Types, Sources, and Debilitating Factors of Sport-Confidence in Elite Early Adolescent Academy Soccer Players
Abstract

This study provided an original contribution to the literature by examining elite early adolescent academy soccer players sport-confidence needs. Pre-interview booklets and individual semi-structured interviews were used as multiple sources of qualitative data to identify the types, sources, and debilitating factors of sport-confidence in a large sample (n = 28) of players within the youth development phase of the Elite Player Performance Plan (The Premier League, 2011). An abductive approach to hierarchical content analysis found three types of sport-confidence: Skill execution, physical factors, and psychological factors. These types were generated from five sources of sport-confidence: Accomplishments, social support, preparation, vicarious experience, and innate factors. Five confidence debilitating factors: Lack of social support, poor performances, poor preparation, pressure and expectations, and injury/illness were also identified. Practitioners are advised to widen the sport-confidence types experienced by elite adolescent performers and broaden the sources of sport-confidence such performers use to gain belief.

Key Words: Youth Sport, Sport Psychology, Qualitative, Hierarchical Content Analysis
Confidence has been recognized as a critical psychological characteristic influencing the development of elite sports performance (e.g., Durand-Bush & Salmela, 2002; Gould, Dieffenbach, & Moffet, 2002; Gould & Maynard, 2009) with a number of studies associating high levels of confidence with a range of desirable cognitive, affective, and behavioral responses (e.g., Jones & Hanton, 2001; Hays, Thomas, Maynard, & Bawden, 2009; Vealey, Hayashi, Garner-Holman, & Giacobbi, 1998). To date, two main approaches have been used to explore confidence related concepts in sport; Bandura’s self-efficacy theory (Bandura, 1977, 1986, 1997; see Feltz, Short, & Sullivan 2008 for a review) and Vealey and colleagues’ models of sport-confidence (Vealey, 1986; Vealey et al., 1998; see Vealey & Chase, 2008 for a review). Although Bandura’s self-efficacy theory has been extensively studied within sport, it was not originally intended for use within sports settings. Consequently, Vealey and colleagues (e.g., Vealey, 1986; Vealey et al., 1998; Vealey, 2001; Vealey and Chase, 2008) have offered an iteratively evolving model of sport-confidence to provide a more sport-specific conceptualization of confidence.

The most recent iterations of this model (i.e., post 1998) shared greater similarities with self-efficacy theory and focused on the source domains performers used to derive belief. The revised model also more closely resembled a social-cognitive approach by recognizing the influence personal, demographic, and organizational factors had on the manifestation of sport-confidence (Vealey & Chase, 2008). To help identify the sources of sport-confidence, Vealey et al. (1998) developed the Sources of Sport-Confidence Questionnaire (SSCQ) which measured nine separate sources of sport-confidence. These sources were categorized into three broad domains: Achievement (i.e., confidence derived from mastery and demonstration of ability); self-regulation (i.e., confidence derived from physical/mental preparation and physical self-presentation); and social climate (i.e., confidence derived from social support,
vicarious experience, coaches’ leadership, environmental comfort, and situational favorableness). A source of sport-confidence was defined as a determinant or antecedent of an athlete’s sport-confidence belief. Vealey et al. also noted how individual athlete characteristics (e.g., gender) and the organizational culture of the sport (e.g., competitive level) influenced the development and manifestation of sport-confidence. Subsequent research has supported the idea that individual athlete characteristics influence sport-confidence via athletes’ goal orientations (Magyar & Feltz, 2003), and notably in the context of the current study, their age (Wilson, Sullivan, Myers, & Feltz, 2004).

Building on her 1998 framework, Vealey (2001) published the integrative model of sport-confidence which provided a more holistic overview of the reconceptualized model of sport-confidence. Vealey (2001) tentatively proposed that sport-confidence existed as a multidimensional construct and that performers possess multiple types of sport-confidence that were derived from the source domains. Vealey recognized her 2001 framework was exploratory and that it should act as a starting point for future sport-confidence research. In response, Hays and colleagues conducted a qualitative program of research with a sample of world class performers suggesting that the organizational culture of world class sport influenced the development and manifestation of sport-confidence (see Hays, Maynard, Thomas & Bawden 2007; Hays et al., 2009). Hays et al. (2007) supported Vealey’s proposal that sport-confidence was a multidimensional construct by identifying the sport-confidence types and sources salient to world class athletes. Six types of sport-confidence emerged (i.e., skill execution, achievement, physical and psychological factors, superiority to opposition, tactical awareness, and athlete specific factors). Hays et al. (2007) also provided conceptual clarity regarding sport-confidence types and defined these as evidence-based belief systems grounded within performers’ sources of sport-confidence. Nine sources of sport-confidence salient to world class performers were reported (i.e., preparation, performance accomplishments, coaching, social support, innate factors, experience, competitive
advantage, trust, and self-awareness). Some sources were unique to this group, whereas others overlapped with those previously reported (e.g., Bandura, 1997; Vealey et al., 1998) and there was an overriding consensus that the world class performers derived their sport-confidence from preparation, performance accomplishment, coaching, and social support.

Beyond the identification of sport-confidence types and sources, Hays et al. (2009) examined the role of sport-confidence in relation to the cognitive, affective, and behavioral responses it elicits, and identified the factors responsible for debilitating sport-confidence within the subculture of world class sport. The resulting confidence debilitating factors were categorized into six categories representing poor performances, injury/illness, poor preparation, coaching, pressure and expectations, and psychological factors. The authors noted that these confidence debilitating factors appeared to be directly related to the sport-confidence sources identified in Hays et al.’s (2007) study. This coherency highlighted a need for researchers and practitioners to consider confidence debilitating factors alongside sources and types when attempting to gain a holistic understanding of an athlete’s sport-confidence.

Collectively, Hays and colleagues’ work (2007; 2009) contributed towards achieving a more in-depth theoretical understanding of sport-confidence within a high-performance elite sport culture. Specifically, it was established that demographic and personality characteristics (e.g., gender and competitive orientation), as well as organizational culture (e.g., competitive level) influenced the types of sport-confidence athletes possessed and the sources upon which such beliefs were based (Vealey & Chase, 2008). However, the majority of this understanding emerged from athletes who have already achieved elite or world class status (e.g., Hays et al., 2007; 2009) and cannot be easily generalized beyond these organizational sub-cultures. For this reason, research is required to examine sport-confidence in athletes who are yet to reach elite or world class status. For example, Hays, Thomas, Butt, and Maynard (2010) suggested that future research should be more proactive and explore the
confidence needs of elite junior athletes to ensure they are using the sources and types of 
confidence necessary to develop a broad and holistic foundational belief system.

Although existing sport-confidence research has acknowledged that demographic, 
personality and organizational factors influence the sources of sport-confidence used by 
colleigate, world class, and masters athletes (e.g., Hays et al., 2007; Vealey et al., 1998; 
Wilson et al., 2004), the sport-confidence needs of competitive junior athletes are yet to be 
explored. This is despite self-efficacy research in academic settings indicating children and 
adolescents often primarily base their efficacy expectations on a relatively narrow source 
base. For example, in their systematic review of 30 years of self-efficacy research in schools, 
Usher and Pajares (2008) noted that not only do mastery experiences consistently emerge as 
the most powerful influencing source of self-efficacy for children and adolescents, they are 
the most salient source of efficacy identified by these groups. Similar findings can be found 
in some self-efficacy research in sport and/or physical education settings. For example, Chase 
(1998) reported adolescent non elite athletes relied upon performance accomplishments 
(mastery) and feedback from significant others to source their belief; with no support being 
evident for two of Bandura’s (1977) sources of self-efficacy in such participant groups (i.e., 
imaginal experiences and physical states). Other self and collective efficacy research in 
adolescent non elite sport contexts (e.g., Chase, Feltz and Lirgg; 2003) and with respect to 
relation-inferred self-efficacy (e.g., Saville et al., 2014) provided some support for the idea 
that younger performers may rely on fewer sources of efficacy than their adult counterparts to 
shape their efficacy expectations. Although such findings are important, they have limited 
practical application to junior elite sport and do not contribute directly to furthering 
understanding within a sport-confidence conceptualization to belief. Consequently, there 
remains a need to examine sport-confidence in junior athletes participating in the subculture 
of elite sport. At a conceptual level, such research will help clarify how some organizational 
factors influence the manifestation of sport-confidence, broaden our understanding of the
multidimensional nature of sport-confidence and provide certainty around the sport-confidence sources adolescent performers use to gain belief. Furthermore, this would help provide evidence-based guidelines for practitioners regarding how to develop and maintain sport-confidence with young athletes (see Vealey, Chase, & Cooley, 2017). Therefore, the purpose of this study was to identify the types, sources, and debilitating factors of sport-confidence in early adolescent elite academy soccer players. The rationale for exploring sport-confidence within soccer was twofold. First, within professional soccer academies in the UK, a player’s development pathway is underpinned by the ‘Elite Player Performance Plan’ (EPPP; The Premier League, 2011). This allows aspects of junior athletes’ sport-confidence to be explored within a clearly defined organizational subculture and pathway emended within elite adolescent sport. Second, following the adoption of EPPP, integration of sport psychology services has been more prevalent in soccer academies leading calls for further systematic enquiry on the psychological development of, and environment surrounding, elite junior soccer players (Mills, Butt, Maynard, & Harwood, 2012).

**Method**

The study was conducted from a post-positivistic philosophical position which recognises that some aspects of the social world cannot be directly measured, but seeks to retain an objective approach that is free from bias (Weed, 2009). In essence, post-positivists loosen the strict positivistic belief in value-free inquiry, yet still embrace traditional evaluation criteria and often quantify their data (Denzin & Lincoln, 2011; Krane & Baird, 2005). The following sections outline how decisions made throughout the study are consistent with the assumptions that underpin post-positivism.

**Participants**

A purposeful sample of 28 early adolescent elite academy soccer players (12-15 years; $M = 14.28$, $SD = 1.22$) participated in the study. This developmental stage was chosen as it represented the adolescent phase of development, aligned with the final years of the
soccer players academy developmental period (Lidor & Ziv, 2012). All four main player positions were represented: Goalkeepers (n = 2), defenders (n = 10), midfielders (n = 12), and forwards (n = 4). Participants had playing experience of between 6 and 10 years ($M = 8.1$, $SD = 1.4$) and had been part of an academy for between 0.3 and 6 years ($M = 3.4$, $SD = 1.6$). All 28 players were signed to a professional club operating at least a category two status academy within the EPPP (The Premier League, 2011). The ethics board of the lead author’s University provided ethical approval for the study. Initial voluntary informed written consent was provided by all gatekeepers (e.g., clubs and parents) before speaking with potential participants. Potential participants were told about the research project and were given the opportunity to speak with their parents or guardian and the researchers in order to gain a full understanding of the study. Voluntary informed written consent was then provided by participants before the research was conducted.

Data Collection

Pre-interview booklet. Drawing upon the notion of ‘elicitation tools’ (see Smith & Sparkes, 2016), the pre-interview booklet was designed for three reasons: First, it encouraged participants to reflect upon their experiences in relation to their sport-confidence. Second, it allowed the participants to familiarize themselves with the type of questions which were to be asked during the interview. Third, it instructed participants to think about and write down answers in relation to their general sport-confidence, career periods of high and low sport-confidence, sources and types of sport-confidence, and confidence debilitating factors. The pre-interview booklet was designed in line with Hays et al.’s (2010) confidence profiling technique, an appropriate approach when seeking ideographic detail on athletes sport-confidence needs (see supplementary file 1 for a copy of the pre-interview booklet). The written notes from each participant’s pre-interview booklet were used to tailor each individual interview guide and were integrated into the data analysis process.
**Interview guide.** Given the exploratory nature of this research, a semi-structured interview guide was designed to allow probing of further views and opinions, generate in-depth answers, and create a consistent level of depth across the interviews (Patton, 2002). The questions were developed based on those used by Hays and colleagues (2007; 2009) and the structure of the guide was based upon Hays et al.’s (2010) confidence profiling technique (see supplementary file 1 for a copy of the interview guide). This ensured participants’ types, sources, and confidence debilitating factors were explored in detail at an ideographic level. The guide consisted of six sections. Sections one and two introduced the broad purpose of the study, how data would be used, outlined confidentiality, and asked general introductory questions. Section three explored participants views on general sport-confidence (e.g., In your pre interview booklet you used [soccer player’s name] as an example of a confident player, can you describe what you think he/she is confident about?). Section four sought detail on the participants specific types and sources of sport-confidence that they identified in their pre-interview booklet (e.g., Why is [type of sport-confidence] an important thing for you to be confident about? Where does your confidence in [type of sport-confidence] come from?). Following this, participants were asked about their types and sources of confidence during a career period of high sport-confidence (e.g., You wrote in your pre-interview booklet/we explored in the interview that your most confident career period was [career period], can you think of a specific match during that period and describe anything that happened during the match that made your confidence increase?). The penultimate section explored confidence debilitating factors by asking about a career period of low confidence to help facilitate this process. The final section reviewed the interview and enabled any important information that might have been overlooked during the process.

**Procedure**

Following parental/guardian consent and participant consent, 28 academy players from two different academies completed both the pre-interview booklet and an individual
interview (i.e., data triangulation across multiple sources of information). All interviews were conducted face-to-face at the participant’s club academy training center, were recorded in their entirety, and lasted between 45-67 minutes. One week after their interview participants were provided with their transcript and results and confirmed that they represented an accurate reflection of their views on their sport-confidence (i.e., member checks). Following this, participants were provided with a workbook titled: ‘Developing Sport-Confidence through Preparation, Achievement, Self-Awareness and Mental Skills’ based on the findings from the current study.

Data Analysis

Consistent with post-positivistic assumptions, qualitative data was analyzed using an abductive (i.e., inductive and deductive) approach to hierarchical content analysis. It is the procedures used in hierarchical content analysis which align with the post-positivistic commitment to reliability, objectivity, trustworthiness and a psychological reality which can be found and known independently of the researcher (Smith & Sparkes, 2012). Following the step-by-step procedures for conducting a hierarchical content analysis outlined by Sparkes and Smith (2013), interviews were firstly transcribed verbatim yielding 353 pages of single-spaced text. Pre-interview booklets and transcripts were then independently studied in detail by the second and fourth authors for content familiarity. Following this, transcripts were independently analyzed by the same authors and themes representing confidence type(s), source(s), or debilitating factor(s) were identified and labelled. Specifically, raw data responses were organized into more meaningful sub-themes (e.g., confidence derived from the use of mental skills), themes (e.g., confidence derived from psychological preparation), and categories (e.g., confidence derived from preparation; Hays et al., 2007). It is important to note that although the raw data themes were generated inductively, deductive analysis was used to promote consistency regarding terminology within the conceptual area and previously published literature (e.g., Vealey et al., 1998; Hays et al., 2007; Hays et al., 2009). Data was
then re-examined to verify that all themes and categories were represented, before the first
and third author reviewed, agreed and confirmed the analysis during a face-to-face discussion
between the authors. Finally, tables and figures were generated to display the hierarchical
nature of the themes. Themes with higher frequency represent sources, types, or confidence
debilitating factors that elite early adolescent academy soccer players have in common.

**Quality Criteria**

In line with our post-positivistic approach, a ‘criteriological’ approach to evaluating
qualitative work can be used to judge the current study (Sparkes & Smith, 2009; Smith &
Sparkes, 2012). Although some have criticized this approach (see Smith & McGannon,
2018), Smith and Sparkes (2012) noted, hierarchical content analysis is positioned within a
criteriological standpoint. This criteriological standpoint, and the specific techniques
employed in relation to each criterion (see below), were used as a way to remain objective
rather than to claim that objectivity has been definitively achieved (see Krane & Baird, 2005,
p.90). Specifically, the current study can be judged using Tracy’s (2010) universal criteria
which was synthesized from others’ work on the markers of quality in qualitative research,
and includes: (a) worthy topic (i.e., relevant, timely, significant, interesting); (b) rich rigor
(i.e., appropriate sample, appropriate procedures, sufficient data derived from multiple
sources of data [pre-interview booklets and interviews] to support claims), (c) sincerity (e.g.,
researcher transparency), (d) credibility (e.g., data triangulation, multivocality, member
checks), (e) resonance (e.g., transferability), (f) significant contribution (e.g., heuristic and/or
practically significant research), (g) ethics (e.g., procedural ethics, existing ethics / sharing of
results), and (h) meaningful coherence (e.g., meaningfully interconnects literature, research
questions, findings, and interpretations with each other).

**Results**

The results are presented in three separate sections. First, the types (i.e., what players
were confident about) of sport-confidence are presented. Second, the sources of sport-
confidence from which these beliefs were derived are detailed. The final section outlines the factors responsible for debilitating players’ sport-confidence. Each section includes supportive evidence via direct quotations from the transcripts and a figure representing the raw data themes, sub-themes, themes, and categories.

Types of Sport-Confidence

The types of sport-confidence identified were categorized into three categories: Skill execution, physical factors, and psychological factors (see Figure 1).

Skill execution. Skill execution was identified by all 28 participants as a type of sport-confidence (see Table 1). Skill execution referred to the soccer players’ beliefs in their ability to successfully execute the physical/technical and tactical skills required to fulfill the demands of their sport. All 28 players spoke about the confidence they possessed in their ability to execute physical/technical skills. For example, participant two stated: “I’m confident about passing over different ranges, distances, 10 yards, 20 yards, then ranges up to 40, 50 yards”. Similarly, another participant explained: “I’m confident that I’ll score when I go 1v1 with a defender and that I can beat him and then go through on goal” (Player 13). In addition, 21 players were also confident about their tactical skill execution such as awareness of others, space, and positioning, reading the game, and versatility for a range of positions or formations. The following quote captures these points:

Since I have been at [Football Club] I have played every position across defense and midfield and I think I have had to adapt to different positions and I have had to adapt a lot…like different positioning, if I am asked to play a different position I know what I am doing, I am confident about that (Player 28).

Physical factors. Seventeen out of the 28 players identified physical factors such as physical work rate, speed and agility, and height and build to be effective as types of confidence. As one player explained: “Most academy players have something unique about them that they are confident about…some people have speed, some people have
dribbling…but what I have is strength” (Player 20). Six participants highlighted physical work rate as a type of confidence: “…because I’m not naturally as good as other players in my team, my work rate, so how hard I work makes up for it I think… that physical ability I have is something I’m confident about” (Player 10).

**Psychological factors.** Psychological factors were identified as a type of confidence by 13 of the 28 participants. This type of confidence referred to the players’ confidence about their ability to handle pressure and communicate. For example, one player stated: “I’m confident about my communication because that’s one thing that I have always been strong at…I never stop talking throughout the game” (Player 18). Leadership skills were also a type of confidence for seven of the players. This point is captured in the following quote from player 14: “I’m a confident leader on and off the pitch, I motivate others, get them to persevere…I think I’m very good in certain situations on the pitch, for example if we’re not playing well, I know to weather the storm so to speak and get through”.

**Sources of Sport-Confidence**

Five sources of sport-confidence were identified in the current study. These included:

- Accomplishments, social support, preparation, vicarious experience, and innate ability (See Figure 2). However, as Table 2 shows, the players mostly gained their confidence from sources associated with accomplishments and social support.

**Accomplishments.** Accomplishments were identified as a source of sport-confidence by all participants. This source related to competition accomplishments, training accomplishments, demonstration of ability, recognition, and selection. All but two players gained confidence from competition accomplishments, with players noting competition performance related accomplishments ($n = 26$) rather than competition outcomes ($n = 7$) as the key source domain. The importance of competition performance related accomplishments is captured within the following quote: “Once I’m passing well I normally play well…when I’ve put 3,4,5 in a row together that’s when I start to grow in confidence…that’s like the
heartbeat of my confidence passing” (Player 26). Alongside competition accomplishments, training accomplishments were a source of confidence for 27 of the 28 the players. For example, one player described the importance of improving from training:

We were working on it [transition from defense to attack] in training and that gave me confidence to play as a left back, and I took that into the game, and it worked well, so we played out from the back, got forward a lot... lots of underlaps and overlaps which came from what we practiced in training (Player 7).

Twenty-one participants also gained confidence from demonstrating ability over opponents or their own team-mates. The following quote illustrates how demonstrating superiority over team mates \((n = 10)\) was considered vital in the process of being retained by the academy:

I knew those next two years were vitally important for my football career and also because quite a few people didn’t get the contract and got released, so it made me feel confident and privileged to be one of those players who did get a contract (Player 14).

Finally, recognition (e.g., being recognized as a leader; \(n = 18\)) and selection (i.e., selected for international squads; \(n = 14\)) were also noted by several players as being important accomplishment related sources of confidence (see Figure 2).

Social support. All 28 participants gained confidence from social support. Specifically, esteem, informational, emotional, and tangible support were all identified as sources of sport-confidence (see Figure 2 and Table 2). Coaches, team-mates, and family and friends, were consistently noted as key providers of esteem support \((n = 28)\). The following quote illustrates how a player gained confidence from the esteem-based support he received from his coach: “Mainly a pat on the back from my coach or my manager, because that shows you’ve done well and that’s what every player wants, their coach to acknowledge what you’ve done, so that is the main thing for my confidence” (Player 15).

Twenty-one players also noted the importance of receiving informational support; coaches, family and friends, and team-mates were again identified as key providers of
this support. For example, player seven explained how informational support from the coaches during a review session was a source of confidence:

You have a 6-week sort of plan with [club’s name], and after that you get a review from the coaches and they tell you what you need to work on, and how you can improve and what players to look at to improve which helps my confidence.

Another academy player explained how receiving informational support during a match from a coach improved both his confidence and performance:

At [Premier League Team] I wasn’t playing that well and most managers, with me being captain, would have left me on but he took me off, sat me down, and told me why he took me off and what he felt I could and should have done, that gave me confidence, and when he put me back on I felt I played better because he told me exactly what he wanted me to do and that gave me confidence to do well when he put me back on (Player 24).

Emotional support (n = 11) (e.g., support from teammates after a mistake) and tangible support (n = 5) were less frequently cited sources of confidence (see Figure 2).

Preparation. Preparation was identified as a source of confidence by 23 of the 28 participants. Twenty-one participants gained confidence from physical and technical preparation including good physical/technical training, team preparation, identifying and rectifying weaknesses, nutrition, and skill repetition. One player explained the importance of team preparation:

On the Friday we’ll train for an hour and then we’ll come in for the last hour or half hour and they’ll [coaches] speak to us about triggers and when we need to press, when we need to drop off so that gives us confidence (Player 13).

Players also highlighted the importance of a good warm up prior to matches: “We do a running warm up first, and then we go into a passing drill and then into a possession drill, so if that warm up is a good tempo I feel confident, I take that into the game” (Player 11). In contrast to physical and technical preparation, only 14 players gained confidence from
psychological preparation and just four players engaged in holistic preparation (e.g., a combination of preparation related to sleep, video analysis, tactical analysis). Despite this, the following quote from a player describes how important holistic preparation was as a source of confidence:

It’s important to get a good breakfast, knowing that I’ve done everything in the right order knowing that I haven’t missed anything out that normally makes me feel confident…I get up and do exercises just to liven myself up, then I have my breakfast, then I do a few more exercises then I picture myself in the game, make sure everything is ready to go, and then I will do it all again in the changing room (Player 26).

Vicarious experience. Vicarious experience was identified as a source of confidence for 18 out of the 28 participants. Specifically, participants gained confidence from watching teammates executing a skill successfully. The following quote from player 28 captures this point: “If I see someone else make a good touch I think I can do that…like I’m confident that if I can get into position like that I can make a touch like that”. In addition to this, 15 players gained confidence from modelling aspects of their game on professional soccer players or specific role models. One of these participants explained how this impacted his confidence:

“Observing better players and learning from what they do gives you confidence when you go away and do what they do, maybe not to the same level but you can take parts of their game and put it into yours” (Player 8).

Innate factors. Eight of the 28 participants identified innate factors as a source of confidence. These players believed that they were born with either a natural ability to play soccer or innate factors which gave them an advantage or edge within soccer (i.e., speed, natural understanding of the game, or competitiveness). One participant explained the foundations of this belief:
I guess that it has always been one of my strong points since I was three, playing football (soccer) has just been one of the things that came naturally to me so that gives me confidence…obviously I have to try hard at it now but it’s one of those things that I was naturally good at (Player 17).

Similarly, another player added: “I’ve always been a good passer even when I wasn’t here (at the academy), I’ve become a better passer now but I’ve always had it, its natural” (Player 9).

Confidence Debilitating Factors

As Figure 3 shows the confidence debilitating factors identified by the participants were classified into five categories: Lack of social support, poor performances, poor preparation, pressure and expectations, and injury/illness. Poor performances and a lack of social support were the most frequently cited confidence debilitating factors (see Table 3).

**Lack of social support.** All players highlighted how a lack of social support reduced their confidence. This lack of social support centered predominantly on insufficient provision of esteem and informational support. Twenty-six players indicated a lack of esteem support from coaches, team-mates, family and friends, and significant others as factors responsible for debilitating their sport-confidence. The following quote highlights how a lack of esteem support from team-mates debilitated confidence: “Once I lose the ball, and if I lose it again I would hear a team-mate moaning and getting angry, so that makes me lose my confidence and just not want to play because I don’t want to get worse” (Player 23). Another player highlighted how this impacted on his confidence when he moved up an age group:

There is more pressure when you are playing up (an age group) because you have to impress the others …When I last played up a few boys kept putting me down and if I didn’t make a good pass they would shout at me which put my confidence down (Player 27).

Similarly, 18 of the players highlighted how a lack of esteem support from coaches (e.g., negative feedback, lack of trust) debilitated their confidence. For example, one player stated:
“There’s been times where I haven’t done things very well and they’ve said look you need to do this better, so that would knock my confidence a little” (Player 11). A lack of esteem support from family and friends (e.g., family arguments, being left out of friendship groups) was also detrimental to players confidence. One player explained how negative feedback from his father had an adverse impact on his confidence: “So if I’ve had like a bad game, or a bad training session then they’ll [parents] say like that wasn’t good enough and are we wasting our time” (Player 12). Furthermore, six players indicated a lack of informational support from coaches (n = 5) and/or the support team (n = 1) debilitated their confidence. The following quote captures the way in which this impacted on players’ confidence: “It was when I got moved position, to a position I wasn’t familiar with, and I didn’t get much information to know what I had to do, so I sort of got on with it, but my confidence went down and down” (Player 1).

**Poor performances.** All players identified poor performances such as: Poor skill execution, poor form and selection worries, inferiority to the opposition, and poor outcomes as confidence debilitating factors. One participant explained how poor skill execution debilitated his confidence:

> At center half if I get the ball and lose it, like numerous times, I will lose confidence and I just won’t want the ball at all because I will think to myself if I get it I will just lose the ball again…like playing out (from defense) I won’t want the ball I will just tell the goalkeeper or whoever has got it to miss me out or I won’t call for the ball and I will gradually fade out of the game (Player 24).

In addition to poor skill execution, 17 players cited poor form and selection worries such as being out of form, playing out of position, and not starring games as debilitating their confidence. The following quote from player 9 captures these points: “I was playing in a position I didn’t want to play in, so they moved me to center back then I wasn’t starting anymore, so it knocked my confidence”. Finally, 14 players identified a sense of inferiority to
the opposition could debilitate their confidence: “If the striker got the better of you, like if he managed to pick the ball up, turn and get past you and go and score a goal, if he was dominating me that would make me low on confidence” (Player 11).

**Poor preparation.** Poor preparation was identified as a confidence debilitating factor by 19 of the 28 participants. Poor preparation included poor physical/technical, organizational, and psychological preparation. Player 8 described how poor physical/technical preparation could debilitate his confidence:

> I didn’t prepare the same way I usually do, like practicing properly in the warm-up. I missed out my passing drills, 5-10 minutes of passing, so I kept giving the ball away in the game, my [passing] accuracy was off, so I felt less confident”.

Player 27 also explained how a combination of poor nutritional, organizational, and physical preparation was detrimental to his confidence:

> If I don’t eat the right stuff I can worry…every Friday I have a pizza, it worries me if I’m going to play good or bad and then if I don’t do my homework or I forget sometimes, or don’t have time I do worry, and then just in the warm up if I do badly that makes me worry and reduces my confidence for the match.

**Pressure and expectations.** Nineteen of the 28 participants identified pressure and expectation as a confidence debilitating factor. Specifically, participants cited placing internal pressure and expectation on themselves, having self-doubts about their ability, and fear of being released as confidence debilitating factors. In addition, external pressure and expectation from coaches, parents, or academy managers were also cited by some players ($n = 5$) as confidence debilitating factors. For instance, one of the players recalled a match in which parental pressure debilitated his confidence:

> My dad kept putting me under a lot of pressure like on the journey there he kept talking to me about not messing up because it’s a big club…At first I was feeling confident because I played them (Premier League team) the year before
and scored but then as it got closer and closer to getting there my dad was putting me under a lot more pressure then I was nervous and I played awful

(Player 23).

**Injury/Illness.** Sixteen out of the 28 participants identified injury/illness as a confidence debilitating factor. Eleven players referred to specific types of age related (e.g., Sever’s disease, osteomyelitis) or general injuries (e.g., groin injury) as confidence debilitating factors. For example, one player described the impact that being injured had on his confidence: “I lose my confidence when I'm injured for a long time and I don't believe in my strengths as a player because I haven’t been playing for some time” (Player 12). In addition to this, 11 players described how the consequences of injuries (e.g., falling behind, deselection, lack of fitness) acted as a confidence debilitating factor when returning to play: I got back into it as the games went on, my performance slowly got back, but I was a bit worried about doing it [injury] again so my performance and fitness wasn’t as good as normal so that didn’t help my confidence at all (Player 11).

**Discussion**

Using multiple sources of data (i.e., pre-interview booklets and interviews) this study identified the types, sources, and confidence debilitating factors of early adolescent elite academy soccer players. Three types of sport-confidence, five sources of sport-confidence, and five confidence debilitating factors were identified. With respect to types of sport-confidence, and consistent with those reported by world class athletes (e.g., Hays et al., 2007; 2009), our findings indicated academy players were confident about: their ability to execute skills (i.e., physical, technical, and tactical skills); some physical factors; and some psychological factors. However, in comparison to the world class athletes used in Hays and colleagues’ work, elite adolescent soccer players did not identify ‘achievement’ and ‘superiority to the opposition’ as sport-confidence types. This is perhaps unsurprising given the age and developmental stage of the players in our study, and the fact they are yet to reach
a professional level. Despite this, the findings provided support for the multi-dimensional nature of sport-confidence (Hays et al., 2007; Hwang, Machida, & Choi, 2017; Machida, Otten, Magyar, Vealey, & Marie Ward, 2016) and endorse the notion that athletes’ evidence-based belief systems (i.e., types) are grounded within their sources (Vealey & Chase, 2008).

Turning towards sources of sport-confidence, and consistent with previous studies (Hays et al., 2007; Vealey et al., 1998; Wilson et al., 2004), the most frequently cited sources of sport-confidence identified were: Accomplishments; social support; and preparation. However, closer inspection of the lower order themes provides new knowledge on how organizational culture (i.e., age, level, and motivational climate) influenced how elite junior players constructed their sources of sport-confidence. Specifically, although performance accomplishments were a source of confidence for all players in our study, competition performances rather than competition outcomes were used most to gain belief. This contrasts the accomplishment sources used by the world class male athletes in previous research (e.g., Hays et al., 2007, 2009). Players also gained confidence from selection accomplishments, receiving recognition, and superiority to the opposition or their own teammates, supporting the notion that the general motivational climate of a sport team includes perceptions of the values, attitudes, and behaviors of a variety of social agents, and effort, improvement, and social comparison might be equally emphasized (Harwood, Spray, & Keegan, 2008). This appears reflective of the organizational culture in elite soccer academies, which may focus on individual progress and improvement, but at the same time players are competing with each other for professional contracts (Mills et al., 2012).

Beyond accomplishments, social support was identified as a critical source of sport-confidence used by elite academy soccer players to gain belief. This sample appeared more reliant on social support from coaches, peers, and family members as a source of confidence than world class athletes (Hays et al., 2007; 2009). Findings that are congruent with studies that have identified social support as a highly influential source of confidence for adolescents...
participating in sport (Vealey et al., 1998) and physical education (Chase, 1998). The reliance on gaining confidence from coach and peer support is perhaps not surprising given the developmental stage of the players used in this study (see Wylleman & Lavellee, 2004), the uncertainty surrounding their futures within elite academies, and the continual prospect of being released from their contracts.

Preparation was the third most frequently cited source of sport-confidence; however, players mostly relied on physical preparation to source this belief with few players using psychological or holistic preparation-based sources (Hays et al., 2007). Such findings suggest that elite academy soccer players may not have acquired the necessary knowledge, experience, or skills to employ preparation strategies that are multi-faceted in nature. This may surprise those engaged in the delivery of the EPPP programme within UK soccer academies given the visibility of psychological provision within those organizational cultures (The Premier League, 2011). However, consistent with Reeves, Nicholls, and McKenna’s (2009) suggestion, although support systems may exist it does not mean they are valued or used by those who have access to them. Such findings highlight the need for greater attention to be paid to the way in which young athletes prepare for competition from a psychological perspective, particularly given the controllable nature of this source (Vealey & Chase, 2008).

The remaining sport-confidence sources of innate factors and vicarious experience identified in this study have been less prominent within other sport-confidence studies. For example, some participants believed they possessed innate factors that facilitated their sporting success. Considering innate factors have only been previously identified by world class athletes (Hays et al., 2007), it is possible that this may be a source of sport-confidence specific to elite performers. Similarly, the importance placed on vicarious experience by elite adolescents is perhaps reflective of their specific developmental stage. Hays et al. (2007) found that world class senior athletes did not source sport-confidence from observing other athletes performing successfully. Our findings suggest that observing and comparing oneself
with others is a particularly relevant source of sport-confidence for athletes who are learning new skills or undertaking new challenges. Considering the aims and objectives of elite academies, providing players with models to facilitate both their skill development and sport-confidence should be a focus of attention for practitioners.

In this study, no support was found for several of the sport-confidence sources outlined in previous research. For example, elite adolescent soccer players did not source confidence from environmental comfort, situational favourableness, or physical self-presentation as described in Vealey et al.’s (1998) research. Further, no evidence emerged for the sport-confidence sources of competitive advantage, coaching, self-awareness, experience, and trust as identified by Hays et al. (2007). These findings suggest elite academy soccer players may base their confidence on a relatively narrow set of source beliefs in comparison with more senior athletes (Hays et al., 2007; Vealey et al., 1998; Wilson et al., 2004). This suggestion is supported by self-efficacy research that has indicated younger individuals base their efficacy expectations on a narrower set of efficacy sources (e.g., Chase, 1998; Chase et al., 2003; Saville et al., 2014; Usher & Pajares, 2008). Thomas, Lane and Kingston (2011) suggested that basing sport-confidence on a narrow set of beliefs may make athletes more susceptible to fluctuations in their levels of confidence and that in order to develop robust sport-confidence, athletes must derive their beliefs from multiple source domains. Our findings extend these suggestions to adolescent performers and indicate practitioners working with such groups must ensure confidence is based on a wide range of controllable sources. The results also suggest practitioners should pay particular attention to the way in which young athletes construct their sources of sport-confidence (i.e., gaining confidence from performance rather than outcome related accomplishments).

In order to gain a more complete understanding of sport-confidence, our study also examined the factors responsible for debilitating sport-confidence. The confidence debilitating factors identified by elite academy soccer players included a lack of social
support, poor performance factors, poor preparation, pressure and expectations, and injury/illness. Consistent with Hays et al.'s (2009) findings, these confidence debilitating factors appeared to be directly associated with the sources of sport-confidence identified by this sample. For example, responses pertaining to verbal feedback from the coaches were highlighted as a means of both gaining sport-confidence but also a factor responsible for debilitating a player’s sport-confidence. As such, the players’ perception of the feedback provided appears to be critical to the interpretation of whether the mechanism was a source of, or debilitating factor for, confidence at that moment in time. In addition to this, the confidence debilitating factors reported also appeared to be closely related to early adolescent academy soccer players’ sources of stress (see Reeves et al., 2009). Although it went beyond the scope of the current study to examine the relationship between sport-confidence and the transactional stress process, it may be that in order to develop or maintain robust levels of sport-confidence, young athletes may need to learn how to effectively cope with the competitive and organizational demands they experience (see Tamminen & Holt, 2012). However, young athletes’ capacity to use coping strategies may not fully emerge until late adolescence (Skinner & Zimmer-Gembeck, 2007).

In summary, our study provided a number of important conceptual and practical implications that extend current thinking and contribute new knowledge to the extant literature. Conceptually, the identification of a range of types and sources of sport-confidence evidence the multidimensional nature of sport-confidence (e.g., Hay et al., 2007, 2009; Machida et al., 2016). The emphasis elite adolescent performers placed on certain types and sources of sport-confidence when compared to those noted in previous research with elite senior athletes (e.g., Hays et al., 2007) supports the inclusion of demographic and personality characteristics within Vealey's model of sport-confidence. The critical role social-support played as an adaptive factor from which elite adolescents sourced belief, versus the maladaptive impact a lack of social-support had on debilitating elite adolescents sport-
confidence was an important contribution. Furthermore, this study provides new knowledge on how social support is conceptualized within sport-confidence research. Previous sport-confidence research has classified social support as a source category (i.e., global dimension) and subtheme within the coaching source of sport-confidence (e.g., Hays et al., 2007; Vealey et al., 1998). The rigorous data analysis process used in our study identified specific dimensions of social support (e.g., esteem, informational, emotional and tangible support) that players used to source their belief and also identified how a lack of esteem support and informational support debilitated sport-confidence. Our findings aligned with the dimension based conceptualizations of social support (e.g., Freeman & Rees, 2009; Rees & Hardy, 2000), and has provided conceptual clarity regarding the positioning of social support within sport-confidence research. Collectively, these results also provide evidence for Feltz et al.’s (2008) suggestion that the unique nature of sport emphasises social support as an important source of belief for athletes beyond what Bandura (1997) represented within the verbal persuasion source of self-efficacy. Our results corroborated findings from self-efficacy research and extended them to the sport-confidence literature by evidencing elite adolescent performers utilize a narrower set of sources of sport-confidence to underpin their belief system (cf. Usher & Pajares, 2008). The results also identified the confidence debilitating factors experienced by elite adolescent performers. At an applied level, our findings indicated coaches, parents, practitioners, and players should work on fostering a strong and broad set sport-confidence sources to underpin an elite adolescent’s belief system. The role these individuals play in providing appropriate social support has emerged as a critical factor for such groups. The bias towards the elite adolescent academy players in our study using performance related accomplishments rather than outcome related accomplishments to source belief sits closely with design of the EPPP pathway and is an important consideration for those designing and administering such programmes.
The findings and implications should be considered in light of several limitations. First, although member checks were used as a strategy to remain objective and enhance the credibility of the data (Tracy, 2010), at a practical level there is no way to guarantee that power relations did not influence participant confirmation or that each participant truly engaged with this process (see Smith & McGannon, 2018). Second, the types, sources, and confidence debilitating factors identified are unique to the context of elite academy soccer within the UK. Although many elite junior team sport athletes may have very similar sport-confidence needs to those identified in this study, we advise caution when generalizing these findings beyond this context. Research is needed to establish which sources, types, or debilitating factors are most salient within sport specific contexts (i.e., individual vs. team sports) across levels (i.e., elite vs. non-elite), and developmental stages (i.e., sampling, specializing, investment years; Côté, 1999). Thirdly, another limitation was that we did not assess levels of confidence. Future research is needed to examine the interaction between academy players’ confidence levels and their sources, types, and confidence debilitating factors over time (e.g., throughout a season). Such insights are crucial to help practitioners design interventions which help young athletes to develop robust sport-confidence. Building on these points, future research is also needed to examine the conceptual links between athletes’ source of sport-confidence and their confidence debilitating factors.

In conclusion, this study was the first to examine the types, sources, and confidence debilitating factors of athletes within a single empirical study. Using multiple sources of data, this study provided an in-depth insight into what elite junior soccer players are confident about, where they gain confidence from, and what serves to debilitate their confidence. It also provided new knowledge on the role of social support within an elite adolescent’s belief system. Such insights are vital in terms of affirming the role organizational culture plays on the manifestation of sport-confidence, and for assisting the development of interventions aimed at fostering robust sport-confidence within elite junior performers.
References


### Table 1.

**Types of Sport-Confidence Identified by Elite Academy Soccer Players (n = 28)**

<table>
<thead>
<tr>
<th>Type of Confidence</th>
<th>Number of athletes citing type</th>
<th>Total percentage of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill Execution</td>
<td>28</td>
<td>100%</td>
</tr>
<tr>
<td>Physical Factors</td>
<td>17</td>
<td>61%</td>
</tr>
<tr>
<td>Psychological Factors</td>
<td>13</td>
<td>46%</td>
</tr>
</tbody>
</table>

### Table 2.

**Sources of Sport-Confidence Identified by Elite Academy Soccer Players (n = 28)**

<table>
<thead>
<tr>
<th>Sources of Confidence</th>
<th>Number of athletes citing source</th>
<th>Total percentage of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplishment</td>
<td>28</td>
<td>100%</td>
</tr>
<tr>
<td>Training accomplishment</td>
<td>27</td>
<td>96%</td>
</tr>
<tr>
<td>Competition accomplishment</td>
<td>26</td>
<td>93%</td>
</tr>
<tr>
<td>Demonstration of ability</td>
<td>21</td>
<td>75%</td>
</tr>
<tr>
<td>Recognition</td>
<td>18</td>
<td>64%</td>
</tr>
<tr>
<td>Selection</td>
<td>14</td>
<td>50%</td>
</tr>
<tr>
<td>Social Support</td>
<td>28</td>
<td>100%</td>
</tr>
<tr>
<td>Esteem support</td>
<td>28</td>
<td>100%</td>
</tr>
<tr>
<td>Informational support</td>
<td>21</td>
<td>75%</td>
</tr>
<tr>
<td>Emotional support</td>
<td>11</td>
<td>39%</td>
</tr>
<tr>
<td>Tangible support</td>
<td>5</td>
<td>18%</td>
</tr>
<tr>
<td>Preparation</td>
<td>23</td>
<td>82%</td>
</tr>
<tr>
<td>Physical and technical preparation</td>
<td>21</td>
<td>75%</td>
</tr>
<tr>
<td>Psychological preparation</td>
<td>14</td>
<td>50%</td>
</tr>
<tr>
<td>Holistic preparation</td>
<td>4</td>
<td>14%</td>
</tr>
<tr>
<td>Vicarious Experience</td>
<td>18</td>
<td>64%</td>
</tr>
<tr>
<td>Innate Factors</td>
<td>8</td>
<td>29%</td>
</tr>
</tbody>
</table>

### Table 3.

**Confidence Debilitating Factors Identified by Elite Academy Soccer Players (n = 28)**

<table>
<thead>
<tr>
<th>Confidence Debilitating Factors</th>
<th>Number of athletes citing confidence debilitating factor</th>
<th>Total percentage of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Social Support</td>
<td>28</td>
<td>100%</td>
</tr>
<tr>
<td>Poor Performances</td>
<td>28</td>
<td>100%</td>
</tr>
<tr>
<td>Poor Preparation</td>
<td>19</td>
<td>68%</td>
</tr>
<tr>
<td>Pressure and Expectations</td>
<td>19</td>
<td>68%</td>
</tr>
<tr>
<td>Injury/Illness</td>
<td>16</td>
<td>57%</td>
</tr>
</tbody>
</table>
Figure 1: Types of Sport-Confidence identified by elite academy soccer players
### Raw Data Theme

| Accurate/successful in game passes (11) |
| Scoring in a match (10) |
| Good tackles (9) |
| Consistency in performance (4) |
| Consistency as top goal scorer (1) |
| Being in form (3) |
| Success in 1v1 (4) |
| Getting an assist (7) |
| Team-mate scoring (2) |
| Good headers (1) |
| Making a good save (1) |
| Catching difficult crosses (1) |
| Influencing the game (4) |
| Helping others on the pitch (1) |
| Clean sheets (3) |
| Tricks coming off (4) |
| Good tackles (9) |
| Getting an assist (7) |
| Team-mate scoring (2) |
| Good first touch (1) |
| Successful interceptions (1) |
| Successful counter attack (1) |
| Last ditch tackling (1) |
| Workrate in matches (2) |
| Consistency as top goal scorer (1) |
| Being in form (3) |
| Success in 1v1 (4) |
| Good tackles (9) |
| Getting an assist (7) |
| Team-mate scoring (2) |
| Good first touch (1) |
| Successful interceptions (1) |
| Successful counter attack (1) |
| Last ditch tackling (1) |
| Workrate in matches (2) |
| Winning matches (7) |
| Improvements from training/practice (19) |
| Learning and practicing new skills in training (8) |
| Scoring in training (4) |
| Passing well in training (3) |
| Training with senior players (3) |
| Strength improvements from the program (2) |
| Training with the National team (1) |
| Good fitness test results (1) |
| Successfully applying training focus to matches (1) |
| Speed and agility improvements (1) |
| Outperforming opponent (individual) (8) |
| Beating opponent with speed (4) |
| Winning aerial/physical battles (3) |
| Using height/strength as an advantage (3) |
| Dominating opposition (team) (2) |
| Exploiting opponents weaknesses (2) |
| Reading game quicker than opponent (2) |
| Dominating possession (1) |
| Being a threat to opposition (1) |

### Accomplishments

| Superiority over opposition (15) |
| Superiority over team-mates (10) |
| Winning matches (7) |
| Winning awards (MoM, player of season) (3) |
| Academy trial (1) |
| Offered an apprenticeship/extended contract (8) |
| Recognized as a leader (captain) (7) |
| Recognized by significant others (10) |
| Recognition from coaches/parents (5) |
| Getting scouted (2) |
| Recognition by significant others (10) |
| Recognition by the club (13) |

### Figure 2: Sources of Sport-Confidence identified by elite academy soccer players
Figure 2: Sources of Sport-Confidence identified by elite academy soccer players
Figure 2: Sources of Sport-Confidence identified by elite academy soccer players
Figure 3: Confidence debilitating factors identified by elite academy soccer players
Figure 3: Confidence debilitating factors identified by elite academy soccer players
Pressure and expectations of self (13)
Pressure and expectations of coaches, academy manager and/or parents (5)
Having self doubts about ability (4)
Being moved up or down an age group by the coach (4)
Fear of being released (3)
Over-thinking during a match (3)

Missing matches through injury (5)
Isolation during recovery from injury (3)
Inability to show ability due to injury (3)
Fear of re-injury (3)
Fear of not reaching pre-injury form (3)
Getting injured during an important part of the season (1)
Other players taking your place when you’re injured (1)

Groin injury (2)
Severs disease (2)
Stress fracture (1)
Haematomas (1)
Broken foot (1)
Osteomyelitis (1)
Hyper-extension of the knee (1)
Damaged hip flexors (1)
Niggling injuries (1)

Illness resulting in poor performances (1)

Pressure and expectations (19)
Consequences of injury (11)
Injury and Illness (16)
Types of injury (11)
Illness (1)