholders
Diedrich, 1996	Performance coaching	Positive change to managerial style and behaviours
Fanasheh, 2003	Coaching services perception	32 % of executives who hired coaches said the outcomes were worth it.
Laske, 2004	Behavioural developmental	Equilibrium found between coaching level and client mental-emotional level
Palmer, 2003	Promotion opportunity	Establishing motivation and suitability for promotion
Peel, 2006	Relationship between coaching and organisational culture	Culture determining support given to coaching and mentoring activity
Phillips,2008	Identify and develop learning needs for company growth	Increased commitment leading to: improved teamwork; job satisfaction; customer service; communication
Sztucinski, 2001	Coaching experience	Achievement; taking ownership; self development; relationship with coach

Whilst early coaching studies focused on success outcomes, findings in general indicate that coaching failed as the byproduct of verifiable business performance or growth (Kilburg, 2000). Very few coaching outcomes are determined by ROI (Bolch, 2001).

However, effectively tracking how business coaching contributes meaningfully to ROI, when a limited number of firms use any form of measurement, has been an ongoing issue (Fritsch & Powers, 2006). McGovern and et al. (2001) identified intangible benefits of improved relationship which emanated from coaching, as well as tangible impacts on productivity and quality. Table 2 shows tangible evidenced-based coaching results.

Table 2 Tangible Coaching Results

Author	Coaching Study	Tangible Outcomes
Anderson, Dauss, & Mitsch, 2002	Performance	$250,000 in documented annualized productivity benefits recorded
Edwards & Lounsberry,2008	New employee (less than one year) retention program	Reduced new staff turnover from 12% to 0%
Homan, Miller, & Blanchard, 2002	Field sales division improvement	Employee retention increase 47%; reduced customer erosion 21%; hiring and training savings 18%; sales productivity increase 14%
McGovern et al., 2001	Learning, behavioural change, business results	Reduced turnover, increased productivity, calculated ROI from coaching
Olivero, Bane, & Kopelman, 1997	Productivity improvement	Increased productivity by 22.4%t
Parker-Williams, 2006	Increase productivity, retention, satisfaction, teamwork	Calculated productivity and ROI from coaching 700%
Phillips,2008	Staff retention program	Reduced staff turnover from 28% to 17%

Connection between coaches role and session focus determine entrepreneurs' perception of business coaching results, leading to the following four hypotheses:

H_{3a}: Results of coaching influence positively satisfaction with coaching

H_{3b}: Results of coaching influence positively entrepreneurs' locus-of-control (internal)

H_{3c}: Results of coaching influence negatively entrepreneurs' locus-of-control (external)

H_{3d}: Results of coaching influence positively entrepreneurs' self-efficacy

Coaching Satisfaction

Through reflection of what went well and why (Rider, 2002), coaching is said to help people gain skills and abilities to develop professionally, and become more effective than without such input (Leonard and Swap, 2005). Through the use of powerful questioning and active listening under an umbrella of confidentiality, business coaching encompasses established trust and intimacy with the entrepreneur (Auerbach, 2006). Additionally, the

relationship between coaches' personal attributes and skills is seen as important to coaching programme effectiveness (Leedham, 2005). Equally, collaborative coaching can be conducted informally, allowing for different styles and personalities (Edwards, 2004).

Business coaching has been found to work best when planning and preparation are well executed, training provided on role expectations, responsibilities defined at the outset, and followed by developmental support at intervals thereafter (Clutterbuck & Megginson, 1999). Preferring sessions delivered within agreed timeframes by practicing business coaches with relevant background and experiences (Leonard & Swap, 2005), entrepreneurs are not willing to spend time attending lengthy programmes (Bennis & O'Toole, 2005). A hallmark of effective business coaching is the skill to pass on timely, relevant experiences and knowledge within appropriate contexts (Leonard & Swap, 2005).

Effective outcomes of business coaching hinge on entrepreneurs gaining insight into their present situation and envisioning future goals (Stober, 2006), with lasting behavioural change advocated through the use of interdisciplinary coaching strategies involving adult development and change (Goodstone and Diamante, 1998). Hall, Otazo, and Hollenbeck (1999) identified positive coaching outcomes for entrepreneurs as acquiring new skills, broader perspectives, higher problem solving skills, and overall improved performance. Furthermore, business coaching based on partnership, education, competency with coach and entrepreneur working together, increases the likelihood of achieving outcomes (Witherspoon & White, 1996). Thus, results obtained from business coaching are likely to effect entrepreneurs' perception of satisfaction, leading to the following hypotheses:

H_{4a}: Satisfaction with coaching influences positively entrepreneurs' locus-of-control (internal)

H_{4b}: Satisfaction with coaching influences positively entrepreneurs' locus-of-control (external)

H_{4c}: Satisfaction with coaching influences positively entrepreneurs' self-efficacy

Level of Confidence

Research has established that firm success is based on characteristics of the founder, with certain personality traits and characteristics cognisant with entrepreneurial behaviour and business success. For example, Collins, Honges and Locke (2004) classified achievement motivation as a key contributor to predicting entrepreneurial performance. Begley (1995) ear-marked entrepreneurial founders of relatively young companies with a high need for achievement as risk takers, and having an external locus-of-control. Similarly, Boone, de Brabander, and Hellemans (2000) identified locus-of-control as a predictor of small firm performance, finding that in the long-term nearly all external orientated entrepreneurs' firms failed and were more likely to go bankrupt. Boone, de Brabander, and Witteloostuijn (1996) suggested that entrepreneurs with internal locus-of-control had the ability to successfully implement strategy which possibly related to a leadership style of controlling outcomes, whereas entrepreneurs with external locus-of-control were not as likely to be as effective in implementing strategy and controlling outcomes.

Bandura and Locke (2003) espoused that at the centre of causal processes lie self-generated activities with strong self-efficacy affecting motivation and actions, resulting in increased performance and goal attainment. Entrepreneurs with high self-efficacy were likely to improvise, execute novel actions, and engage in new venture performance (Hmielski & Corbett, 2008), while goals, self-efficacy, and communicated vision have been linked directly to venture growth (Baum & Locke, 2004). Further, entrepreneurs with strong self-efficacy believed in the decisions involving their own abilities and that of employees (Forbes, 2005), while conscientiousness, emotional stability and openness have moderate positive correlations with self-efficacy (Stewart, Palmer, Wilkin, & Kerrin, 2008). In addition, self-efficacy can be a personal resource forming a buffer against, stress, anxiety, and burnout (Jerusalem & Schwarzer, 2006). Thus, it is hypothesised that:

H_{5a}: Entrepreneur' locus of control (internal) influences positively firm growth

H_{5b}: Entrepreneur' locus of control (external) influences negatively firm growth

H_{5c}: Entrepreneur' self efficacy influences positively firm growth

Method

Participants

Participants are self-nominated business owners and entrepreneurs of 200 private (*n = 190*) and public (*n = 10*) firms who responded to advertisements calling for Australia's fastest growing SME firms (Walker, 2006). Known as the *BRW Fast100*, the present survey has similarities to *Fortune's FSB 100*, North America's fastest growing small businesses annually. Criteria for inclusion are annual revenue in excess of AUD$500,000 rising each year over four consecutive financial periods; not receive more than 50% of its revenue from one client; have fewer than 200 full-time and part-time employees; and not be a subsidiary of an Australian or overseas company. Unlisted companies must be privately owned.

Of the 200 participants, 50% (*n = 100*) had used a business coach and 50% (*n = 100*) had not used a business coach. Table 3 shows industry, revenue turnover, percentage growth, number of employees, and company age of participant firms by previous business coaching versus no business coaching experience.

Table 3 highlights that participants represent a cross-section of industry sectors, however chi-square tests reveal nonsignificant differences on industry sectors across both cohorts $\chi^2(15, n = 200) = .287$, $p < .05$. In terms of firm characteristics, independent samples *t*-tests, culminate in nonsignificant differences amongst cohorts on firm size (number of employees), company age, or percentage growth on revenue turnover. Although cohorts differ significantly on revenue turnover $t(198) = .338$, $p < .05$, the r^2 effect size of 1% is extremely small. Perhaps surprisingly, 81% of entrepreneurs attribute up to 30% of firm growth to business coaching received (ranging from 0% to 100%).

Table 3. Firm Characteristics

Industry Characteristics	**Business Coach (*n = 100*)**	**No Business Coach (*n = 100*)**
Industry Sector		
• Information Technology	24%	20%
• Property	20%	17%
• Finance	11%	13%
• Manufacturing	10%	3%
• Personal	8%	12%
• Construction	8%	7%
• Communications	4%	10%
• Retail	4%	5%
• Education	4%	1%
• Other (Accommodation; Cultural; Health; Mining; Wholesale; Agriculture)	7%	12%
Number of Employees		
• Range – no. employees	2 – 197	3 – 200
• Mean (*Standard Deviation*)	40.27 (*41.43*)	46.37 (*47.93*)
• Median	25.5	29.5
Company Age		
• Range - years	3 – 54	3 – 26
• Mean (*Standard Deviation*)	8.67 (*7.13*)	8.54 (*5.61*)
• Median	6	6
Revenue Turnover (Australian dollars)		
• Range	.9m – 161m	.5m – 1,160m
• Mean	9,010,687	32,233,387
• Median	5,647,915	10,438,735
Percentage Growth on Revenue Turnover from Previous Year		
• Range	7 – 650	9 – 407
• Mean (*Standard Deviation*)	83.74 (*86.45*)	88.67 (*69.7*)
• Median	65	69.5

Measures

Measured on 7-point Likert-scales the survey tapped relationships between business coach *role* (1 = *not at all* to 7 = *always*), *session focus* (1 = *not at all* to 7 = *always*), business coaching *result* (1 = *totally disagree* to 7 = *totally agree*), business coaching *satisfaction* (1 = *totally dissatisfied* to 7 = *extremely satisfied*), and effects of entrepreneur *locus-of-control* and self-efficacy (1 = *not at all true* to 7 = *exactly true*) on firm *growth*. Based on recommendations by Jerusalem and Schwarzer (2006), the self-efficacy scale items used for level of confidence were interspersed with five locus-of-control items (Ferguson, 1993). Table 4 shows survey questionnaire themes of business coaching and level of confidence with accompanying questions and associated items.

Table 4. Survey Themes, Questions and Related Items

Themes and Questions	Items
Business Coach • **Role** To what degree did your business coach played the role of:	(a) Sounding board (*eg open/honest feedback)* (b) Listener (*eg. empathy, encouragement)* (c) Counsellor (*eg .analysed problems)* (d) Advisor (*eg expert knowledge, skills)* (e) Network facilitator (*eg. access to others)*
Business Coaching • **Session Focus** The main focus of your coaching sessions was on:	(a) Vision/strategy/goals/environment (b) Customers (c) Production (*example: create/ manufacture)* (d) Processes (*example: method/ procedures)* (e) People (*example: leadership/managing/culture)*
Business Coaching • **Results** As a result of business coaching you are now able to:	(a) Make better decisions (b) Have more ideas/options to deal with issues (c) Achieve your objective/goals (d) Have greater self awareness (e) Understand your strengths/weaknesses (f) Know your development needs (g) Have a more positive attitude towards life (h) Have a greater degree of confidence that your business will succeed
Business Coaching • **Satisfaction** To what extent were you satisfied with your business coaching experience?	(a) Period/length of business coaching (b) The cost of you sessions (c) Delivery method of your sessions (d) Your relationship with your coach (e) Your business coach's style and approach (f) The role/s your business coach played (g) The outcome of business coaching
Level of Confidence • **General Self Efficacy** To what extent is it true that:	(a) I can always manage to solve difficult problems if I try hard enough. (b) If someone opposes me, I can find the means and ways to get what I want. (c) It is easy for me to stick to my aims and accomplish my goals. (e) I am confident that I could deal efficiently with unexpected events. (g) Thanks to my resourcefulness, I know how to handle unforeseen situations. (i) I can solve most problems if I invest the necessary effort. (j) I can remain calm when facing difficulties because I can rely on my coping abilities. (l) When I am confronted with a problem, I can usually find several solutions. (m) If I am in trouble, I can usually think of a solution. (o) I can usually handle whatever comes my way.
Level of Confidence • **Locus of Control** To what extent is it true that:	(d) The world is run by a few people in power and there's not much I can do about it. (f) Growing my business depends on being in the right place at the right time. (h) It is difficult to have much control over the things politicians do in office. (k) Many times I feel as though I have little influence over what happens to me. (n) It is not always wise to plan too far ahead because many things turn out to be a matter of good and bad fortune anyway.

Procedure

An online cross-sectional survey was conducted tapping company demographics, growth generators, entrepreneur characteristics, and learning and development experiences. Incomplete surveys with less than 50% of data were excluded and missing data dealt with using the SPPS Maximum Likelihood function of replacing missing values at random. For the

calculation of average growth rates ranking purposes, participants provided audited revenue figures over four consecutive financial periods, with the fourth year used as a baseline.

Analysis

Instrument Validation

Data were analysed using confirmatory factor analysis (CFA) procedures (AMOS 17.0) and involving a Maximum Likelihood (ML) estimation method. Structural Equation Modeling explains the amount of variance of the model and is used to simultaneously examine dependent relationships between measured variables and several latent constructs. All constructs were tested for reliability, validity, and fit. Based on an assessment of CFA fit statistics, measurement models were further refined. Table 5 shows the correlations and descriptive statistics of model constructs, while Table 6 shows the measurement properties of constructs. Instrument validation proceeded through three steps: calculation of construct reliability, estimation of variance extracted, and evaluation of construct validity.

Table 5. Correlation Matrix, Mean Scores and Standardized Deviations

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. Role	6.05	0.99	1							
2. Session Focus	4.56	1.42	.15	1						
3. Result	5.44	1.16	.23*	.44**	1					
4. Satisfaction	5.82	0.79	.30**	.17	.45**	1				
5. Locus of Control (internal)	3.25	1.25	.01	.12	-.05	.01	1			
6. Locus of Control (external)	3.25	1.18	.03	.13	-.05	0	.26	1		
7. Self Efficacy	6.06	0.69	.33**	0	.19	.16	-.18	-.17	1	
8. Growth	3.04	1.39	.08	-.07	-.19	.11	-.05	-.09	.17	1

Note: *$p<.05$.**$p<.01$

Construct Reliability

Construct reliability, a measure of consistency, assesses the degree to which items are free from random error. Indictor and composite reliability are two measures of construct reliability (Fornell & Larcker, 1981). While indicator reliability represents the proportion of variation that is explained by a construct it purports to measure, composite reliability reflects the internal consistency of indicators (Werts, Linn, & Jöreskog, 1974). In the present study,

indicator reliability values range between .19 and .96, and all composite reliability values exceed the recommended value of .7 (Nunally & Bernstein, 1994), except for two constructs locus of control (internal) and locus of control (external).

Table 6. Confirmatory Factor Analysis

Constructs	α	Construct Reliability	Variance Extraction	Standardized Loadings	Indicator Reliability
Role	.79	.79	.66		
• Sounding board				.86	.73
• Listener				.74	.55
Session Focus	.73	.79	.50		
• Vision/strategy/goals				.76	.58
• Customers				.64	.41
• Production				.58	.33
Result	.75	.78	.64		
• Achieve your objective/goals				.87	.75
• Have a greater degree of confidence that your business will succeed				.72	.52
Satisfaction	.79	.92	.80		
• Your coach's style and approach				.85	.72
• The role/s your coach played				.98	.96
• The outcome of business coaching				.83	.70
Locus-of-Control (internal)	.49	.49	.32		
• Growing my business depends on being in the right place at the right time				.56	.32
• It is not always wise to plan too far ahead because many things turn out to be a matter of good and bad fortune anyway				.57	.33
Locus-of-Control (external)	.51	.64	.50		
• It is difficult to have much control over the things politicians do in office				.91	.82
• Many times I feel as though I have little influence over what happens to me				.43	.19
Self Efficacy	.82	.83	.50		
• I can always manage to solve difficult problems if I try hard enough				.75	.55
• I can solve most problems if I invest the necessary effort				.76	.57
• If I am in trouble, I can usually think of a solution				.76	.58
• I can usually handle whatever comes my way.				.70	.49

Variance Extracted Estimate

Variance extracted estimate reflects the overall amount of variance in indicators accounted for by a latent construct (Fornell & Larcker, 1981). In this study, all estimates exceed the recommended value of .5 (Hair et al., 2006) except for locus of control (internal) construct.

Construct Validity

Construct validity was established by measuring convergent and discriminant validity of measurement items (Straub, 1989). Convergent validity assesses the consistency across multiple operationalisations. Values for *t*-statistics for all factor loadings are significant (all p_s<.001), indicating that measures satisfy convergent validity criteria (Gefen et al., 2000). According to Fornell and Larcker (1981), average variance extracted for each construct should be greater than the squared correlation between constructs when assessing for discriminant validity, the extent to which different constructs diverge from one another. In our sample, results suggest that items share more common variance with related than non-related constructs, with all constructs meeting this criterion.

Confirmatory and full structural model fit were assessed using multiple indices (Hair et al., 2006), including the ratio of χ^2 to degrees of freedom (χ^2/df) (Jöreskog, 1978), comparative fit index (CFI), Tucker-Lewis Index (TLI), root mean-square error of approximation (RMSEA), and standardized root mean-square residual (SRMR). A χ^2/df ratio of below 3 indicates sound fit (Carmines & McIver, 1981). Values of CFI and TLI above .90 are considered good fit (Hair et al., 2006). A RMSEA of .09 or less indicates a close fit (Hu & Bentler, 1999) and SRMR should be less than .08 (Hair et al., 2006). All seven one-factor congeneric measurement models tested were found to meet these criteria.

Result

Given the acceptable measurement models, we estimated a full latent variable structural model (Anderson & Gerbing, 1988) using the same set of goodness of fit criteria to test our structural model and respective hypotheses. Table 7 summarizes results of hypothesis testing, revealing reliable and robust fit between our theoretical model and sample covariances: $\chi^2(111)=162.408$, p=.019, χ^2/df=1.266, CFI=.943, TLI=.929, SRMR=.078, and RMSEA=.052. These indices suggest a good fit.

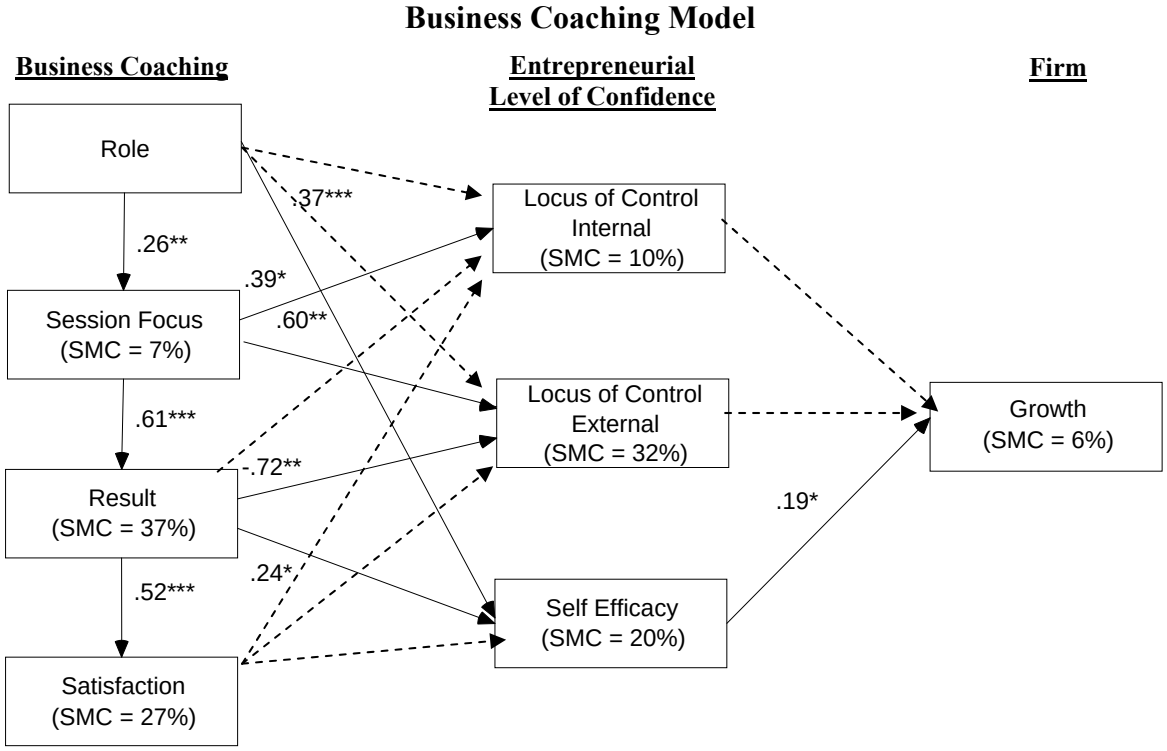
Table 7. Hypotheses and Test Results

Hypotheses	Standardized Parameter Estimate	Conclusion
H1a: Role → Focus	.26**	Supported
H1b: Role → Locus-of-control (internal)	-.03	Not Supported
H1c: Role → Locus-of-control (external)	.04	Not Supported
H1d: Role → Self-efficacy	.37***	Supported
H2a: Session Focus →Result	.61***	Supported
H2b: Session focus → Locus-of-control (internal)	.39*	Supported
H2c: Session focus → Locus-of-control (external)	.60**	Supported
H3a: Result → Satisfaction	.52***	Supported
H3b: Result → Locus-of-control (internal)	-.31	Not Supported
H3c: Result → Locus-of-control (external)	-.72**	Supported
H3d: Result → Self-efficacy	.24*	Supported
H4a: Satisfaction → Locus-of-control (internal)	.04	Not Supported
H4b: Satisfaction → Locus-of-control (external)	.19	Not Supported
H4c: Satisfaction → Self-efficacy	-.07	Not Supported
H5a: Locus-of-control (internal) → Growth	-.07	Not Supported
H5b: Locus-of-control (external) → Growth	.13	Not Supported
H6: Self-efficacy → Growth	.19*	Supported

Note:*p<.10.**p<.05.*** p<.01.

Results show that while coaching role has significant positive relationships with session focus and self-efficacy, supporting H1a and H1d, it has no significant influence on locus-of-control (internal) and locus-of-control (external), failing to support H1b and H1c. Session focus has a significant positive effect on locus-of-control (internal), locus-of-control (external), and self-efficacy, supporting H2a, H2b, and H2c. While coaching result impacts significantly positively on satisfaction and self-efficacy, supporting H3a and H3d, this dimension demonstrates a significant negative association with locus-of-control (external), supporting H3c, but fails to support H3b, with nonsignificant link to locus-of-control (internal). Satisfaction with coaching has a nonsignificant impact on locus-of-control (internal), locus-of-control (external), and self-efficacy, failing to support H4a, H4b, and H4c. Self efficacy is related positively to growth, supporting H6. But both locus-of-control (internal) and locus-of-control (external) have nonsignificant relationships with growth, failing to support H5a and H5b.

Figure 1 shows significant relationships between variables (solid lines) and percentage of variance, explained by the Business Coaching Model for each endogenous variable.



Note: **p*<.10. ***p*<.05. ****p*<.01. - - - > denotes non-significant relationship.

Figure 1. Tests of hypothesised model of influences of business coaching with entrepreneurs' level of confidence factors on firm growth.

Squared multiple correlation (SMC) values, which are similar to multiple R^2 in multivariate regression analysis, show that this model accounts for 7% of the variance in coaching session focus, 37% of the variance in result of coaching, 27% of the variance in satisfaction with coaching, 10% of the variance in locus of control (internal), 32% of the variance in locus of control (external), 20% of the variance in self efficacy, and 6% of the variance in growth.

Discussion

The objective of this study is to address the principal question of whether business coaching directly or indirectly enhances firm growth. By systematically evaluating linkages

between a number of pertinent factors (coaches' style, coaching session focus, outcome result of coaching, entrepreneurs' satisfaction with coaching, entrepreneur locus-of-control, and self-efficacy), between business coaching and entrepreneurs' level of confidence, firm growth is demonstrated and a Business Coaching Model is not only established, but also tested empirically. Findings suggest that business coaching is a non-direct influencer of entrepreneurial level of confidence (self-efficacy) on firm growth.

The most important finding of this study is that specific component variables of business coaching work in concert to engender a sense of satisfaction with the coaching experience. Business coaching built on a partnership embracing trust and rapport where coach and entrepreneur work together (Clutterbuck & Megginson, 1999), and where the relationship is such that the entrepreneur feels free to express what comes to mind without fear of judgment or reprisal, increases the likelihood of satisfaction (Witherspoon & White, 1996). The positive effects of the focus of coaching sessions and coaching outcome result leading to entrepreneur satisfaction, are consistent with a number of studies, such as Anderson et al., (2002), Homan et al., (2002), and Phillips, (2008), indicating that entrepreneurs benefit from the support of coaches. As concluded by Bush (2005), the interwoven nature of coaching elements suggest that when entrepreneurs are motivated and committed to working to achieve results with coaches they trust, firm growth naturally follows.

Self-efficacy outcomes are of particular interest and affirm Kets de Vries, et al. (2007) reasoning that coaches support entrepreneurs by working with their strengths, which builds self-confidence enabling entrepreneurs to face operational and environmental issues. Forbes (2005) held that entrepreneurs with strong self-efficacy believed in decisions involving their own abilities, while Jerusalem and Schwarzer (2006) asserted self-efficacy as a personal resource forming a buffer against, stress, anxiety, and burnout. Findings that outcome results

from coaching have a negative effect on external locus-of-control are consistent with Begley (1995), and Boone et al. (2000), identifying externally orientated entrepreneurs as high risk takers who are more likely to go bankrupt. In contrast, internally orientated entrepreneurs are more likely to display leadership style to control outcomes (Boone et al., 1996).

In conclusion, drilling down into the hypothesised model reveals that coaches that act as sounding boards and effective listeners, tend to focus during coaching session on elements, such as vision, goals and strategy, that empower self-efficacy within entrepreneurs, ultimately leading to firm growth.

Limitations

There are four main limitations associated with this study: the cross-sectional survey; a relatively small sample size; construct reliability; and common methods bias. This study is cross-sectional, providing only a snapshot of factors influencing firm growth. The non-longitudinal nature means that causal relationships between variables cannot be implied as other factors might have influenced growth.

While structural equation modeling with maximum likelihood estimation was employed using 100 participants, the relatively small sample size could have influenced the statistical power of the method used to examine interrelationships between a number of variables. Although valid results can be obtained with samples as small as 50, samples of 200 are recommended as a sound basis for estimation (Hair et al., 2006).

Construct reliability of measures was relatively low for the locus-of-control scales ranging between .49 and .64. Moreover, Chronbach's alpha statistics ranged between $\alpha = .49$ and $\alpha = .51$. These statistics could have also influenced the present results and can be attributed to each of these constructs having only two items following the application of one-factor congeneric measurement models.

Taking a deductive positivist approach to statistically analyse data and predict events, quantitative measures can lose the human meaning when reduced to numbers. Adoption of a triangulated approach, future quantitative research findings on business coaching could be corroborated by collecting additional qualitative data on entrepreneurs' experiences, thus reducing common methods bias (Cresswell, 2003).

Significance

The present study establishes a model of business coaching factors that facilitate firm growth, as well as proposing a systematic and comprehensive method of measuring outcome evaluation. Providing strong evidence of business coaching's effectiveness on firm growth, these findings have both practical and theoretical implications. From a practical perspective, positive contributing effects on firm growth and significant ROI are of relevance to entrepreneurs contemplating engaging business coaches. Theoretically, this research adds significantly to the apparent dearth of literature on business coaching within the context of a grounded framework (Grant, 2005) through the development and testing of a Business Coaching Model consisting of essential ingredients of business coaching, targeting entrepreneurs' level of confidence aimed at firm growth. In addition, this study provides the foundation for future outcome-based business coaching research.

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