The complexity of leading in sport: Examining the role of domain expertise in assessing leader credibility and prototypicality

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The Complexity of Leading in Sport: 
Examining the Role of Domain Expertise 
in Assessing Leader Credibility and Prototypicality

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Abstract
The way in which leaders in sport organizations are evaluated by their employees is dependent upon perceived levels of credibility and implicit theories of leadership. Leader knowledge and expertise play significant roles in this process, yet both have been treated as comprehensive constructs irrespective of specific knowledge domains. Drawing from the education literature, this research looks to disentangle the global perspective used by the credibility and prototypicality literatures. It is proposed that employees in sport organizations expect managers to possess domain-specific expertise which is separate from the functional area requirement. Two different samples including professional sport employees and sport management students were utilized, with confirmatory factor and conjoint analyses used to test the research hypotheses. The results support the notion that distinct psychological processes exist within sport organizations, and that sport domain knowledge and expertise are distinct constructs which play important roles in the perception of leaders within this context.
Questions pertaining to the distinctiveness of the sport context have provoked sport management scholars to acknowledge the importance of establishing distinct areas of our discipline (Chalip 2006; Slack, 1998). While it has been suggested that some aspects of managing sport are indeed different, it is primarily in the area of consumer behavior that the most convincing evidence has been demonstrated (Todd & Kent, 2009). Phenomena such as elevated consumer expertise (Funk, 2008) and decreased sensitivity to price and performance (Sutton, McDonald, Milne, & Cimperman, 1997) are examples of some of the distinguishing processes present in the context of sport. Although a well-established research paradigm exists within this broad sport marketing realm, there is a relative lack of such within the realm of organizational behavior. In finding distinction in attitudes of sport fans from other types of consumers, natural questions arise as to potential differences between sport employees and the workforces in other sectors. Indeed, research has been explicitly called for that explores the potential of distinct attitude-behavior relationships for employees within the sport industry (Todd & Kent, 2009). As a starting point, Todd and Kent’s (2009) framework of sport employee attitudes provides a convincing argument for distinct psychological processes within this domain, however the main tenets of their position have yet to be empirically tested.

Whether managers are seen as leaders depends upon implicit theories about leadership (Shondrick, Dinh, & Lord, 2010), and the perceptual needs of followers (Meindl, Ehrlich, & Dukerich, 1985). From this viewpoint, leadership can be seen as a perceptual phenomenon where what matters most is what people see in the leader, which does not necessarily need to be an accurate depiction (e.g., Meindl et al., 1985). Two areas where follower perceptions play an integral role are in the attributions of credibility (Kouzes & Posner, 2011) and characteristics relevant to leadership prototypes (Lord, Foti, & De Vader, 1984). Credibility refers to the
perceived expertise and trustworthiness of an individual (Hovland, Janis, & Kelley, 1953), and a leadership prototype is defined as “a cognitively constructed ideal leader” (Foti, Bray, Thompson, & Allgood, 2012, p. 703). Perceived attributes related to these concepts serve as an enabling force in the leadership process (Hogg, 2010; Yukl, 2010), and are therefore desirable qualities for managers. For both credibility and prototypicality, the perceived knowledge and expertise of the leader play significant roles, yet both have been left as comprehensive constructs irrespective of specific knowledge domains. Drawing from the education literature (e.g., Alexander, Shallert, & Hare, 1991), the current investigation seeks to disentangle the knowledge concept used by the credibility and implicit leadership perspectives. Consistent with Chalip’s (2006) call for the development of theory grounded in sport phenomena, the research takes a follower-centric approach to inform our understanding of leaders in the sport management context. The findings suggest that sport domain knowledge and expertise are indeed distinct constructs, and play important roles in the perception of leaders.

Theoretical Background

The Nature of Sport Expertise

The sport industry is one of the largest and fastest growing industries in the world (Gillentine & Crow, 2009). Due to the significant public nature of this domain, many fans and members of society at large have access to vast amounts of information and therefore consider themselves knowledgeable about sport. With this in mind, it seems conceivable that employees in sport organizations might expect their leaders to also possess such knowledge of this domain. The leadership literature lends support for such a proposition by suggesting that power and influence increase as a leader is perceived to display relevant knowledge and skill (Yukl, 2010). From this perspective, while managers will be expected to be competent within their functional area (i.e., accounting, marketing, and sales), it may also be that sport-specific knowledge (i.e.,...
athlete recognition, sports history/statistics, and game rules/strategy) is a separate yet significant factor in being deemed credible and prototypical in this context. With the constant comparisons of leadership techniques within sport and business (e.g., Krzyzewski, 2000), and the immense exposure related to sports teams, these characteristics may be particularly important in the sport context. As the media scrutinizes every move of management, the trail of evidence and related opinions of past decisions are readily accessible and often utilized for assessing credibility. Furthermore, as the sports world is replete with descriptions of the consummate sports person, an exploration of cognitive leader prototypes in this context seems especially appropriate.

While it is likely that perceived manager expertise will include an organization-based functional area component, this research posits that domain knowledge specific to the industry should be considered as well. In the case of the sport context, such a perspective supports the notion that specific knowledge, experience, and skills directly related to sport could in fact play a role in the perceived credibility and prototypicality of leaders. A major emphasis of the present research is to conceptually distinguish different aspects of perceived leader knowledge and expertise which might play a role in the leadership process.

Leadership as a Perceptual Phenomenon

As most definitions of leadership account for the influencing of others, the ability to persuade is a central aspect of the leadership and communication processes (Bass, 2008). While some refer to persuasion as “one form of leadership” (Bass, 2008, p. 17), others would go as far as to say “leadership is persuasion” (Hogan, Curphy, & Hogan, 1994, p. 493). Hovland, Janis, and Kelley (1953) equated persuasion with effective communication and considered it largely reliant upon the credibility of who delivers the message. Source credibility has been referred to with terms such as ethos, prestige, and charisma; and the more of ‘it’ someone is perceived to
have will positively influence the acceptance of what that person has to say (Berlo, Lemert, & Mertz, 1969). One way ‘it’ might best be conceptualized is in the ‘image’ perceived by those receiving the message (Berlo et al., 1969). Images perceived from this vantage point have played a central role in understanding persuasion and social influence since classical times (McCroskey & Teven, 1999). From this perspective, McCroskey and Teven (1999) argue that an individual’s image is actually defined in terms of receiver perceptions, rather than objective source characteristics. In that vein, some researchers have proposed that the most important ‘quality’ a leader can ‘possess’ is to be acknowledged as a leader (Bass, 2008). According to Bass, an acknowledgement of this kind is achieved through a matching process of observed leader behaviors with those deemed necessary to the follower. “Most people carry around in their heads implicit theories about what qualities leaders should have and what behaviors leaders should exhibit” (Bass, 2008, p. 16). As the public nature of sport provides numerous images of leadership and success, such a viewpoint seems quite relevant to the current context. The perception-based perspectives of credibility and prototypicality will now be discussed in turn.

**Leader Credibility**

The concept of source credibility has its origins in the communication and persuasion literature and the foundational work of Hovland et al. (1953). These authors endeavored to build a “general science of communication” (p. 13) and outlined the components of their larger framework as the communicator, content of the communication, predispositions of the audience, and audience responses. Although various definitions of credibility exist in the literature, most refer back to Hovland et al.’s (1953) definition of the perceived expertise and trustworthiness of the communicator. Credibility relates to important attitudes such as trust and confidence, and the belief about the source’s “knowledge, intelligence, and sincerity” (Hovland et al., 1953, p. 20).
The perception of leaders as credible sources is of the utmost importance in the leadership process (Bass, 2008; Kouzes & Posner 2011, Yukl, 1998). Indeed, the degree to which an individual will be persuaded to accept ideas and information is dependent upon the credibility of the source (Berlo et al., 1969). As credibility is “not an intrinsic property of the communicator” (p. 181), it is instead based on individual judgments regarding the believability of the leader (O’Keefe, 2002). In an attempt to summarize factors most likely to influence credibility perceptions, O’Keefe (2002) reported such judgments can be influenced by numerous factors with no comprehensive list of the most salient. However, according to O’Keefe’s summary, manipulations of experience, training, and occupation do generally lead to higher credibility ratings and are also the variables most commonly manipulated in these studies.

**Leader Prototypicality**

Another means of understanding perceptions of leaders is through the use of Implicit Leadership Theories (ILTs), which has also been referred to as Leadership Categorization Theory. ILTs are personal assumptions and beliefs about the traits and abilities of ideal leaders (Epitropaki & Martin, 2004; Lord et al., 1984; Offermann, Kennedy, & Wirtz, 1994). Building from theory on cognitive categorization (Rosch, 1978), Lord et al. (1984) argued that leadership categories and schemas were represented by cognitive prototypes. According to Phillips (1984), a prototype is an “abstract conception of the most representative member or most widely shared features of a given cognitive category” (p. 126). This line of research indicates that followers develop cognitive structures, or schemas, which specify characteristics and behaviors that are expected from leaders (Epitropaki & Martin, 2004). When making judgments about leaders, such schemas are activated and perceived leader characteristics are then compared to the relevant schema (Hogg, 2010).
In addition to the most representative, prototypes have also been referred to as “ideal instances of leadership” (Kellerman, 1999, p. 590), the “best example” of a leader (Offermann et al., 1994, p. 44), and cognitive structures that characterize an ideal leader (Epitropaki & Martin, 2004). Prototypical images are formed through relationships and prior experiences and may be also be affected by individual and social differences (Bass, 2008; Epitropaki & Martin, 2004). Whether followers then consider someone to be a leader depends on the perceived match between the individual’s characteristics and the prototypical preconception (Rush & Russell, 1988). Earlier conceptualizations of prototypes viewed the structure of their schema as relatively fixed and more general in nature; however, contemporary views see them as more flexible and reconfigured to meet situational and contextual demands (Hogg, 2010).

The ILT perspective demonstrates a resurgence of interest in leader traits with a focus placed more on the underlying perceptual processes of leadership (Lord & Alliger, 1985). With the ubiquity of nomenclature in the media referring to consummate athletes and coaches, this approach to studying leadership seems especially relevant in the sport context. More specifically to the current research, it is conceivable that employees in this context will be highly aware of such sport-related terminology and incorporate this into their expectations of organizational leaders.

**The Dimensionality of Credibility and Prototypicality**

As the definitions of credibility and prototypicality both refer to multiple concepts within their definitions, each of these constructs is viewed as multidimensional in the literature. The next two sections outline the various dimensions of each before highlighting a focal area of overlap between the two constructs.
Credibility. Although many different dimensions of credibility have been identified in the literature (e.g., Berlo et al., 1969; Ohanian, 1990; McCroskey & Young, 1981, McCroskey & Teven, 1999), there is general consensus that two dimensions are related to expertise and trustworthiness (Pornpitakpan, 2004). Beyond these, researchers have also found evidence for additional factors such as: attractiveness (Ohanian, 1990); dynamism (Berlo et al., 1969); goodwill (McCroskey & Teven, 1999); and composure, extroversion, sociability, size, and weight (McCroskey & Young, 1981). From its earliest conception, Aristotle envisioned credibility, or in his terms ‘ethos,’ as composed of intelligence, character, and goodwill (McCroskey & Teven, 1999). As Hovland et al. (1953) also saw ‘intention toward the receiver’ as a third element, McCroskey and Teven (1999) argued that goodwill somehow became ‘lost’ and is the true third dimension of credibility.

Prototypicality. Similar to credibility, leader prototypicality is also considered to be a multidimensional construct with varying specific dimensions within the literature. In an attempt to better understand the content and structure, Offermann et al. (1994) used the work of Lord (e.g., 1984) and colleagues as a basis for determining the dimensions of leader prototypicality. Working with student samples from psychology courses, their exploratory factor analysis yielded the following eight dimensions: sensitivity, dedication, tyranny, charisma, attractiveness, masculinity, intelligence, and strength. In a later attempt to validate this structure, Epitropaki and Martin (2004) indicated a modified six-factor structure, which included: sensitivity, intelligence, dedication, dynamism, tyranny, and masculinity. In comparison with Offermann et al. (1994), this research revealed the additional dimension of dynamism, but did not include the previously seen charisma, attractiveness, and strength factors.
**Expertise and intelligence.** When comparing the credibility and prototypicality constructs, an area of obvious overlap exists within the dimensions accounting for perceived knowledge. The credibility literature has referred to this dimension as competence (McCroskey & Teven, 1999), qualification (Berlo et al., 1969), and expertise (Ohanian, 1990), while the prototypicality literature has used the term intelligence (e.g., Epitropaki & Martin, 2004; Offermann et al., 1994). The first dimension of this nature with regard to credibility was referred to as ‘expertness’ by Hovland and colleagues at Yale University and was initially conceptualized as being perceived as “a source of valid assertions” (Hovland et al., 1953, p. 21). Items representing this dimension refer to the degree to which individuals perceive a target source as knowledgeable, experienced, skilled, trained, expert, and intelligent (Berlo et al., 1969; McCroskey & Teven, 1999; Ohanian, 1990). With regard to prototypicality, both Offermann et al. (1994) and Epitropaki and Martin (2004) reported intelligent, knowledgeable, clever, and educated as reflective elements, with Offermann et al. (1994) also including wise and intellectual. As leadership prototypicality and credibility each are composed of a dimension where knowledge plays a significant role, the way this construct has been viewed in the other literatures will be discussed in the following section.

Before proceeding with that discussion, it is worth noting that the terms knowledge and expertise sometimes contain overlapping components in the literature. As a point of clarification, and in concert with other researchers who have discussed both of these terms simultaneously (e.g., Hinds, Patterson, & Peffer, 2001; Faraj & Sproull, 2000), we refer to expertise as the broader concept which encompasses knowledge as well as experience and skill. Further elaboration of these components of expertise will follow after first discussing the complexity of the knowledge construct.
The Complexity of Knowledge

An important factor to both credibility and prototypicality is how intelligent and knowledgeable the leader is perceived to be (Kouzes & Posner, 2011; Lord & Shondrick, 2011). However, the conceptualization of knowledge in each of these literatures has been utilized as a global construct rather than taking into account the availability of more specific knowledge terminology (e.g., Alexander et al., 1991). In contrast, as educators specialize in the dissemination of knowledge, it should perhaps be of no surprise that a multitude of descriptors have been utilized in the education literature to conceptualize various types of knowledge. In an attempt to bring structure to the proliferation of knowledge terminology, Alexander et al. (1991) developed a conceptual framework for the various labels present in the education literature. Examples of specific types of knowledge and the authors’ pursuit of more accurate terminology include: content knowledge (of one’s mental, social, or physical world); declarative knowledge (of factual information); and discipline knowledge (of an academic subject or specialized field). Such terminology challenges the appropriateness of a global knowledge construct, lending strong support for the conceptual distinctiveness of various types of knowledge.

Within such a framework of differing knowledge types, one stream of research has focused on knowledge at it relates to a topic or subject area (e.g. Cheisi, Spilich, & Voss 1979; Alexander, 1992). Examples include labels such as domain-specific, content-specific, topic, and subject matter knowledge (Alexander et al., 1991). In attempt to capture and consolidate these related concepts, Alexander (1992) defined domain knowledge as “the realm of knowledge that individuals have about a particular field of study” (p. 34). As an example, quoting from Cheisi et al. (1979), Alexander (1992) used a sport to illustrate how domain knowledge can be a specialized aspect of a person’s overall knowledge:
Most of us have some knowledge of baseball; that is, for most of us, information about baseball is part of our background or prior knowledge. . . For some, however, baseball has become the focus of study. For these individuals, baseball has advanced within the individual to the level of a domain. (Alexander, 1992, p. 35)

As Alexander et al. (1991) made clear, the use of a global conception of knowledge is problematic as knowledge types fluctuate between individuals due to variations in person and context variables. This perspective lends support for the notion that the knowledge of others will be perceived from subject-specific perspectives. As perceived knowledge is an integral aspect of perceived expertise (Ohanian, 1990), a closer examination of other components reveals the need for a more domain-specific understanding of expertise.

**Expertise Elements as Domain-Specific**

The realization that expertise is a domain-specific concept has been addressed in various other literature streams. One line of research which has seen overlap in psychology, management, and education is that of occupational or professional expertise (e.g., Van der Heijden, 2000). From this perspective, competent professionals “must possess a certain degree of expertise in his or her specific job domain” and “be able to compete with skillful colleagues” (Van der Heijden, 2000, p. 9). When operationalizing this construct, Van der Heijden (2000) maintained that professional expertise was a multidimensional construct that should represent the different aspects of knowledge that are inherent in specific fields.

**Knowledge.** From very early conceptions (e.g., Hovland et al., 1953), expertise was one of the two primary dimensions of source credibility. Such terminology seems to reference being knowledgeable in a much more specific manner than knowing about a variety of subjects. When using the term expert in everyday language, we will usually either infer or explicitly state that
individuals are experts ‘of’ a certain subject or experts ‘in their field.’ The formal definition lends support for such an argument, as a common description of an expert is “...one with the special skill or knowledge representing mastery of a particular field” (Merriam-Webster.com, 2011).

The perceived level of expertise and knowledge by leaders play a central role in the leadership process. However, it seems that such components within the ILT and source credibility literatures has been utilized only as a global construct rather than taking into account more specific domains of knowledge and expertise. Following the lead of the educational literature, this research looks to take a “multi-domain” approach and make an initial attempt at specifying these dimensions within the context of sport.

**Hypothesis 1a:** Sport domain expertise and functional area expertise are distinct constructs within the sport context.

**Hypothesis 1b:** Sport domain knowledge and functional area knowledge are distinct constructs within the sport context.

In addition to knowledge, there are other components of expertise which could also be more clearly understood from a domain-specific approach. Two such constructs which have also been researched in conjunction with knowledge are those of experience and skill. The field of cognition, for example includes experience and skill in the definition of knowledge by commonly referring to the term as idiosyncratic information, experiences, and skills relative to the individual (Alexander et al., 1991). Similarly, the management literature refers to a similar collection known as knowledge, skills, and abilities (KSAs) where experience is seen to enhance KSAs (e.g., Cheney, Hale, & Kasper, 1990). The domain-specific nature of these concepts will now be discussed in turn.

**Experience.** Other labels of the expertise dimension of credibility like qualification (Berlo et al., 1969), and competence (McCroskey & Teven, 1999), seem to elevate the
importance of experience in their conceptualizations and operationalizations. Berlo et al.’s
(1969) and McCroskey and Teven’s (1999) dimensions of qualification and competence
respectively, paralleled Hovland et al.’s (1953) and Ohanian’s (1990) expertise dimension.
However, these dimensions also incorporated variables such as qualified, competent, trained,
informed, and experienced. Similar to knowledge, these terms are also usually accompanied in
language or thought by phases such as competent ‘in’ or qualified ‘for’ a particular discipline or
subject area.

**Skills.** The notion of perceived skill is also embedded in the expertise dimension of
credibility (Berlo et al., 1969; Ohanian, 1990). Success in complex domains such as music,
games, and sport demonstrates skill and knowledge are developed through experience (Ericsson,
Krampe, & Tesch-Römer, 1993; Hambrick & Meintz, 2011). In the workplace, domain-specific
technical skill is a frequent criterion for promoting technical professionals into management
positions (Hysong, 2008). However, as Hysong (2008) points out in her examination of various
professions (private computer, petrochemical, and engineering), this is largely untested and the
fundamental assumption is that people who flourish in a certain profession will also do so in a
management position.

In sport we often see this same phenomenon; players and coaches are often promoted to
management positions at the end of their careers (e.g., Larry Bird). While there are numerous
examples of managers without technical expertise excelling in their jobs, the question remains as
to whether possessing “technical” knowledge of sports provides any additional value in
managerial performance. An example of this phenomenon is articulated by Howie Roseman,
general manager of the Philadelphia Eagles professional football team. According to Roseman:
“If you haven’t played, you have to be right a lot more than everyone else. If I had a strong opinion I had to make sure I was right, because people are going to remember it. I think that built credibility. It definitely helps if you played. People want to work with people that look like them and act like them. I think it’s always going to be like that.” (H. Roseman, personal communication, November 9th, 2011).

Although much of the knowledge, experience and skills perspective of the preceding discussion has been outlined through the rubric of expertise, it is again worth noting the presence of perceived knowledge within the implicit leadership theory literature (Epitropaki & Martin, 2004; Offermann et al., 1994). As prototypicality has been referred to as the “fit” with a particular image (Lord et al., 1984, p. 351), and the “best example of” (Offermann et al., 1994, p. 44), it seems logical that the consummate leader in a sport management position would be experienced in sport and knowledgeable regarding sport in general.

Hypothesis 2: Sport domain knowledge, experience, and skill play significant and distinct roles in the perception of leader credibility within the sport context.

Hypothesis 3: Sport domain knowledge, experience, and skill play significant and distinct roles in the perception of leader prototypicality within the sport context.

In order to address the research hypotheses, two studies were conducted. The first study addressed the discriminant validity of functional area and sport domain concepts (Hypothesis 1), and the second study addressed the relative importance of leadership attributes in the perceptions of credibility and prototypicality (Hypotheses 2 & 3).

Study 1

As noted, this study addressed the concepts of expertise and knowledge, looking to determine the possibility of domain distinctness (e.g., sport vs. function). To properly address this issue, a sample with actual work experience in a sport organization was critical, and as such persons with experience working for professional sport teams were recruited as participants.
Method

Sample and procedure. The sample for the first study consisted of 63 (of 121, 52.1% response) current and former students from a sport management program at a large university in the United States, who were either current employees of a professional sport team or had interned with one within the previous three years (N = 63). More than half (55.6%) of the final sample consisted of individuals who were either currently employed by or currently interning with a professional sport team. The average age of those 23 or younger was 22.0 years old, with 18 respondents (28.6%) indicating that they were 24 or older. The participants were 66.7% male and 33.3% female, with a race/ethnicity breakdown of 80.9% Caucasian, 17.5% African American, and 1.6% Asian.

The data were collected via the online Qualtrics survey platform, and much attention was given to ensure that participants understood the content of the questions. The survey made clear to participants that the questions they were about to answer would be referring to the supervisor to whom they directly reported, and participants were asked to confirm their understanding prior to continuing with the survey. Additionally, respondents were asked to indicate the functional area (department) that their direct supervisor was in charge of managing, and were henceforth given questions tailored to the specified referents.

Measures. To assess expertise, a measure was constructed which incorporated expertise items from Berlo et al. (1969), Ohanian (1990), and McCroskey and Teven (1999). All three used semantic differential scales and all but one of the items were utilized in the present study. In consideration of the participants, one item in the McCroskey and Teven study which used ‘stupid’ as an anchor was not utilized. Due to a fair amount of overlap between the remaining 15 items, the final measure was reduced to nine items after eliminating duplicates (see Table 1).
Perceived knowledge was assessed with four items adapted from Funk and Pritchard (2004), and Brucks (1985). As the items from these studies referred to self-perceived knowledge, the current measure was modified by changing the target of the items to refer to one’s immediate supervisor. The items were measured on seven point Likert-type scales (see Table 2). For the sport domain questions the functional area term was changed to “sports in general.”

**Data analysis.** The construct reliability (CR) and discriminant validity for the functional area and sport domain constructs were assessed using the method proposed by Fornell and Larcker (1981). As the literature suggests that Cronbach’s alpha may understate the true reliability of a construct, the current study used factor loadings and squared variance terms in order to obtain a more conservative estimate (Hair, Black, Babin, Anderson, & Tatham, 2006). To accomplish this task, loadings for each construct were obtained by use of the AMOS 19 statistical analysis program and both the CR and average variance extracted (AVE) were calculated. In order to demonstrate both reliability and convergent validity, it is recommended that CR and AVE meet the recommended levels of .70 and .50 respectively (Fornell & Larcker, 1981). Discriminant validity was assessed by determining the AVE by the factor loadings for each construct and comparing it to the squared correlation between constructs. This demonstrates that a latent construct explains its own items more accurately than it does another construct (Hair et al., 2006).

**Results and Discussion**

For the expertise items, both functional area expertise (CR = .96; AVE = .70) and sport domain expertise (CR = .95; AVE = .68) exceed the recommended cut-off levels. In addition, both of these AVE values are greater than the squared interconstruct correlation value (.66) (see Table 1). Similarly, functional area knowledge (CR = .95; AVE = .85) and sport domain
knowledge ($CR = .94; AVE = .79$) surpass the recommended level, and their AVE scores well exceed the squared correlation value (.24) between the terms (see Table 2). These results give support for Hypotheses 1a and 1b, clearly demonstrating that perceived sport domain expertise and knowledge are distinct constructs from functional area expertise and knowledge.

**Study 2**

The second study addressed Hypotheses 2 and 3 and sought empirical evidence regarding the perceived importance of specific aspects of knowledge, experience, and skill in the sport context.

**Method**

**Research approach.** As the constructs of interest could be assessed at similar levels with concurrent direct ratings tasks, this study looked to account for this possibility and determine the relative importance individuals place on certain factors when evaluated in combination. Previous research has, in fact, indicated that individuals were often not able to discriminate between perceived leadership attributes (Ridley, Chatterjee, & Soutar, 1998). To address this limitation, conjoint analysis was utilized in this study to explore the trade-offs people make when assessing leaders (Green & Srinivasan, 1990). As common in the marketing literature, this approach is consistent with the idea that individuals do not evaluate attributes singularly, but instead do so while simultaneously assessing other attributes relevant to the leader (Beall & Perttula, 1991). Although rarely utilized in the sport management literature, previous research has used conjoint analysis to assess factors related to perceived success in intercollegiate athletic programs (Putler & Wolf, 1999; Wolfe & Putler, 2002). With this analysis technique, part-worth utilities can be converted into relative importance scores for each leader attribute in the study. These scores can
then be compared with each other as an indication of which attributes are considered more important when evaluating the credibility and prototypicality of leaders in sport organizations.

**Sample and procedure.** The population for the second study consisted of 448 students (400 undergraduate; 48 graduate) enrolled in the sport management program at a large university in the United States. Previous research has indicated the appropriateness of utilizing student samples when the focus is on theory testing rather than effects application (see Calder, Phillips, & Tybout, 1981; Funk & Pritchard, 2006). From the population, 267 participants voluntarily completed an online survey \((N = 267)\) for a response rate of 59.6%. The average age of those 23 or younger was 20.5 years old, with 31 respondents (11.6%) indicating that they were 24 or older. Participants were 70.0% male and 30.0% female, with a race/ethnicity breakdown of 82.4% Caucasian, 11.2% African American, and the remaining 6.4% indicating either Hispanic, Asian, Native American, Pacific Islander, other, or “would rather not say”.

**The survey.** Utilizing a design similar to Soutar and Ridley (2008), a set of eight different leader attributes were determined based on the research hypotheses and the credibility and prototypicality literatures. These were as follows: functional area knowledge, sport domain knowledge, functional area experience, sport domain experience, playing experience, coaching experience, trustworthiness, and dynamism. The first six attributes and levels were developed by the authors in concert with the proposed distinct variable set. Trustworthiness was also included in the analysis as a type of control variable due to the constant and significant role it has played in the credibility literature (e.g., Hovland et al., 1953; McCroskey & Teven, 1999), as well as its presence in prototypicality literature (e.g., Lord et al., 1984). The same trustworthiness level descriptions from Soutar and Ridley (2008) were utilized in this study. Finally, the descriptions of the dynamism attribute were also developed by the authors and incorporated terminology from
the literature to describe the levels. This attribute was also chosen due to serving as a common
dimension between the credibility and prototypicality literatures (Berlo et al., 1969; Epitropaki &
Martin, 2004). The list of attributes and level descriptions can be found in Table 3. While
additional attributes would have ideally been included to inform theory, the literature on conjoint
analysis commonly suggests that respondents can comprehend up to eight attributes and this is a
routinely chosen maximum limit (Green & Srinivasan, 1990; Molin, 2011). Hypothetical profiles
of departmental managers were then developed incorporating the eight attributes. As this $2^8$
(Levels $^8$Factors) design results in a total of 256 different combinations, the use of an orthogonal
experimental design reduced this down to a partial profile with 16 different profile scenarios to
be assessed. This design was also of balanced form where each level of the eight attributes
appears an equal number of times.

The data were collected via an online survey platform, and again close attention was
given to ensure that participants understood the content of the questions. A sample profile was
provided along with the sample assessment questions (see Appendix). Functional areas were
clearly defined and respondents were asked to affirm their understanding of the survey
terminology. The 16 profiles were randomly presented to control for response bias and were
tailored to the functional area of interest as specified by participants. In addition, each profile
was gender-neutral and identified only by letters of the alphabet (e.g., Department Manager K).
After reviewing the profile, participants were asked rate from 0-100 how credible they viewed
this person as a manager in a sport organization. Participants were also asked to rate from 0-100
how well this person fit their image of an ideal leader in a sport organization.

Data analysis. The present study utilized the SPSS Conjoint 19 statistical analysis
software to develop the orthogonal design. Of the 16 profiles assessed by the respondents, 12 of
the profiles represented the required orthogonal design, while the remaining four were used as holdout cases to ensure the validity of the model (SPSS, 2010). Both the Pearson’s R and Kendall’s tau statistic were calculated to measure the correlation between the observed and estimated rating scores. In addition, the Kendall’s tau statistic for the holdout profiles was estimated as a check of the validity of the utilities.

Using ordinary least-squares regression, part-worth utilities (coefficients) were estimated for each respondent. These utility values were then averaged to determine the part-worth utilities for each attribute level (see Table 3). The signs of the part-worth values reflect the relationships proposed above with positive utilities being associated with the high levels of each attribute and negative utilities associated with the low levels. The relative importance of each attribute was then calculated by dividing the utility ranges of each attribute by the sum of utility ranges of all eight attributes. The relative importance scores sum to 100 and are listed in Table 4.

Results and Discussion

The results indicated that both the credibility and prototypicality models were overall very representative of the data (Cred: $R = .999, p = .000$, $\tau = 1.000, p = .000$, $\tau$-holdout = 1.000, $p = .021$; Proto: $R = .997, p = .000$, $\tau = .970, p = .000$, $\tau$-holdout = .667, $p = .087$). Although the Kendall’s tau correlation for the prototypicality model was higher than preferred, significance at the .10 level has been viewed as acceptable in the literature in conjunction with high values in the other correlation statistics (Gozbasi & Citak, 2010).

As seen in Table 4, the trustworthiness attribute was clearly the most important when assessing both credibility (21.26) and prototypicality (25.07) for department managers. With this being somewhat expected for credibility, it was not expected for trust to take on such a dominant role in the prototypicality assessment (e.g., Offermann et al., 1994). The next two most important
attributes for both constructs were functional area knowledge and functional area experience, respectively. Looking at these constructs together, it is of interest that they are virtually identical in magnitude within each construct. These results indicate that both functional area knowledge and experience are considered highly and relatively equally important for both credibility and prototypicality.

After the first three attributes, there is some slight disparity between the constructs with regard to the others. For credibility, the next two most important attributes are sport domain knowledge (11.07) and sport domain experience (10.75), respectively, while for prototypicality, these two attributes had similar magnitude and rank, with the knowledge factor again being slightly more important in both constructs. One noticeable difference that occurred between the models was that dynamism leapfrogged the sport dimensions for prototypicality. This suggests a greater importance for the ideal leader type to be dynamic than is required to be credible. The final two factors in terms of relative importance for both constructs were the playing and coaching attributes. Although these were lower in magnitude, it is worth noting for future investigation that they were not remarkably lower than many of the other attributes.

As the relative importance measures are in effect standardized, the magnitudes within the same construct can be directly compared. For example, these results suggest that for credibility, functional area knowledge (15.66) is nearly twice as important as actual playing experience (8.34). Likewise, it is nearly twice as important to be considered trustworthy (21.26) than it is to be perceived as experienced in sport (10.75). With this in mind, perhaps the most important comparisons might be the easily comparable functional area and sport domain components. For both credibility and prototypicality, the functional area importance did not exceed the sport domain importance to a great extent. For the credibility assessment, functional area knowledge
was 15.66 compared with 11.07 for sport domain knowledge. This gap narrowed even further with the prototypicality assessment (12.85 to 10.07). This suggests that while functional area knowledge takes a more prominent role with regard to manager credibility, the prototypical leader would have sport domain knowledge at a level more similar to that of their respective functional area. The overall results of the analysis lend support for Hypotheses 2 and 3, indicating that sport-specific knowledge, experience, and skill factors play significant and distinct roles when assessing the credibility and prototypicality of leaders in the sport context.

**General Discussion and Conclusions**

The studies presented here sought to gain empirical evidence regarding the existence of distinct psychological processes within sport organizations. While a conceptual distinction can be made between a functional area and the sport domain, the results of the first study provide strong empirical support for the discriminant validity of these two different spheres of expertise and knowledge. The results of the second study lend additional support for the idea that sport domain factors play an important role in assessing the credibility and prototypicality of leaders in the context of sport. In combination with the more traditional concept of functional area expertise, the current findings indicate that sport-specific knowledge, experience, and skill also occupy a significant cognitive space when evaluating managers within this context. Collectively, these results lend robust support for Todd and Kent’s (2009) proposition that managing in the sport context may have idiosyncrasies not prevalent elsewhere, due to the complex and industry-specific nature of employee attitudes.

The findings presented here make significant contributions to the literature in a number of ways. First, the results suggest that credibility is attributed to leaders in the sport industry in a more complex manner than previously understood. Specifically, it appears that the expertise
dimension within sport should be viewed in a more multifaceted manner with the inclusion of domain-specific elements. Such implications would require additional measurement and the assessment of traditional tools used to evaluate leadership in sport organizations. Second, this research utilized implicit leadership theory and explored the important leadership concept of prototypicality. The authors sought to introduce this topic to the sport management literature and knows of no other research to date which has addressed this perspective. Additionally, this research adds to the sport management literature by utilizing conjoint analysis to determine how important leadership attributes are assessed simultaneously. Moving forward, such an approach can provide valuable insight into factors influencing decision-making in a variety of sport environments.

The results of the current research may also provide support for a shift in the pattern of leadership profiles in sport organizations. For example, the literature suggests that career tracks for athletic directors in intercollegiate athletics have seen a shift toward progression through administrative paths (Grappendorf, Lough, & Griffen, 2004), rather than the coaching ranks as seen previously (e.g., Fitzgerald, Sagaria, & Nelson, 1994). Although relative importance levels of perceived attributes by employees in previous decades are unknown, the current research indicates a priority given to functional area factors over those of the sport domain. These seem to be in concert with the Moneyball (Lewis, 2004) perspective of decision-making, where analytics continue to play a more prominent role in comparison with more traditional strategies based on sporting experience.

The practical implications of the current research are also notable. The findings suggest the existence of sport-specific factors which should be considered when recruiting, hiring, evaluating, and training managers in the sport industry. As managers are held responsible for
influencing employees under their direction, it appears they may be better equipped to do so with the addition of domain-specific expertise. However, as the collective results show promise for a line of inquiry which would better establish the distinctiveness of the sport workplace, there may exist much broader implications. Specifically, additional support in this direction could bring fundamental change to our instruction and sport management curriculum. In the presence of additional evidence of this nature, our conversation as a discipline could shift toward distinct executive evaluation processes and a different means to psychologically engage employees within sport. The current research suggests that there may be an unspoken expectation of leaders in sport organizations due to the presence of the underlying values and beliefs of employees. Such a phenomenon would also have implications on establishing and managing organizational climate and culture in this domain (e.g., Schein, 1983).

As future directions are considered, it is important to recognize the limitations of the current research. While the use of student samples was appropriate for the initial testing of theory, the incorporation of employee samples in future research is necessary to assess the generalizability of the present findings. That being said, it is of note that a majority of the sample for the first study consisted of individuals currently employed by, or interning with, a professional sport organization. In addition, the sample for the second study was of considerable size and all participants were sport management majors within a few years of pursuing entry-level jobs within the industry. Nonetheless, individuals who have worked extensively in sport may yet have different views of what they consider a credible and prototypical leader. Methodologically, the nature of conjoint analysis limits the number of attributes which can realistically be considered simultaneously. Future research might incorporate other central aspects of leadership to determine the relative importance of these in combination with the sport
domain components. Additionally, while discriminant validity was demonstrated between the functional area and sport domain constructs, future research should examine the impact of these dimensions in combination to determine their effect on specific outcome variables of interest.

Another area worthy of future consideration is in the relationship between self-identity and leadership prototypes (e.g., MacDonald, Sulsky, & Brown, 2008). As there is support in the literature that self-identity can be influenced by contextual dynamics (e.g., Brewer & Gardner, 1996), it is possible that the current context might have accentuated aspects of self-identity related to sport. For example, MacDonald, Sulsky, and Brown (2008) found that the priming of certain areas of self-identity can in turn impact assessments of leadership prototypicality. Future research should therefore assess how the priming of certain aspects of employee identities might impact the way in which managers are perceived to be leaders in sport organizations. Finally, future research might also explore potential differences between male and female perceptions, as well as any discrepancies relating to sub-divisions of the sport industry such as college versus professional sports, or sport-producing versus sport-supporting sectors (Li, Hofacre, & Mahony, 2001).

The collective results of the two studies suggest that there is significant potential for more in-depth investigation with regard to employee attitudes in sport. As the results here show that domain-specific considerations are made when assessing leaders in the sport context, similar distinctions may also be present in the perceptions of co-workers, organizations, and the overall work environment. This potential for distinct mindsets in the sport organization context speaks to the need for more empirical assessment in each of these different areas of employee perceptions. In the interest of the continuing development of sport management as a legitimate academic discipline, Chalip (2006) clearly articulated the need for theory development grounded in the
sport context. The current research has sought to deliver on this recommendation and provide empirical support for the notion of distinct phenomena within our field. The results presented here indicate that distinct psychological processes exist in the minds of employees within the field of sport. That is, domain-specific considerations are made by followers when assessing the credibility and prototypicality of leaders in the sport context. Future research is necessary to gain an in-depth understanding of these complexities, which can ideally lead to a more domain-specific approach to management within our field.
References


Table 1

Standardized Factor Loadings, Construct Reliability, Average Variance Extracted, and Squared Interconstruct Correlation for Expertise

<table>
<thead>
<tr>
<th>Items</th>
<th>β</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional area expertise</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Untrained – Trained</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Intelligent – Unintelligent (R)</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Informed – Uninformed (R)</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Not an Expert – Expert</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Experienced – Inexperienced (R)</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Qualified – Unqualified (R)</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Knowledgeable – Unknowledgeable (R)</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Incompetent – Competent</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Skilled – Unskilled (R)</td>
<td>0.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sport domain expertise</strong></td>
<td>0.95</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>1. Untrained – Trained</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Intelligent – Unintelligent (R)</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Informed – Uninformed (R)</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Not an Expert – Expert</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Experienced – Inexperienced (R)</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Qualified – Unqualified (R)</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Knowledgeable – Unknowledgeable (R)</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Incompetent – Competent</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Skilled – Unskilled (R)</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Squared interconstruct correlation** = .66

*(R) = recoded
Table 2

*Standardized Factor Loadings, Construct Reliability, Average Variance Extracted, and Squared Interconstruct Correlation for Perceived Knowledge*

<table>
<thead>
<tr>
<th>Items</th>
<th>β</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional area knowledge</strong></td>
<td>0.95</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>1. How much information would you say that your supervisor has about marketing?</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Compared to other supervisors, I consider my supervisor to be an expert about marketing.</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. How much knowledge does your supervisor have about marketing?</td>
<td>0.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Rate your supervisor's knowledge of marketing, as compared to the average person.</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sport domain knowledge</strong></td>
<td>0.94</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>1. How much information would you say that your supervisor has about sport in general?</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Compared to other supervisors, I consider my supervisor to be an expert about sport in general.</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. How much knowledge does your supervisor have about sport in general?</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Rate your supervisor's knowledge of sport, as compared to the average person.</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Squared interconstruct correlation** = .24

*Note:* “Marketing” is the functional area and fluctuated between respondents.
Table 3

Conjoint Analysis Attribute Level Descriptions and Part-Worth Utility Scores

<table>
<thead>
<tr>
<th>Attributes and levels</th>
<th>Part-worth utilities</th>
<th>Credibility</th>
<th>Prototypicality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional area experience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previously worked in a management position related to marketing.</td>
<td>6.33</td>
<td>5.38</td>
<td></td>
</tr>
<tr>
<td>Has never held a job related to marketing.</td>
<td>−6.33</td>
<td>−5.38</td>
<td></td>
</tr>
<tr>
<td><strong>Sport domain experience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previously worked in a management position for a professional sports team.</td>
<td>4.18</td>
<td>2.83</td>
<td></td>
</tr>
<tr>
<td>Has never worked in a sport organization prior to current position.</td>
<td>−4.18</td>
<td>−2.83</td>
<td></td>
</tr>
<tr>
<td><strong>Trustworthiness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is seen as trustworthy and displays integrity in all actions and decisions.</td>
<td>9.89</td>
<td>11.94</td>
<td></td>
</tr>
<tr>
<td>Is mistrusted by followers and fails to deliver on promises.</td>
<td>−9.89</td>
<td>−11.94</td>
<td></td>
</tr>
<tr>
<td><strong>Playing experience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previously played sport at the professional level.</td>
<td>1.57</td>
<td>1.89</td>
<td></td>
</tr>
<tr>
<td>Never played sport at the high school level or higher.</td>
<td>−1.57</td>
<td>−1.89</td>
<td></td>
</tr>
<tr>
<td><strong>Coaching experience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previously coached sport at the professional level.</td>
<td>2.55</td>
<td>2.34</td>
<td></td>
</tr>
<tr>
<td>Never coached sport at the high school level or higher.</td>
<td>−2.55</td>
<td>−2.34</td>
<td></td>
</tr>
<tr>
<td><strong>Dynamism</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a dynamic person with an aggressive mindset.</td>
<td>2.99</td>
<td>4.72</td>
<td></td>
</tr>
<tr>
<td>Is a shy person who is hesitant to make decisions.</td>
<td>−2.99</td>
<td>−4.72</td>
<td></td>
</tr>
<tr>
<td><strong>Functional area knowledge</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is extremely knowledgeable about marketing.</td>
<td>6.97</td>
<td>5.09</td>
<td></td>
</tr>
<tr>
<td>Is not very knowledgeable about marketing.</td>
<td>−6.97</td>
<td>−5.09</td>
<td></td>
</tr>
<tr>
<td><strong>Sport domain knowledge</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is extremely knowledgeable about sports in general.</td>
<td>4.05</td>
<td>3.53</td>
<td></td>
</tr>
<tr>
<td>Is not very knowledgeable about sports in general.</td>
<td>−4.05</td>
<td>−3.53</td>
<td></td>
</tr>
</tbody>
</table>

*Note: “Marketing” is the functional area and fluctuated between respondents.*
Table 4

*Relative Importance of Attributes*

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Credibility</th>
<th>Prototypicality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional Area Experience</td>
<td>14.48</td>
<td>12.69</td>
</tr>
<tr>
<td>Sport Domain Experience</td>
<td>10.75</td>
<td>9.36</td>
</tr>
<tr>
<td>Trust</td>
<td>21.26</td>
<td>25.07</td>
</tr>
<tr>
<td>Played Sport</td>
<td>8.34</td>
<td>8.82</td>
</tr>
<tr>
<td>Coached Sport</td>
<td>8.91</td>
<td>8.57</td>
</tr>
<tr>
<td>Dynamic</td>
<td>9.53</td>
<td>12.57</td>
</tr>
<tr>
<td>Functional Area Knowledge</td>
<td>15.66</td>
<td>12.85</td>
</tr>
<tr>
<td>Sport Domain Knowledge</td>
<td>11.07</td>
<td>10.07</td>
</tr>
</tbody>
</table>
Appendix

Example Hypothetical Profile

Department Manager A:
- Previously worked in a management position related to marketing.
- Has never worked in a sport organization prior to current position.
- Is seen as trustworthy and displays integrity in all actions and decisions.
- Never played sport at the high school level or higher.
- Previously coached sport at the professional level.
- Is a shy person who is hesitant to make decisions.
- Is not very knowledgeable about marketing.
- Is extremely knowledgeable about sports in general.

Please indicate from 0 to 100 your assessments of this person below:
1. How credible do you see this person as a manager in a sport organization?
2. How well does this person fit your image of a leader in a sport organization?

Note: “Marketing” is the functional area and fluctuated between respondents.