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THE IMPORTANCE OF SOURCES OF SPORT CONFIDENCE: A COMPARITIVE STUDY BETWEEN ELITE AND NON ELITE ATHLETES.			
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Comments	Section
	Title and Abstract Title to include: A concise indication of the research question/problem. Abstract to include: A concise summary of the empirical study undertaken.
	Introduction and literature review To include: outline of context (theoretical/conceptual/applied) for the question; analysis of findings of previous related research including gaps in the literature and relevant contributions; logical flow to, and clear presentation of the research problem/ question; an indication of any research expectations, (i.e., hypotheses if applicable).
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CARDIFF SCHOOL OF SPORT

DEGREE OF BACHELOR OF SCIENCE (HONOURS)

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TITLE: THE IMPORTANCE OF SOURCES OF SPORT

**CONFIDENCE: A COMPARITIVE STUDY BETWEEN ELITE
AND AMATUER ATHLETES.**

**(Dissertation submitted under the discipline of
Psychology)**

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ABSTRACT

The present study examined the sources of sport confidence deemed important by fifty elite (N=25) and amateur (N=25) team sport athletes. Elite and amateur athletes aged between 18 and 30 (22.56 ± 2.54) completed the Source of Sport Confidence Questionnaire (SSCQ; Vealey et al., 1998) an hour before a normal training session. A one way ANOVA test analysed the variance between elite and amateur athletes found four significant differences in the nine subscales; mastery (elite, 26.08 ± 3.29 / non elite, 24.00 ± 3.42), support (elite, 35.44 ± 4.77 / non elite 31.16 ± 5.92), coach's leadership (elite, 25.92 ± 3.90 / non elite, 21.84 ± 5.43) and physical self presentation (elite, 13.00 ± 3.76 / non elite 10.64 ± 3.59) were viewed of significantly higher importance for elite athletes than amateur athletes. This discovery indicates elite and amateur athletes have different derivation of sporting confidence. Descriptive results indicated both elite and amateur athletes viewed support, demonstration of ability and mental and physical preparation as the respective top three sources of sport confidence. These results indicated the importance of sources of sport confidence for both populations in the study. Implications in results suggest coaches should increase their awareness of the differences between elite and amateur derivation of confidence when implementing interventions. The areas for future research were provided.

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1.0 Table 1 SSCQ Coefficient Alphas and Levene's Significant Difference Scores

Source	Levene's Significance Difference	Alpha Scores
Mastery	.869	.74
Demonstration of Ability	.255	.75
Mental /Physical Preparation	.627	.74
Situational Favourableness	.071	.71
Leadership	.310	.92
Environmental Comfort	.316	.91*
Vicarious Experience	.099	.82
Social Support	.461	.89
Physical Self-Perception	.705	.79

Note. * = Source altered to improve alpha score. SSCQ = Sources of Sport Confidence Questionnaire.

2.0 Table 2 represents SSCQ results of ANOVA F ratio, Significant Differences between the two groups, also mean scores for elite and non elite athletes.

Source	F Ratio	Significant Difference	Elite Mean Scores	Amateur Mean Scores
M	4.809	.033*	26.08	24
DOA	2.392	.129	33.24	31.44
MaPP	.341	.562	31.6	30.8
SF	.140	.710	12.48	12.8
L	9.307	.004*	25.92	21.84
EC	1.636	.207	14.88	15.84
VE	2.465	.123	24.48	22.64
S	7.921	.007*	35.44	31.16
PSP	5.143	.028*	13	10.64

Note. * = Significant difference > .050.

SSCQ = Sources of Sport Confidence Questionnaire.

M= Mastery, DOA= Demonstration of Ability, MaPP = Mental and Physical Preparation, SF= Situational Favourableness, L= Leadership, EC= Environmental Comfort, VE= Vicarious Experience, S= Support, PSP= Personal Self-Perception.

CHAPTER ONE

INTRODUCTION

CHAPTER ONE

INTROUDCTION

1.0 INTRODUCTION

Confidence significantly influences sporting performance according to prior research (Vealey et al., 1998; Jones and Hanton., 2001; Vealey., 2001; Moritz et al., 1996). The importance of this confidence for optimal athletic performance has led to increased research in sport confidence literature (for example, Thomas et al., 2011; Hayes et al., 2007; Kingston et al., 2010) Reinforcing the influence confidence can have is Terry Bradshaw, a former professional American football player and Super Bowl winner quoted “what’s the worst thing that can happen to a quarterback? He loses his confidence” (Sport Psychology Quotes, 2013). Therefore, Bradshaw and previous research supported the influential factor confidence has upon sporting success.

Generally, Sport confidence conceptual approaches have transpired through the self efficacy theory (Bandura, 1977) and Vealey’s Model of sport confidence model (Vealey et al., 1998; Vealey and Chase, 2008). Initially, the conceptual theory of self confidence utilised in sport psychology research was the self efficacy theory (Bandura, 1977, 1997). The theory stated its ones belief in the capabilities of a course of actions which influenced performance attainment. The theory was utilised in mainstream psychology, equating in more than dubitable evidence whether this theory could be transferred into a sporting context. Nevertheless, Bandura (1977; 1997) identified four sources which predicted self efficacy: past performance accomplishments, vicarious experiences, imagery and verbal persuasion. In time, Vealey et al. (1998) questioned whether these sources were most salient to athletes in a sporting context. Consequently, Vealey et al. (1998) developed a sport specific model of sport confidence, which proposed athletes relied on further sources of confidence and identified nine sources of confidence (mastery, demonstration of ability, vicarious experience, physical and mental preparation, physical self presentation, social support, coaches leadership,

environmental comfort and situational favourableness). In context, studies upon sources have been conducted with rehabilitation athletes (Magyar and Duda, 2000), master athletes (Wilson et al., 2004), collegiate athletes (Vealey et al., 1998; Machinda et al., 2012), and elite level athletes (Hayes et al., 2007; Kingston et al., 2010; Thomas et al., 2011). The research in varied samples of the sporting population in relation to sources of confidence research provided support for Vealey's suggestion that athletes derive their confidence from sources which athletes consider important for success. However, specific sources are deemed of more value than others, dependent upon the athletic sample.

The necessity for coaches to discover the source of an athlete's confidence is central to enhance, maintain and create a facilitating confidence environment. An example of the primary requirement of confidence to assist success is John McEnroe, a world champion tennis player stating "I think it's the mark of a great player to be confident in tough situations" (Sport Psychology Quotes, 2013). McEnroe suggestion of high confidence in difficult situations separates the good or average players and the 'great' players, but where does this integral confidence derive? The present study focused upon the sources of sport confidence questionnaire (SSCQ; Vealey et al., 1998) and identified elite and amateur level athlete's sources of sport confidence and analysed any significant differences. The sources discovered by the elite and amateur athletes as crucial, should subsequently lead coaches and psychologists of respective populations to practically implement strategies to enhance or maintain sports confidence.

CHAPTER TWO

LITERATURE

REVIEW

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

Sport confidence has been noted by theorists, researchers and practitioners as one of the most critical psychological characteristic influencing athletic performance (Vealey et al., 1998). Sport confidence was defined by Vealey (1986, pp. 222) as “the belief or degree of certainty individuals possess about their ability to be successful in sport”. Athletes, coaches and sport psychologists believe that a crucial psychological requisite for sporting success is confidence (Vealey and Chase, 2008).

In this chapter, literature related to sport confidence will be reviewed to establish that the investigation is building upon existing research (Gratton and Jones, 2004). Initially, the respective framework of Bandura’s (1977) and Maddux (1995) sources of the self efficacy theory are explored, leading onto Vealey’s (1986) trait and state sport confidence conceptual approach being examined. In addition, Vealey et al. (1998) sources of sport confidence Multidimensional Model are discussed, alongside previous elite and amateur sources of confidence research. Finally, the purpose of the present investigation is explained and its importance in furthering psychological research.

2.1 BANDURA’S SELF EFICACY THEORY

Self-efficacy theory was created by Bandura and provided the initial theoretical framework portraying situational specific self confidence. Self efficacy expectations are the belief’s an athlete has in their capabilities to execute and organise their actions required in producing performance attainments (Bandura, 1997). The theoretical framework indicated these capabilities of an athlete manifests in the thought process, emotional state and actions needed in an ever changing environment (Vealey and Chase, 2008). Despite sport researcher’s utilisation of the self-efficacy theory, it’s important to note this theory was a

mainstream, psychological theory. Self-efficacy foundations were derived a social cognitive theory, developed and grounded outside the sporting context, therefore transferring this theory into a sporting environment provided practical limitations.

Generally speaking the self efficacy theory serves as a well designed and complex conceptual framework within which to study the manifestation of self efficacy. Bandura (1977; 1997) identified four sources for the prediction efficacy: Past performance accomplishments, vicarious experiences, imagery and verbal persuasion. Research upon the derivation of self efficacy has been mostly conducted within the parameters of Bandura's (1977; 1986) self efficacy theory (Vealey et al., 1998), thus the discovery and creation of two new sources of efficacy: perception of emotional and physical states (Maddux, 1995).

Past performance accomplishments (mastery experiences) are the primary source of self efficacy and research (Bandura, 1997; Zaccaro et al., 1996) these elicit the greatest effect upon an athlete's self efficacy. The research stated discovered efficacy judgements were centred upon an athlete's mastery experiences (Weinberg and Gould, 2011). Mastery experiences are integral source of efficacy with the provision of evidence that an athlete can succeed at a specific task (Bandura, 1977; Vealey and Chase, 2008). If successful experiences are exploited, self efficacy levels will raise, as a result past performance accomplishments have been identified as the strongest source, portraying the greatest effect upon self efficacy and performance (McAuley, 1985).

The second source identified by Bandura (1977) was vicarious experience; these experiences are often used by exercise leaders, physical educators and coaches, to help students develop new skills through demonstration or modelling (Weinberg and Gould, 2011). Studies (Gould and Weiss, 1981) have shown vicarious experience corresponds with a person increasing their self efficacy beliefs. However, the effects vicarious experience has upon efficacy beliefs are reported (Feltz and Riessner, 1990) to be lesser than deriving efficacy from performance accomplishments.

Verbal and social persuasion transpires once significant others express faith in or support in an athlete's capabilities (Vealey and Chase, 2008). This source of self efficacy has been identified to be weaker and less enduring than self efficacy built

through past performance or vicarious experiences (Bandura, 1977). However, research has suggested coaches have ranked verbal persuasion techniques as extremely effective to maintain or enhance an athlete's self efficacy (Vargas-Tonsing et al., 2004; Weinberg and Jackson 1990; Gould et al., 1999). Another source of self efficacy is imagery. Imagery leads the athlete to perceive personal efficacy generated by imagining themselves, others behaving successfully in a situation. In spite of this, imagery is regarded as an elite facilitator to self efficacy, and having lesser effects upon amateurs or beginners in the initial learning phase of a skill or activity (Bandura, 1997).

Following Bandura's (1977) recognised sources of self efficacy, Maddux (1995) identified further sources, highlighting physiological and emotional states. Physiological states influence self efficacy when athletes associate aversive physical arousal with failure (Weinberg and Gould, 2011). Conversely emotions or mood states can affect self efficacy in the sense the athletes potential to feel anxious or depressed, leading to low efficacy levels. Conversely, Weinberg and Gould (2011) suggested that an athlete who feels energized and positive would probably have enhanced feelings of self efficacy.

As performance accomplishments are likely to be the most influential effect upon self efficacy; vicarious experience, physiological and emotional states, verbal persuasion are generally seen to be less important sources of efficacy (Bandura, 1977; Short and Stewart, 2008). The question remains, whether the sources predict self efficacy, salient to unique sporting context for athletes (Vealey et al., 1998). Nonetheless, self efficacy theory is crucial for Vealey's et al.'s (1998) framework, sharing commonalties; specifically the focus of the source of an athlete's confidence and its reflection of the influence of social and cultural factors on the development of sport confidence (Thomas et al., 2011).

2.2 VEALEY'S TRAIT AND STATE MODEL OF SPORT CONFIDENCE

In 1986, Vealey developed a conceptual model of sport confidence as she expressed the importance to appropriately conceptualize a model of self confidence which created sport specificity conceptualization and measurement instrumentation. The model created included trait and state confidence, identifying differentiations between state and trait athletes, whilst including reciprocity of individuals and behaviour.

The creation of the model is the belief the concept could be employed across all sports. The model was centred on three constructs. The first construct was competitive orientation (how an individual defines success, which has the potentially could be winning or a high performance). Secondly, trait sport confidence (i.e. the confidence the athlete possesses normally about their own ability to be successful in their chosen sport), and finally state confidence in sport is the degree or belief the athlete has at one moment in time (Wilson et al., 2004; Short and Stewart, 2008). Vealey's expectation of the model was to signify individual differences between the three constructs and the influence upon the perception of sporting environment factors equating in dissimilar levels of state confidence which affects behaviour (Vealey et al., 1986; Short and Stewart, 2008).

Vealey (1986) created a trait and state measure of sport confidence, named the Trait Sport Confidence Inventory (TSCI) and the State Sport Confidence Inventory (SSCI) which assessed confidence as a uni-dimensional construct. Despite the seemingly high validity of the TSCI and the SSCI, a number of implications affected the utilisation of this measure upon an athlete's sport confidence. A study from Gayton and Nickless (1987) examined the validity of the trait and state sport confidence inventories in predicting marathon performance before a race. Marathon runners were chosen because most marathon fields comprise of a wide range of running abilities ranging from elite to amateur. The study discovered trait scores were superior to state score in predicting performance outcomes for both predicted and real finishing times (Gayton and Nickless, 1987). This discovery is inconsistent with Vealey's (1986) model of sport confidence, however corresponds with her acknowledgement to find empirical support for the prediction of sport

confidence. Gayton and Nickless (2008) study did not support Vealey's predication which raised questions about the utility of conceptualizing sport confidence as a state-trait construct.

Most research on self confidence in sport has assessed confidence as a uni-dimensional construct (i.e. the TSCI and SSCI) where the inventories provided a single sport confidence score, which contained the whole of sport confidence into one, unitary sport confidence construct (Vealey and Chase, 2008). Previous research (Vealey et al. 1986; 1988) suggested state sport confidence is influenced by the interaction of an athlete's competitive orientation and their trait sport confidence. However, research rejects the state and trait construct due to its unrealistic concept. Sport confidence is multidimensional by nature; consequently research (Gayton and Nickless., 1987; Vealey et al., 1998) suggested failure from Vealey to support these predictions inside her initial sport confidence model. Self efficacy theory certifies that athletes rely on the ability to assess and respond positively in numerous sporting tasks and demands. Thus, neglecting the factor of where an athlete sources their sport confidence.

2.3 SOURCES OF SPORT CONFIDENCE

The original conceptualisation of sport confidence was revised by Vealey and her colleagues (1998) and the creation of a concept centred on a social-cognitive perspective (Short and Stewart., 2008; Feltz et al., 1998).The revised model considered the organisational culture of sport and the various individual characteristics of an athlete, influences the manifestation of sport confidence; thus the inclusion of type and source of the athletes confidence (Vealey and Chase, 2008). The framework by Vealey et al. (1998) shared commonalties with self efficacy theory; for example, a similar focus upon the source domains from which athletes derive their beliefs; and, a reflection of the influence of the social and cultural factors on the manifestation of sport confidence (Thomas et al., 2011). However, Vealey et al. (1998) questioned the six sources of efficacy and doubted whether these were particularly salient to athletes in a sporting context (Hays et al., 2007). The study by Vealey and her colleagues (1998) focused upon sources of sport confidence and defined a source as where an athlete derives their sport

confidence belief. Utilising three hundred and thirty five collegiate athletes, Vealey et al. (1998) identified the most salient sources of sport confidence for athletes in relation to their sport. Based on the data collected Vealey and her colleagues identified achievement, self regulation and social climate as their three broad domains in which the sources (nine) fall (Thomas et al., 2011). The nine sources are described as:

- 1) Mastery: improving or mastering athlete's skills derives confidence.
- 2) Demonstration of ability: is the derivation of confidence from demonstrating a higher level of ability than the opposition or others observing the athletes skills.
- 3) Physical and mental preparation: feeling physically and mentally prepared for optimal focus sources confidence.
- 4) Physical self presentation: The athletes self perception of how he or she looks to others, or the physical perception of one's self derives confidence.
- 5) Social support: confidence sourced from perceiving support from significant others (i.e. coaches, family and team mates) as supportive and encouraging.
- 6) Vicarious experience: athletes watching team mates, friends or significant others and utilising this as a source of confidence.
- 7) Coaches' leadership: sourcing confidence from the belief in the coach's skills at making successful decisions and leadership qualities.
- 8) Environmental comfort: confidence derived from a perception of comfort in a sporting environment, for example a comfortable, well acquainted soccer pitch may derive confidence for the athlete in the specific sporting environment.
- 9) Situational favourableness: the feeling that breaks and decisions are going in the athletes favour can derive confidence.

There have been various studies conducted within the sources of sport confidence construct. These studies have assessed high school and collegiate athletes (Vealey et al., 1998; Machida et al., 2011), master level athletes (Wilson et al., 2004) and rehabilitation athletes (Magyar and Duda, 2000) in relation to their derivation of the most important sources of sport confidence. These sources have been thoroughly examined and investigated by researchers (Bandura, 1997; Vealey et al., 1998; Vealey and Chase, 2008). For example a study by Hays et al (2007) led to the suggestion of the sources and types of confidence world class performers have. Analysis discovered their investigation a positive correlation

between previously researched sources (Vealey et al., 1998; Bandura, 1977) of sport confidence salient to non elite athletes and with their own upon world class athletes (i.e. elite athletes).

Vealey et al. (2001) categorised the sources into three domains; (1) achievement (mastery and demonstration of ability); (2) self regulation (physical and mental preparation and physical self presentation); and (3) social climate (social support, vicarious experience, coaches leadership, environmental comfort and situational favourableness). Sources of confidence, particularly those that are considered achievement related, might be better than others in nurturing levels of athletes' confidence (Machida et al., 2011). Vealey et al. (1998) assessed mastery, social support, physical preparation, and demonstration of ability to be the highest sources of sport confidence used by college athletes. Their study coincided with Bandura (1997) previous research that enactive mastery experiences are the strongest source of self efficacy. A study (Vealey et al., 2004) found that mastery and mental/physical preparation were the strongest sources of sport confidence compared to other sources. Wilson et al. (2004) investigation into sources of sport confidence by master athletes identifies physical/mental preparation to be the most important in relation to the other sources. The commonalties in the aforementioned studies can be interpreted as support for the integral importance self regulating behaviour and controlling cognitions (Wilson et al., 2004).

Despite a modest amount of research (Hayes et al., 2007; Kingston et al., 2010; Thomas et al., 2011), the research is limited upon the importance of the derivation of confidence for elite athletes. A study (Hayes et al., 2007) upon fourteen world class, male and female athletes investigated both types and sources of sport confidence. The study revealed that coach's feedback and positive reinforcement an imperative source of their confidence and all athletes believed performance accomplishments as the most powerful effects on confidence. The results reinforced the clear differences between gender and antecedents of confidence, however, the difference between elite and amateur athletes were not investigated.

2.4 MEASUREING SOURCES OF SPORT CONFIDENCE

Vealey and Chase (2008) foresaw the various differentiating measurement approaches to study sport confidence and represent a smorgasbord from which researcher can select in relation to their research purpose. Measuring sport confidence can be done quantitatively or qualitatively. Qualitative studies (i.e. Thomas et al., 2011; Vealey et al., 1998; Hayes et al., 2007) use deductive interviews of the already existing framework with the use of verbal descriptions which describe the manifestation of confidence (Vealey and Chase, 2008). Hayes et al. (2007) expressed the importance of inductive interviews as allowing important patterns or results of self confidence without presupposing what the important dimensions will be (Patton, 2002; Vealey and Chase, 2008). However the sample size and the time constraints of elite and amateur athletes resulted in this inductive approach being ignored in present study. Vealey and Chase (2008) suggested the inductive approach seemed to be a fruitful area of inquiry, due to the preponderance of deductive based research in this area, which coincides with the demand for increased holistic studies amounting to how the unique subculture of competitive sport influences sport confidence.

Consequently, sources of sport confidence in this study are measured quantitatively. Numerous inventories have been constructed to accurately measure sport confidence. For example, the Sport confidence Inventory (SCI) was developed as a multidimensional measure of sport confidence, which represented the athletes sport confidence in three areas: (1) physical skills and training, (2) cognitive efficiency, and (3) resilience (Vealey and Knight, 2002). However, one inventory has been developed to quantitatively measure the domains athletes use to source confidence. Vealey et al. (1998) developed the Sources of Sport Confidence inventory (SSCQ) to measure nine sources of sport confidence specific to an athlete's sporting environment. The questionnaire utilisation by previous researchers (Wilson et al., 2004; Kingston et al., 2010; Vealey et al., 1998; Machida et al., 2011) where their studies have been published suggested the SSCQ is trusted for measurement of the importance athlete places on the derivation of a source confidence. These studies vary in terms of sample; assessment of master athletes source confidence (Wilson et al., 2004), elite

athletes antecedents of confidence (Kingston et al., 2010; Hays et al., 2007), not forgetting derivation of collegiate athletes confidence (Vealey et al., 1998; Machida et al., 2012) among many more.

2.5 PURPOSE OF THE STUDY

Overall research has led to the belief athletes and coaches deem sport confidence an important psychological prerequisite to success in sport (Vealey and Chase, 2008). Durand-Bush et al. (2001) identified over half of their sample of elite, university and club athletes agreed that self confidence was crucial component linked with success. Self confidence can make the difference between successful and less successful athletes at elite level (Mahoney and Avenier, 1977), coinciding with collegiate or amateur athlete's determining self confidence to be the factor which separated success and failure (Gould et al., 1999), therefore the suggestion that elite and amateur athletes both deem sport confidence as an important factor to success. These studies as mentioned (Gould et al., 1999; Mahoney and Avenier, 1988) neglect the crucial factor of, where the successful athletes sourced their confidence in comparison to the unsuccessful athletes. Vealey et al. (1998) proposed there to be further investigation after their study imposed sources may change based on individual or contextual factors. In relation to the current study, there is insignificant research to examine differentiation between elite and non elite sources of sport confidence. The purpose of the study was to examine the sources of sport confidence between elite and amateur athletes, and to identify any differentiation between the two groups derivation of confidence.

The hypothesis of the investigation is the importance of the sources of sport confidence will differ for elite athletes and amateur athletes. Elite athletes will place greater importance upon sources in the performance accomplishment domain due to previous research (Kingston et al., 2010; Hayes et al., 2007), where as research (Bandura, 1977; Vealey et al., 1998; Vealey, 2004; Wilson et al., 2004).indicated amateur athletes will deem mastery and physical and mental preparation.

CHAPTER THREE

METHOD

CHAPTER THREE

METHOD

3.0 INTRODUCTION

Chapter three contains the methodology the study utilised for data collection and analysis. Firstly the chapter discusses the participants and progresses into the instrumentation applied. Secondly, the procedure the author exercised and the data analysis techniques will be described, explained and justified.

3.1 PARTICIPANTS

Following ethical approval and the provision of informed consent fifty male athletes aged between 18 and 30 years (22.56 ± 2.54) completed the study. The research excluded participants under the age of eighteen years after ethical consideration, and female athletes. Male athletes were specifically utilised since research (Jones et al., 1991; Woodman and Hardy, 2003; Craft et al., 2003) had noted that males show higher levels of confidence than females.

Elite athletes ($n=25$) were required to have competed and experienced professional or international competition. These athletes had between 1 and 11 years (2.36 ± 2.29) experience and included all team sport participants (Rugby, $n=16$; soccer, $n=8$; and cricket, $n=1$). In conjunction with elite athletes, amateur athletes ($n=25$) included were team sport athletes (Rugby, $n=9$; and soccer, $n=16$), and explicitly competed socially for between 2 and 12 years (4.28 ± 3.06). Convenient and purposive sampling located all participants through personal contacts of the author. The personal contact of the author located other athletes in their respective team, thus generating an excellent international and professional sample.

3.2 INSTRUMENTATION

The application of a valid recognised Sources of Sport Confidence Questionnaire (SSCQ; Vealey et al., 1998) ensured standardised and reliable data, assessed participants sources of confidence. The effectiveness in measuring sources of confidence using the SSCQ (Vealey et al., 1998) had been reinforced via previous research (Vealey et al., 1998; Feltz and Chase, 1998; Machida et al., 2011; Kingston et al., 2010). Gratton and Jones (2010) stated it's advantageous to exercise valid, existing scales and questions, especially designed to measure similar concepts of interest. The conceptual approach of the SSCQ was developed to measure nine sources of sport confidence, which athletes deemed as important derivation of confidence in competitive sport (Vealey et al., 1998). The questionnaire consisted of forty three items divided into nine subscales: Mastery (5), Demonstration of Ability (6), Mental and Physical Preparation (6), Physical Self Presentation (3), Support (6), Vicarious Experience (5), Environmental Comfort (4), Situational Favourableness (3), and Leadership (5). Participants were asked to indicate how important that particular question is in helping them feel confident in their sport, with the stem of "I feel self-confident in my sport when I...". Each participant answered each question on a Likert scale which assessed 1 to be "not at all important" up to 7 "of highest importance", allowing the respondents indication to the extent they agree with a certain statement. Subscales scores calculation formed as mean score of all items in each source measured.

Langdridge and Johnson (2009) expressed that psychometrics is an area of psychology concerned with the quality of the scales and items designed to measure psychological constructs, in two criteria's: reliability and validity. Internal reliability scores (Cronbach Alpha's) for the nine sources of sport confidence have been reported as acceptable. Vealey et al. (1998) disclosed internal reliability scores (Cronbach Alpha's) between 0.71 and 0.93, coinciding with Wilson et al. (2004) recording of 0.79 and 0.97 and Kingston et al. (2010) reported scores of between 0.75-0.96.

3.3 PROCEDURE

Voluntary participation was utilised in the study, while confidentiality was assured. The assurance was explained when subjects completed informed consent forms prior to completion of the SSCQ, whilst addressing all the rights the participants possessed.

Following successful discussions and meetings with local coaches; potential amateur participants were invited to their next training session thirty minutes early to complete the study. The author's aims of increasing the knowledge and understanding between elite and amateur athlete's sources of sport confidence was explained, providing athlete's the opportunity to ask questions on the study. Before distribution of each questionnaire to the athletes, the age and amateur experience were recorded on their questionnaire by the author. The amateur subjects completed the SSCQ, whilst promoting the athletes to answer honestly, as there was no right or wrong answers. The temporal amateur data collection consisted of two evenings.

Elite sampling involved the studies confidentiality and rationale being confirmed by the author through phone calls, allowing the opportunity for questions. The contacts were asked to complete the SSCQ before normal training. Permission was granted with the three contacts and fifteen research packets were mailed to each contact. A single research packet contained the SSCQ, informed consent form, and a pre paid self addressed stamped envelope. The contact participated in the study and identified further potential participants, their team mates, which exposed the author to snowball sampling. This approach can be seen as a purposive sampling, which is useful when there are difficulties identifying members of the population (Langdrige and Johnson, 2009). A total of 45 research packets were sent to three different elite contacts, resulting in a total of 24 (53%) packets were returned. The sample consisted of 8 footballers and 16 rugby players. The final elite athlete (n=25) was contacted by telephone and agreed to participate in the study. The phone call contained the same aforementioned information as previous contacts. This elite cricketer received one research packet by delivery to his home. The research packet contained the same material as the football and rugby participants, and upon completion, mailed to the author. The temporal frame

in which the author secured all twenty five elite SSCQ's manifested over a two month period.

Subject's data was explicitly not collected prior or directly after a match, thus avoiding contextual influence. Consequently, avoiding emotional influence of the subject's situation prior or post game, potentially damaging data as subjects inaccurately responds to the questionnaire.

3.4 DATA ANALYSIS

Once collected, SSCQ data calculation was generated by equating mean scores for each of the nine sources. The nine subscales (sources) are Mastery (5 items), Demonstration of Ability (6 items), Mental and Physical Preparation (6 items), Physical Self Perception (3 items), Support (6 items), Vicarious Experience (5 items), Environmental Comfort (4 items), Situational Favourableness (3 items), and Leadership (5 items). The mean of each subscale were separated into elite and non elite.

Field (2009) stated the questionnaire should consistently reflect the construct its measuring, likewise Tabacknick and Fidell's (1996) recommended actions reported the necessity for data to be pre-screened for internal reliability and statistical assumptions. Internal reliability scores were calculated for each dimension of the SSCQ in the form of Chronbach alpha coefficients. In line with previous research that has calculated these to assess reliability in sport psychology related studies (Vealey et al., 1998; Wilson et al., 2004; Kingston et al. 2010). Nunnally's (1978) of 0.7 to 0.8 were used and redeemed acceptable for Chronbach's Alpha values, substantially lower indicate unreliable scales

Primary analysis involved a one way ANOVA test. The one way ANOVA was used to analyse the variance between an independent variable (elite and non elite), specifically designed for the comparison of each subscale mean between elite and non elite athletes. ANOVA represented this as the F-ratio. ANOVA also determined any significant difference between elite and non elite groups. Consequently, ANOVA produces a significant difference result, which expresses

the likelihood of the F-ratio occurring by chance. Field (2000) states social scientists use a cut off point of 0.05 as their criterion for statistical difference.

Homogeneity of covariance were analysed via ANOVA and the output presented as Levene's significant difference (see table 1.0). Field (2000) stated this test is useful to test null hypothesis, that the variances of the groups are the same. In this case, Levene's test, tested whether the variances between the elite and non elite sources of sport confidence. Levene's test led to no significant differences of variances. Analysis of statistics was carried out using SPSS, due to the software quickly and accurately performing statistical functions.

CHAPTER FOUR

RESULTS

CHAPTER FOUR

RESULTS

4.0 INTRODUCTION

This chapter provides the results of the data collected of both elite and non elite athletes. The chapter contains three sub headings: Internal reliability and covariance, one way ANOVA results and descriptive results.

4.1 INTERNAL RELIABILITY AND COVARIENCE

Internal consistency reliability scores for each source are represented in table 1.0; all of the subscales except environmental comfort exceeded Nunnally (1978) criteria of .70 for alpha. The alpha criteria of environmental comfort was .532; following analysis of individual item scores, question 14 was removed; this realised an alpha reliability score of .0809 within the environmental comfort subscale thus reaching the required subscale. Consequently all source alpha scores were of an acceptable level (.711 to .920).

Following alpha results, tests of homogeneity of covariance (see table 1.0) reached acceptable levels ($>.05$) according to Levene's test. As shown in table 2.0, situational favourableness tests of covariance revealed (.07) slightly above the acceptable level. Situational favourableness has not violated one of the assumptions of ANOVA; however the subscale would need to be approached with caution, with Field (2000) suggesting in these circumstances it is well advised to report Levene's test, allowing researchers accessibility of the accuracy of the results.

Table 1.0 SSCQ Coefficient Alphas and Levene's Significant Difference Scores

Source	Levene's Significance Difference	Alpha Scores
Mastery	.869	.74
Demonstration of Ability	.255	.75
Mental /Physical Preparation	.627	.74
Situational Favourableness	.071	.71
Leadership	.310	.92
Environmental Comfort	.316	.91*
Vicarious Experience	.099	.82
Social Support	.461	.89
Physical Self-Presentation	.705	.79

Note. *= Source altered to improve alpha score.

SSCQ = Sources of Sport Confidence Questionnaire.

4.2 ANOVA RESULTS

One way ANOVA results discover there are significant differences between groups (elite and non elite) when comparing subscales. Results indicate elite and non elite athletes have four out of nine significantly different sources of sport confidence. The significant difference results occur between groups for Mastery $F = 4.809, p = .033$; Leadership $F = 9.307, p = .004$; Support $F = 7.921, p = .007$ and Physical Self-Presentation $F = 5.143, p = .028$.

Table 2.0 represents SSCQ results of ANOVA F ratio, Significant Differences between the two groups, also mean scores for elite and non elite athletes.

Source	F Ratio	Significant Difference	Elite Mean Scores	Amateur Mean Scores
M	4.809	.033*	26.08	24
DOA	2.392	.129	33.24	31.44
MaPP	.341	.562	31.6	30.8
SF	.140	.710	12.48	12.8
L	9.307	.004*	25.92	21.84
EC	1.636	.207	14.88	15.84
VE	2.465	.123	24.48	22.64
S	7.921	.007*	35.44	31.16
PSP	5.143	.028*	13	10.64

Note. * = Significant difference > .050.

SSCQ = Sources of Sport Confidence Questionnaire.

M= Mastery, DOA= Demonstration of Ability, MaPP = Mental and Physical Preparation, SF= Situational Favourableness, L= Leadership, EC= Environmental Comfort, VE= Vicarious Experience, S= Support, PSP= Personal Self-Perception.

4.3 DISCRIPTIVE RESULTS

Coinciding with ANOVA results found significantly different means between elite and non elites sources (see figure 1). These sources are mastery, leadership, support and personal self-perception therefore it's important too see where descriptively these differences occur. Mastery results indicated that elite athletes viewed mastery as higher importance as a source of sport confidence compared to amateur. Likewise, elite athletes deemed coaches leadership to be significantly more important when compared with non elite athletes. Social support results also manifested in elite athletes indicated they deem the support source of confidence as the highest out of the nine sources, and significantly more important than non elite athletes. Finally, when comparing the means of sources, Physical Self-Perception is deemed the least important source of confidence by both elite and non elite athletes. However, elite participants viewed the physical self-presentation as significantly more important than non elite athletes. Overall, both elite and non elite participants rated demonstration of ability ($m= 32.34$), Mental and Physical Preparation ($m= 31.20$) and Support ($m= 33.30$) as the most important sources of sport confidence. Consequently, both athlete group deemed Situation Favourableness ($m= 12.64$), Environmental Comfort ($m= 15.36$) and Physical Self-Perception as the least important sources.

CHAPTER FIVE

DISCUSSION

CHAPTER FIVE

DISCUSSION

5.0 INTRODUCTION

This chapter discusses the results following the application of Vealey et al. (1998) sources of sport confidence questionnaire. The purpose of the study was to identify and compare the salience of the nine sources of sport confidence between elite and non elite athletes. This study differentiated from previous studies, specifically comparing elite and amateur competitive levelled athletes. Previous studies have researched elite athletes (exemplified by Hayes et al., 2007; Kingston et al., 2010) and non elite (Vealey et al., 1998; Wilson et al., 2004) separately rather than in a comparative study designs. Despite five of the sources finding insignificant importance ratings between the two groups, the chapter begins with significant differences discovered being discussed regarding mastery, coach's leadership, social support and physical self-presentation sources. Secondly, the chapter continues, utilising a general discussion relating to previous research upon each source. Finally, practical and theoretical implications, limitations and future research into sport confidence will be discussed.

5.1 ELITE AND AMATUER SIGNIFICANT DIFFERENCES

In the present investigation significant differences developed between how each group rank the different sources of confidence. The significant differences were associated with mastery, coach's leadership, social support and physical self presentation.

Elite and amateur athletes acknowledged social support as a high source of confidence yet significant differences between the two groups were reported. Elite athletes viewed social support as a higher derivation of confidence as opposed to amateur athletes. The suggestion according to Bandura (1977) self efficacy theory, the placement of a significantly higher importance on social support provided evidence for elite athletes requiring higher levels of verbal persuasion from coaches and significant others when compared to amateur athletes. The

verbal and social persuasion is a form of support, when significant others place support or faith in the capabilities of the athlete (Vealey and Chase, 2008). Elite athletes have added stressors at professional and international levels, amateur athletes would not face. Research into stress suggests that higher levels of performance, provokes more organisational stressors in day to day lives (Hanton et al., 2005). Therefore, high social support is regarded as an excellent coping strategy when athletes are faced with competitive stressors (Gould et al., 1999; Rees, 2007), and as a result unsurprising elite athletes in this study deemed social support as significantly higher than amateur athletes. Previously conducted research provided support for the study that elite athletes deemed social support as an integral source of confidence (Hayes et al., 2007; Kingston et al., 2010). However, Kingston et al. (2010) investigation indicated support was an important source but disputed that elite athletes ranked this source as the highest derivation of confidence, where their elite athletes viewed achievement based sources, such as mastery, as the highest sources of confidence. The present study coincides with research (Vealey et al., 1998; Hayes et al., 2007) identifying social support to be an important source of confidence to collegiate and elite athletes respectively. Vealey et al., (1998) research upon college athletes (non elite) would certify why non elite athletes in this study, portrayed support as the second highest rating of importance. The provision of evidence from this study and research (Kingston et al., 2010; Vealey et al., 1998; Machida et al., 2012; Hayes et al., 2007) suggested that elite and non elite athletes regard social support as a high source of confidence. Therefore, for both elite and amateur athletes maintaining a high level of social support as a source of confidence for an athlete is integral for successful athletic performance, whether emotional, tangible or informational. Overall, the significant difference of groups indicated increased support for elite athletes in relation to family, friends, medical staff, relatives, coaches and team members is imperative to nullify potential stressors and increase confidence levels.

Despite the amateur athletes recognising coach's leadership in this study and in research (Vealey et al., 1998) as a source of confidence, the source was ranked the sixth most important source for this group, creating a significant difference between elite and amateur athletes. Therefore the suggestion can be made that elite athletes place a higher importance upon their coach to lead them

successfully to elicit positive confidence results. The study is consistent with elite athlete research (Kingston et al., 2010) where elite athletes viewed leadership as the fifth ranked important source of confidence.

Mastery subscale analysis, led to significant differences occurring between elite and amateur athletes. Elite athletes deemed mastering or improving skills of higher importance than amateur athletes. This coincided with previous research (Kingston et al. 2010; Hayes et al. 2007) where professional and international athletes deemed mastery to be of high importance and integral for success. Vealey et al. (1998) suggested the derivation of confidence from mastery sources provided stable confidence levels, thus mastery being a larger influence upon confidence stability levels for elite athletes, as opposed to amateur athletes. The study uncovered the perception of elite athletes to demonstrate competence in their sport is higher than amateur athletes. A study from Mallet and Hanrahan (2004) equated in elite athletes success being positively influenced by their perception of competence in their sport (i.e. competence or mastery skill levels), which provides increased effort (Duda et al., 1995). In summary, elite athletes therefore perceived mastery as an important source of confidence in which competence influences effort and stability of confidence levels. However, the study also noted non elite athletes also rated mastery as an important source of confidence, but significantly less than elite athletes.

The final source of confidence subscale equating significant differences between both athletes groups was physical self presentation. Both athlete groups, regardless of significant difference, rated physical self presentation as a source of confidence very low. This coincided with previous elite research where physical self presentation was suggested not to be an important source of confidence (Hayes et al., 2007; Kingston et al., 2010). Initially the elite athletes significantly higher importance rating upon physical self presentation is supported by Vealey et al. (1998) prediction that professional or international athletes viewed their body composition of significant importance due to the elite sporting nature that they are exposed to, thus indicated why elite athletes viewed physical self presentation as a significantly higher source than amateur athletes in this study. Perhaps due to the increased pressures from media, spectators and coaches for elite team sport athletes, where as amateur athletes would not have these pressures. For

example, Hanton et al. (2005) stated that elite athletes suggested body image and physical presentation can be a significant stressor upon performance; reinforcing the importance for the athlete to present themselves physically to their own perceived satisfaction.

The study indicated two (social support, coaches leadership) of the five sources under the social climate domain, were ranked significantly higher for elite athletes when compared with amateur athletes. Thus, roughly the results indicated elite athletes deem social climate, if manipulated correctly, as extremely more important sources of confidence. The study speculatively suggested the significant higher ratings elite athletes placed upon specific sources of confidence provided support for previous investigations (Woodman and Hardy., 2003; Jones et al., 1991; Craft et al., 2003) which lead to the belief elite athletes posited higher levels from confidence research than amateur athletes. However, these results would be approached with caution as this is purely speculative, as confidence levels were not measured.

5.2 GENERAL DISCUSSION

The focus of the current study, was to identify the elite and amateur significant differences of sources of sport confidence, in spite of this, the results have also furthered research literature in the general sources of sport confidence (see, for example, Bandura 1977; Vealey et al., 1998; Hayes et al. 2007; Kingston et al., 2010; Machida et al., 2012). Yet, all these results should be approached with caution as no significant differences were found between subscales.

The results indicated, theory, some support for Bandura (1977) self efficacy theory. Bandura (1977; 1998) implied verbal persuasion from coaches and significant others would enhance one's self efficacy. This verbal and social persuasion is a form of support, when significant others express faith in or support for ones capabilities (Vealey and Chase, 2008). Elite athletes in the current study also deemed vicarious experience of slightly higher important source of confidence as opposed to amateur athletes; however analysis showed no support for a significant difference. According to Weinberg and Gould (2011) vicarious

experience is based upon demonstrating an ability, to help learn or improve skills. This provided support for Bandura (1977) suggestion that vicarious experience of an athlete is an important predictor of self efficacy, due to both athlete groups deeming this source as vital for deriving confidence. The aforementioned findings indicated elite and non elite athletes portray both vicarious experience and verbal/social persuasion (support) as important sources of sport confidence, also supporting the self efficacy predictors by Bandura (1977; 1998).

The study reported mastery, mental and physical preparation, demonstration of ability and support were the top four sources of sport confidence for both elite and amateur athletes. This gathers support for Vealey et al., (1998) model of sport confidence; in particular the sources of sport confidence, where their results similarly indicated mastery, social support, physical/mental preparation and demonstration of ability were among their top five sources of sport confidence.

The results of the investigation led to no significant differences being discovered for demonstration of ability, therefore the results could be considered problematic. Vealey et al. (1998) study reinforced demonstration of ability as an important source of confidence among athletes, for example; an athlete demonstrating higher level of skills and ability over opponents. Vealey et al.'s (1998) investigation utilised amateur collegiate athletes which provided support for this study that non elite athletes the most important source of confidence was demonstration of ability. In this study, elite athletes considered demonstration of ability as the second highest source of importance, behind social support source. Researchers have also indicated elite performer's demonstration of ability as a highly integral source to have. For example Kingston et al. (2010) study upon a temporal examination of elite sources of sport confidence, demonstration of ability was ranked as the single most important source of sport confidence for elite athletes, reinforcing elite athletes seek to show competence over their opponent. Both studies (Vealey et al., 1998; Kingston et al., 2010) indicate the appearance of demonstration of ability is integral as a source of confidence for elite and amateur athletes. The competitive environment both elite and amateur athletes are in would suggest athletes usually draw self and social comparisons, to equate their capabilities. Thus, the concerns over purely speculative discussion, has been reinforced positively by research (Vealey et al., 1998; Kingston et al., 2010),

therefore overall demonstrating one's ability against a team mate or opponent positively would facilitate sports confidence whether elite or amateur.

The study established no significant differences between elite and amateur athletes in physical and mental preparation; however both deemed the sources as integral for confidence. This corresponds with and compares with previous studies on elite and amateur athlete's sources of confidence. Hayes et al. (2007) study upon sources of sport confidence identified by world class athletes led to elite athletes to specifically highlight preparation as an important source of confidence. However, their qualitative study included a multifaceted (physical, mental and holistic) preparation based upon Greenleaf (2001) study upon Olympians. This differentiates from this study, in the sense that we did not use any holistic questions upon preparation as a subscale, however its identification of mental and physical preparation is a direct comparison. Kingston et al. (2010) also supports the increasing evidence that preparation both physical and mental as imperative, as it was consistently ranked as the second highest source of confidence. Vealey et al. (1998) study where amateur, collegiate athletes identified preparation physically and mentally as an important source of confidence, which provided support for the current study where non elite athletes deemed physical and mental preparation as an essential source of confidence. The significance of this research for coaches is the provision of correct preparation both physically and mentally for their athletes to increase confidence, thus increasing performance levels. Greenleaf et al., (2001) stated great importance from Olympic athletes was specifically placed upon mental preparation, with all of the athletes reporting utilisation of some mental preparation and the positive impact upon they deem it have upon performance. Therefore both coaches and psychologists should focus on psychologically preparing athletes for optimum performance. In spite of this, the results in this study should be approached with caution, due to no significant differences being discovered on analysis. Consequently though, previous research justified the suggestion of mental and physical preparation as an integral source of confidence.

Results indicated that Situational Favourableness, Personal Self Presentation and Environmental Comfort were deemed as the lowest sources of sport confidence by elite and non elite athletes. Therefore, it can be suggested that coaches and

psychologists focus their attention upon the sources the athletes derive the most confidence (Support, Demonstration of Ability and Mental and Physical Preparation). An athlete's favoured situation as a source of confidence found no significant differences between groups, and was deemed as the least important source of confidence for elite and amateur athletes. Therefore conclusions can be drawn that elite and amateur athletes do not believe that situational specific favourableness has an effect upon confidence or performance, contradicting previous research (Vealey et al., 1998). Studies (Kingston et al., 2010), indicating that elite athletes do not deem this as a high source of confidence. Finally, environmental comfort was considered by both elite and non elite athletes as a less important derivation of sport confidence compared to other sources (e.g. social support, mental and physical preparation and coach's leadership).

The study provided some support for Vealey et al. (1998) claim confidence sources based upon controllable factors (e.g. mastery, physical and mental preparation) should facilitate sport confidence, as opposed to uncontrollable sources acting as a debilitating influence, such as environmental comfort and demonstration of ability. As aforementioned, athletes deemed mastery and physical and mental preparation of higher importance than environmental comfort, with elite athletes placing a greater importance upon mastery than non elite athletes.

5.3 PRACTICAL IMPLICATIONS

This section discusses the practical implications that the results have discovered for athletes, coaches and psychologists.

Similarities between both groups discovered every skill level athlete deemed sourcing confidence from demonstration of ability, support, mental and physical preparation as highly important. Finally, the results indicated that all athletes deem sources under the achievement domain as important, specifically demonstration of ability. Machida et al. (2011) stated that achievement related sports confidence is more facilitative than other sources at nurturing levels of confidence, thus unsurprisingly, the coach has a significant role to play in both training and

matches to create an achievement environment (Hughes et al., 2007), exemplified by performance related scenarios in training. The study also discovered that self regulated sources of confidence are important, however both athletes, dismissed physical self presentation as an important source of confidence. However, mental and physical preparation is deemed to be an integral source of confidence for an athlete to derive confidence. Vealey (2001) evoked self regulation is the how one controls thoughts, feelings and behaviours. Therefore, the importance of maintaining and enhancing this source of confidence for elite and amateur athletes is a challenging but important factor the coach or psychologist must strive to achieve. The last domain Vealey (2001) stated was a successful social climate. The study indicated two (social support, coaches leadership) of the five sources under the social climate domain, being ranked significantly higher for elite athletes when compared with amateur athletes. Thus the results indicated elite athletes deem social climate, if manipulated correctly, as an extremely important source of confidence. Kingston et al. (2007) stated ensuring effective social support is important in terms of the athlete's perception of the coping resources available enabling the athlete to cope with the varied demands. Social support results are consistent with research (Hayes et al., 2007; Vealey et al., 1998), but are disputed when compared to temporal research of elite sports performers (Kingston et al., 2010) where athletes viewed social support as a less important source than achievement sources (i.e. mastery).

The practical implications due to the results of the research question, now allows coach's to implement interventions based upon the athletes competitive skill level. Elite athletes viewed mastery, support, coach's leadership and physical self presentation as of a higher importance than non elite athletes. Therefore conclusions can be made that elite coaches and practicing psychologists should provide psychological skills and coaching strategies, to enhance these sources of confidence. However, caution is needed focusing upon specific sources and neglecting others, as all athletes viewed each source of some importance, but some higher than others. It is also unwise to assume that athletes only rely on these sources as their derivation of confidence, as previous qualitative studies (Hayes et al., 2007) indicated other sources not included in the SSCQ (Vealey et al., 1998) have been identified.

Despite the similarity between Vealey et al. (1998) study, that athletes placed a higher importance on controllable sources (i.e. mastery and physical and mental preparation) than uncontrollable sources (i.e. environmental comfort), the study argues that Vealey et al. (1998) suggestion is not entirely accurate, in the sense athletes deemed an uncontrollable source, demonstration of ability, as the second most important source of sport confidence. Consequently the suggestion that athletes do not view an uncontrollable source as important as controllable sources is disputed and interestingly for both athletes, regardless of skill level. This provided evidence that coach's should equally focus upon both uncontrollable and controllable sources to enhance or maintain confidence. However caution will be needed with this discovery, due to the quantitative nature of the study, the suggestion athletes deem demonstration of ability as a facilitator to sport confidence based upon them placing the source high in importance is based upon a suggestion, coinciding with no significant differences being discovered for this subscale.

The elite athletes viewed coach's leadership as significantly more important source than amateur athletes provided practical implications for coach's, athletes and consulting psychologists. The suggestion that elite athletes should be provided with added confidence from the leadership qualities from the coach are integral. Elite male athletes therefore sourced their confidence from the belief in their coach to lead the athletes to successful, efficient training programs (Hayes et al., 2007). This is congruent with Fletcher and Arnold (2011) study upon the importance of Olympic performance related leadership, where the investigation concluded leadership involving elite sports teams is a multifaceted phenomenon, where the leader would need to create vision, lead athletes and mould a successful culture. The findings from confidence research and leadership research that elite coaches would focus upon leading their athletes successfully by building loyalty to their organisation or club and achievement of goals, coaches need to refine their leadership talents (Marken, 2009). In time coaches could use a variety of different leadership styles to maintain confidence and portray leadership qualities which instils increased athlete self confidence.

As noted, elite athletes placed a significantly more important rating upon physical self presentation, thus the suggestion coaches would need to derive higher levels

of confidence from this subscale, as opposed to amateur athletes. From a purely practical application, the study did not incorporate individual sport athletes. Interestingly, Vealey et al. (1998) study equated in individual sport athletes reporting greater emphasis upon their physical presentation, indicating the resultant differences between the current study, where every athlete participated in team sports. However, Hayes et al. (2007) sample utilised 86% individual sport athletes and contradicted Vealey et al. (1998) suggestion there are physical self presentation differences between team sports and individual sports. The skill level of both the college and amateur athletes in the current study are similar, thus the suggestion that skill level would not influence the importance of self presentation as a source, rather the environment. The aesthetic pressure collegiate athletes potentially face, could be higher than elite and amateur athletes, due to their environment. The importance of the collegiate coach to provide self confidence derivation by creating an environment where the athletes physically present themselves positively, would be beneficial to confidence.

5.4 LIMITATIONS AND FUTURE RESEARCH

The nature of the study required quantitative data collection due to the accessibility of fifty elite and amateur athletes, thus postal questionnaires were sent to the contact inside the elite clubs. The postal questionnaire allowed the collection of data from a geographically dispersed sample group at a much lower cost than interviewing a sample (Gratton and Jones, 2010). In addition there was limited opportunity to introduce bias to the results, which may have been the case with interviews. The use of postal questionnaires is an area of research where results are to be approached with caution. Both elite and amateur athletes, despite asking for honest answers, the questionnaire is vulnerable to lack reliability due to time constraints and honesty of answers. A qualitative study by Hayes et al. (2007) upon sources and types of confidence in world class athlete incorporated interviews as a measure. The interview process resulted in their study highlighting sources which have not been recognised by researchers thus far, including innate ability, trust and holistic preparation as important sources of confidence, thus further research qualitatively to identify if there are any other important sources of

sport confidence. Further sources being identified by elite and amateur athletes were unable to transpire due to quantitative nature of the study. Duplication of Hayes et al. (2007) study was seen as too difficult due to implications of inaccessibility, financial constraints, and geographical distance of researcher and elite athletes. Therefore an area of future research could be to access a similar sample size (n=50) qualitatively, incorporating interviews to identify further sources. The quantitative investigation also led to significant limitations in terms of retrospective answers. The SSCQ required the participants to answer based upon when they felt very confident in their sport. Retrospective data collection is restricted due to athletes inaccurately reflecting upon how they felt at that particular time, thus temporal confidence scores should be applied and compared for elite and amateur participants. Finally, the sample size of team sports participants was relatively small, therefore the results cannot be generalised to the whole of the team sport populations.

As a consequence of the quantitative research design, there are implied implications concerning the link between the self efficacy predictors and the sources viewed as important in this study. Initially, despite creating the links between efficacy predictors and confidence sources, the results do not show where, when and from whom support and verbal/social persuasion manifests. Secondly, vicarious experience would have a less of an impact upon self efficacy as opposed to past performance accomplishments, coinciding with the results of vicarious experience being approached with caution, as no significant differences between elite and non elite athletes according to ANOVA under 0.05 were discovered.

An obvious limitation of the study is the incorporation of only team sport participants. The questionnaires were completed by elite and amateur rugby, football and cricket players, therefore the results cannot be generalised to individual sport athletes. The research aforementioned in the study (Kingston et al., 2010; Hayes et al., 2007) predominantly utilised only individual sport athletes and were compared to the authors team sport participants therefore the study provided support that there are similarities and differences between individual and team sport participants. A future area of research would be the comparison of confidence sources between athletes involved in a team and athletes competing

individually, thus furthering coaches and psychologists applied application of interventions.

Despite research (Vealey et al., 1998) discovering college do find environmental comfort as a source of confidence, the assumption made in the study collegiate athletes find their environment more pressured due to looking good is merely a suggestion. Admittedly, this suggestion is a future area for research, to see if there physical self presentation differentiates between collegiate and amateur athletes. Chronbach Alpha reliability test revealed environmental comfort to have a low reliability score. Removal of one item resulted in the reliability and validity scores increasing, thus providing the justification for removal. However the results from this subscale need to be approached with caution. Due to the removal of one item, the subscale is limited with its comparison to previous literature.

Finally, the current study discovered differences and similarities between elite and amateur skilled athletes; however their overall confidence levels were not accounted for. There is a potential for an argument that if the study could be stronger in nature, if confidence levels were considered. Potentially there is link between how confident an athlete is, and which source they deem most important. Therefore from a practical view point, coaches and psychologists could discover if the athletes are not confident, is this because the athletes are deriving their confidence from weaker confidence sources as stated by previous research. For example, this study and research (Kingston., 2010; Vealey., 1998; Hayes et al., 2007; Machida. 2011) indicate all skill level athletes see the importance support as a source of confidence, therefore if a study revealed significant differences between low social support and negative confidence levels, interventions could be implemented to increase social support.

Situational favourableness as a source should be approached with caution, as results from the covariance tests revealed that the source passed by a small margin. Research indicates (Wilson et al., 2004) that situational favourableness items can be problematic, due to the lack of clarity certain items provided. Despite Wilson et al. (2004) investigation being upon master athletes, clarity over items in this subscale should be provided, exemplified by "feel everything is going right". This subscale is very vague, and specifics on the exact source of 'what is going

right' needed to be provided, perhaps by increasing the number of questions in the subscale.

CHAPTER SIX

CONCLUSION

CHAPTER SIX

CONCLUSION

6.0 CONCLUSION

In conclusion, the investigation examined the differences of sources of sport confidence identified by elite and non elite athletes. Significant differences were discovered between the sample groups. The study noted elite athletes significantly derive more confidence from social support, coach's leadership, mastery and physical self presentation when compared to the amateur athletes. Therefore, the provision of enhancing or maintaining confidence derivation through these four sources is integral for elite coaches and psychologists. The conclusion can be drawn that elite athletes place of the derivation of confidence from the social climate domain (i.e. coach's leadership and support) higher than amateur athletes. Therefore, support for psychologist consultant to evidently to enhance and protect athletes sources of confidence are warranted (Hayes et al., 2007), targeting social climate. Results descriptively however the study suggested that both elite and non elite athletes deem preparation, coach's leadership and the demonstration of their ability to be the highest sources of confidence, although descriptive results are to be approached with caution as no significant differences were discovered. As there is little research directly comparing elite and amateur sources of confidence in one study, further duplication of this study is merited. Research should also consider what effect these sources have upon confidence levels. For example, if an athlete is sourcing physical self presentation as highly important and confidence levels are dwindling, comparisons between confidence levels and what source potentially, is causing this level of confidence can be made.

REFERENCE

REFERENCE LIST

Bandura, A. (1977). Self-Efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, **84**, 191-195.

Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory*. NJ: Prentice Hall.

Bandura, A. (1997). *Self Efficacy: The Exercise of Control*. New York: Freeman.

Craft, L., Magyar, T., Becker, B., and Feltz, D. (2003). The relationship between Competitive State Anxiety Inventory-2 and sport performance: a meta analysis. *Journal of Sport and Exercise Psychology*, 44-65.

Duda, J.L., Chi, L., Newton, M.L., Walling, M.D., and Catley, D. (1995). Task and ego orientation and intrinsic motivation in sport. *International Journal of Psychology*, **26**, 40-63.

Durand-Bush, N., Salmela, J.H., and Green-Demers, I. (2001). The Ottawa Mental Skills Assessment Tool (OMSAT-3). *The Sport Psychologist*, **15**, 1-19.

Feltz, D.L. and Chase, M.A. (1998). The measurement of self efficacy and confidence in sport. In Duda (Ed.), *Advances in sport and exercise psychology measurement*, 65-80. Morgantown, WV: Fitness information technology.

Feltz, D.L., and Riessinger, C.A. (1990) Effects on In vivo emotive imagery and performance feedback on self-efficacy and muscular endurance. *Journal of Sport and Exercise Psychology*, **12**, 132-143.

Field, A.P. (2000). *Discovering statistics using SPSS for Windows: advanced techniques for the beginner*, London, Sage Publications.

Field, A.P. (2009). *Discovering statistic using SPSS: (and sex and drugs and rock 'n' roll)*. Los Angeles, Sage Publications.

Fletcher, D. and Arnold, R. (2011). A qualitative study of performance leadership and management in elite sport. *Journal of Applied Sport Psychology*, **23**, 223-242.

Gayton, F.W., and Nickless, J.C. (1987). An investigation of the validity of the trait and state sport-confidence inventories in predicting marathon performance. *Perceptual and Motor Skills*, **65**, 481-482.

Gould, D., Weiss, M.R., and Weinberg, R. (1981). Psychological characteristics of successful and non successful Big Ten wrestlers. *Journal of Sport Psychology*, **3**, 69-81.

Gould, D.R., Guinan, D., Greenleaf, C., Medbury, R., and Peterson, K. (1999). Factors affecting Olympic performance: Perceptions of athletes and coaches from more and less successful teams. *The Sport Psychologist*, **13**, 371-394.

Gratton, C., and Jones, I. (2004). *Research Methods for Sports Studies*, Second Edition: USA. Routledge.

Greenleaf, C., Gould, D., and Dieffenbach, K. (2001). Factors Influencing Olympic Performance: Interviews with Atlanta and Nagano US Olympians. *Journal of Applied Sport Psychology*, **13** 154-184.

Hanton, S., Fletcher, D., and Coughlan, G. (2005). Stress in elite sport performers: A comparative study of the competitive and organisational stressors. *Journal of Sports Sciences*, **10**, 1129-1141.

Hays, K., Maynard, I., Thomas, O., and Bawden, M. (2007). Sources and types of confidence by world class sport performers. *Journal of Applied Psychology*, **19**, 434-456.

Hughes, M., Jones, L.R. and Kingston, K. (2007) *An introduction to sports coaching: from science and theory to practice*. New York, NY: Rutledge.

Jones, G., and Hanton, S. (2001). Precompetitive feeling states and directional anxiety interpretations. *Journal of Sports Sciences*, **19**, 385-395.

Jones, G., Swain, A., & Cale, A. (1991). Gender differences in precompetition temporal patterning and antecedents of anxiety and self-confidence. *Journal of Sport and Exercise Psychology*, **13**, 1-15.

Kingston, K., Lane, A., and Thomas, O. (2010). A temporal examination of elite performers sources of sport confidence. *The Sport Psychologist*, **18**, 313-332.

- Machida, M., Ward, M.R., and Vealey, R. (2012). Predictors of sources of self confidence in collegiate athletes. *International Journal of Sport and Exercise Psychology*, **10**, 172-185.
- Maddux, J.E., and Lewis, J. (1995). Self-efficacy and adjustment: Basic principles and issues. In: Maddux, J.E. (ed.'s). *Self-Efficacy, Adaptation, and Adjustment: Theory Research and Application*. New York: Plenum Press.
- Magyar, T.M., and Duda, J.L. (2000). Confidence restoration following athletic injury. *The Sport Psychologist*. **14**, 372-390.
- Mahoney, M.J. and Avenener, M. (1977). Psychology of the elite athlete: An exploratory study. *Cognitive Therapy and Research*, **1**, 135-141.
- Mallet, C., and Hanrahan, S. (2004). Elite athletes: Why does the fire burn so brightly? *Psychology of Sport and Exercise*, **5**, 183-200.
- Marken, R.S. (2009). You say you had a revolution: Methodological foundations of closed-loop psychology. *Review of General Psychology*, **13**, 137-145.
- McAuley, E. (1985). Modelling and self efficacy: A test of Bandura's model. *Journal of Sport Psychology*, **7**, 283-295.
- Moritz, S.E., Hall, C.R., Martin, K.A., and Vadocz, E. (1996). What are confident athletes imaging: An examination of image content. *The Sport Psychologist*, **10** 171-179.
- Nunnally, J.C. (1978). Psychometric theory. New York: McGraw-Hill.
- Patton, M.Q. (2002). Qualitative Research and Evaluation Methods (3rd ed.). Thousand Oaks, CA: Sage.
- Rees, T. (2007). Influence of social support on athletes. In Jowett, S. and Lavallee, D (Eds.). *Social psychology in sport*, 223-231, Champaign, IL: Human Kinetics.
- Short, S., and Ross-Stewart, L. (2008). A review of self efficacy based interventions. In: Mellalieu, S.D., and Hanton, S (ed.'s). (2009). *Advances in Applied Sport Psychology*. Routledge. London.

Sport Psychology Quotes. [online] Available at: <<http://sportpsychquotes.wordpress.com/tag/confidence/>> [Accessed 15 March 2013].

Tanachnick, B., and Fidell, L. (1996). Using multivariate statistics. London: Pearson.

Thomas, O., Lane, A., and Kingston, K. (2011). Defining and contextualising robust sport confidence. *Journal of Applied Sport Psychology*, **23**, 189-208.

Vargas-Tonsing, T.M., Myers, N.D., and Feltz, D.L. (2004). Coaches and Athletes Perceptions of Efficacy Enhancing Techniques. *Sport Psychologist*, **18**, 397-414.

Vealey, R.S. (1986). Conceptualization of sport confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport Psychology*, **8**, 221-246.

Vealey, R.S., and Chase, M. (2008). Self-Confidence in Sport. In: Horn, S. T. (eds.) *Advances in Sport Psychology*. USA: Human Kinetics.

Vealey, R.S., and Knight, B.J. (2002). *Multidimensional sport confidence: A conceptual and psychometric extension*. Paper presented at the Association for the Advancement of Applied Sport Psychology Conference, Tucson, AZ.

Vealey, R.S., Chase, M.A., Magyar, T.M., and Galli, N. (2004). *Sources and levels of confidence in female athletes: Age related and seasonal influences*. Paper presented at Association for Advancement of Applied Sport Psychology Conference, Minneapolis, MN.

Vealey, R.S., Holman, M.G., Giacobbi, P., and Hayashi, W. (1998). Sources of sport confidence: Conceptualization and Instrument Development. *Journal of Sport Psychology*, **20**, 55-56.

Weinberg, R.S. and Jackson, A. (1990). Building self-efficacy in tennis players: A coach's perspective. *Journal of Applied Sport Psychology*, **2**, 164-174.

Weinberg, R.S., and Gould, D. (2011). *Foundations of Sport and Exercise Psychology*, Fifth Edition. USA: Human Kinetics.

Wilson, C.R., Sullivan, J.P., Myers, N.D., and Feltz, D.L. (2004), Sources of sport confidence of master athletes. *Journal of Sport and Exercise Psychology*, **26**, 369-384.

Woodman, T., and Hardy, L. (2003). The relative impact of cognitive anxiety and self confidence upon sporting performance: a meta analysis. *Journal of Sport Sciences*, 433-457.

Zaccaro, S.J., Kane, T.D. and Marks, M.A. (1996). Self efficacy, personal goals, and wrestlers' self regulation. *Journal of Sport and Exercise Psychology*, **18**, 36-48.

APPENDECIES

APPENDIX A

INFORMED CONSENT FORM

CARDIFF METROPOLITAN

INFORMED CONSENT FORM

CSS Reference No:

Title of Project: An examination of Sources of Sport Confidence Deemed Important Elite and Amateur Athletes.

Name of Researcher: Luke Thomas

Participant to complete this section: Please initial each box.

1. I confirm that I have read and understand the information sheet datedfor these evaluations study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
2. I understand that my participation is voluntary and that it is possible to stop taking part at any time, without giving a reason.
3. I also understand that if this happens, our relationships with the Cardiff Metropolitan University or our legal rights will not be affected
4. I understand that information from the study may be used for reporting purposes, but I will not be identified.
5. I agree to take part in this study on / /

Name of Participant

Signature of Participant

Date

Name of person taking consent

Date

Signature of person taking consent

APPENDIX B

PARTICIPANT INFORMATION SHEET

Project Title: An examination of Sources of Sport Confidence Deemed Important by Elite and Amateur Athletes.

This document provides a run through of:

- 1) The background and aim of the research,
- 2) My role as the researcher,
- 3) Your role as a participant,
- 4) Benefits of taking part,
- 5) How data will be collected, and
- 6) How the data / research will be used.

The purpose of this document is to assist you in making an *informed* decision about whether you wish to be included in the project, and to promote transparency in the research process.

1) Background and aims of the research

In all sports, confidence is an extremely important indicator of success or failure. The aim of this research will be to test whether there is a difference between the sources of sport confidence between elite and amateur athletes.

2) My role as the researcher:

The project involves myself (Luke Thomas) giving you the questionnaire's; Source of sport confidence questionnaire (SSCQ)

3) Your role as a participant:

Your role is to complete the questionnaire pack as honestly as possible. The questionnaire pack includes questions about your sources of confidence. The completion of the questionnaire pack is not compulsory, and you do not have to respond to every question should you wish not to.

4) Benefits of taking part:

The information of taking part in my study, will be that we will be able to further the research upon sports confidence. This will provide evidence to whether an athlete at your current level differs in terms of confidence to one at another. We will be happy to share this information to any of the participants of this study.

5) How data will be collected:

The data will be collected by myself and I will only have access to it.

6) How the data / research will be used:

In agreeing to become a voluntary participant, you will be allowing me to use your responses to the questionnaires and include them within a larger data set that includes the data of other participants. Your personal data will be anonymous and will not be reported alone, but within the total sample of participants.

Your rights

Your right as a voluntary participant is that you are free to enter or withdraw from the study at any time. This simply means that you are in full control of the part you play in informing the research, and what anonymous information is used in its final reporting.

Protection to privacy

A great effort will be made to hide your personal information, and any information about you will remain confidential according to the guidelines of the Data Protection Act (1998).

Contact

If you require any further details, or have any outstanding queries, feel free to contact me on the details printed below.

Luke Thomas
07905135744
Cardiff School of Sport
Cardiff Metropolitan University
CF236XD, United Kingdom
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APPENDIX C

SOURCES OF SPORTS CONFIDENCE QUESTIONNAIRE

Athlete Self-Rating Scale (SSCQ)

Think back to times when you felt **very confident** when participating in your sport. **What things made you feel confident?** What things helped you believe in your abilities and gave you confidence that you would be successful?

Listed below are some things that may help athletes feel confident in sport situations. For each statement, circle the number which indicates **HOW IMPORTANT THAT IS IN HELPING YOU FEEL CONFIDENT IN YOUR SPORT**. Please respond to every question even though they may seem repetitive. There are no right or wrong answers because every athlete is different. Please be honest - your answers will be kept completely confidential.

I gain self-confidence in my sport when I...

	not at all	not very	slightly	average	very	extremely
highest						
important	important	important	important	importance	important	important
1. get positive feedback from my teammates and/or friends.....	1	2	3	4	5	6 7
2. win.....	1	2	3	4	5	6 7
3. keep my focus on the task.....	1	2	3	4	5	6 7
4. psych myself up.....	1	2	3	4	5	6 7
5. master a new skill in my sport.....	1	2	3	4	5	6 7
6. get breaks from officials or referees.....	1	2	3	4	5	6 7
7. perform in an environment (gym, pool, stadium, etc.) that I like and in which I feel comfortable.....	1	2	3	4	5	6 7

8.	feel good about my weight.....	1	2	3	4	5	6	7
9.	believe in my coach's abilities.....	1	2	3	4	5	6	7
10.	know I have support from others than are important to me.....	1	2	3	4	5	6	7
11.	demonstrate that I am better than others.....	1	2	3	4	5	6	7
12.	see successful performances by other athletes.....	1	2	3	4	5	6	7
13.	know that I am mentally prepared for the situation.....	1	2	3	4	5	6	7
14.	follow certain rituals (e.g., wearing a lucky shirt, eating certain food, etc).....	1	2	3	4	5	6	7
15.	improve my performance on a skill in my sport.....	1	2	3	4	5	6	7
16.	see the breaks are going my way.....	1	2	3	4	5	6	7
17.	feel I look good.....	1	2	3	4	5	6	7
18.	know my coach will make good decisions....	1	2	3	4	5	6	7
19.	am told that others believe in me and my abilities.....	1	2	3	4	5	6	7

I gain self-confidence in my sport when I...

highest	highest	not at all	not very	slightly	average	very	extremely
import		important	important	important	importance	important	important

20.	show my ability by winning or placing.....	1	2	3	4	5	6	7
21.	watch another athlete I admire perform successfully.....	1	2	3	4	5	6	
7								
22.	stay focused on my goals.....	1	2	3	4	5	6	
7								
23.	improve my skills.....	1	2	3	4	5	6	
7								
24.	feel comfortable in the environment (gym, pool, stadium, etc.) in which I'm performing.....	1	2	3	4	5	6	
7								
25.	feel that everything is "going right" for me in that situation.....	1	2	3	4	5	6	7
26.	feel my body looks good.....	1	2	3	4	5	6	7
27.	know my coach is a good leader.....	1	2	3	4	5	6	7
28.	am encouraged by coaches and/or family.....	1	2	3	4	5	6	7
29.	know I can outperform opponents.....	1	2	3	4	5	6	7
30.	watch a teammate perform well.....	1	2	3	4	5	6	7
31.	prepare myself physically and mentally for a situation.....	1	2	3	4	5	6	7
32.	increase the number of skills I can perform..	1	2	3	4	5	6	7
33.	like the environment where I am performing	1	2	3	4	5	6	7

34. have trust in my coach's decisions.....	1	2	3	4	5	6	7
35. get positive feedback from coaches and/or family.....	1	2	3	4	5	6	7
36. prove I am better than my opponents.....	1	2	3	4	5	6	7
37. see a friend perform successfully.....	1	2	3	4	5	6	7
38. believe in my ability to give maximum effort to succeed.....	1	2	3	4	5	6	7
39. receive support and encouragement from others.....	1	2	3	4	5	6	7
40. show I'm one of the best in my sport.....	1	2	3	4	5	6	7
41. watch teammates who are at my level perform well.....	1	2	3	4	5	6	7
42. develop new skills and improve.....	1	2	3	4	5	6	7
43. feel my coach provides effective leadership....	1	2	3	4	5	6	

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