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Conceptual Considerations for Social Support Research in Sport and Exercise Settings: The Case of Sport Injury

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There is an extensive body of research indicating that social support can contribute to health and well-being by reducing exposure to stress and enhancing coping efforts. The mechanisms underlying this relationship remain poorly understood, however, and confusion abounds as to the nature of social support. This paper examines some of the major conceptual issues relevant to the study of social support in the context of sport injury. Specific issues addressed include differences between (a) support activities and support messages, (b) perceived support and received support, and (c) support networks, support behaviors, and appraisals of support. The discussion includes an examination of the general and sport-specific social support research. Gaps in the research are identified and suggestions are made throughout the paper for investigating social support issues in sport.

Key words: rehabilitation, social ties, review, athletes

Social support, which in the broadest sense refers to social interactions aimed at inducing positive outcomes, is growing as an area of interest in the literature on sport and exercise, particularly where sport injury is concerned. Generally, research in this area has focused on the role of social support in both the etiology of sport injury (Andersen & Williams, 1988; Hardy, Richman, & Rosenfeld, 1991; Smith, Smoll, & Ptacek, 1990) and recovery from sport injury (Hardy, Crace, & Burke, 1999; Udry, 1996, 1997; Udry, Gould, Bridges, & Tuffey, 1997; Wiese-Bjornstal, Smith, Shaffer, & Morrey, 1998). The knowledge gained from these endeavors has both theoretical and practical implications for sport scientists. Specifically, research findings can elucidate psychosocial issues associated with sport injury and guide the development of injury-prevention strategies and psychosocial rehabilitation interventions.

Investigating the link between social support and selected health outcomes, such as rate of recovery following sport injury, can be a daunting task, however. Social support is proving to be a complex phenomenon and, despite the large volume of studies published on the topic in the sport and exercise literature and elsewhere, confusion abounds as to the nature of social support and its relationship to

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health. The purpose of this article is to present some of the major conceptual issues relevant to the study of social support in recovery from sport injury. Although framed in the context of athletic injury, the issues addressed remain pertinent to support exchanges occurring in any sport and exercise context.

Complexity of the Social Support Construct

Social support theorists have claimed that much of the confusion surrounding social support stems from the complexity of the construct coupled with a lack of conceptually driven research (Sarason, Pierce, & Sarason, 1990; Schwarzer & Leppin, 1991; Vaux, 1988). Social support is a "multiconstruct" that comprises three subconstructs which represent its structural (support networks), functional (support exchanges), and perceptual (support appraisals) features (Vaux, 1988). These subconstructs are interdependent and, as Winemiller, Mitchell, Sutcliff, and Cline (1993) pointed out, a full understanding of the mechanisms underlying the social support/health relationship rests on comprehensive and simultaneous examinations of all three subconstructs of social support.

Unfortunately, the trend in much of the research on social support has been to examine the subconstructs independently. In their review of the literature, Winemiller and colleagues (1993) observed that several of the social support studies examined focused exclusively on: (a) structural features of social support that emphasized the relationship between network composition and health variables; (b) functional features of social support that highlighted the link between the provision of social support and well-being; or (c) perceptual features of social support that underscored the influence of perceptions of being supported on health outcomes. Together, these diverse approaches have produced a collection of contradictory findings, with some studies reporting a positive relationship between social support and health while others report either a negative relationship or none whatsoever between these variables (Sarason et al., 1990).

Divergent approaches to investigating the social support/health relationship and contradictory findings can also be found in the literature on sport and exercise. For example, some authors have examined support network features (Rosenfeld, Richman, & Hardy, 1989) whereas others have focused on appraisals of social support (Duda, Smart, & Tappe, 1989; Fisher, Domm, & Wuest, 1988; Ford, 1999; Udry, 1997). In terms of the research findings, several qualitative studies that explored the influences of social support on recovery from sport injury (Bianco, 1999; Ford, 1999; Johnston & Carroll, 1998; Udry 1997, Udry et al., 1997) have indicated that social support helps relieve distress and enhances coping.

Quantitative work on the issue has produced mixed results, however. For example, in examining factors related to rehabilitation adherence, two studies (Duda et al., 1989; Fisher et al., 1988) found that social support contributed significantly to rehabilitation adherence, whereas two others studies (Fields, Murphey, Horodyski, & Stopka, 1995; Udry, 1997) found that it did not. Conflicting results have also been reported within the same study. Ievleva and Orlick (1991) used interview and survey methods to examine factors contributing to quick recovery, and found qualitative evidence for the facilitative impact of social support on recovery but statistically insignificant findings for this same link.

Several authors (Dunkel-Schetter & Bennett, 1990; Schwarzer & Leppin, 1991; Vaux, 1988) have suggested that some of the contradictory findings in the research on social support can be attributed to conceptual and methodological shortcomings in the research itself. For example, Winemiller et al.'s (1993) review of the literature on social support indicated that definitions of social support varied significantly across studies, and that 61% of the studies they examined used novel measures of social support (i.e., measures developed specifically for the study) with unknown reliability and validity. Sarason and colleagues (1990) suggested that discrepant findings could also be related to the incorrect use of social support instruments (e.g., using an inventory designed to measure *perceptions* of support available to assess actual support exchanges).

Schwarzer and Leppin (1991) posited that in addition to methodological difficulties, the contradictory findings were likely a reflection of the complexity of the social support construct. It was possible, they explained, that observed positive and negative effects of social support on outcome variables represented different causal mechanisms in the social support/health relationship. Schwarzer and Leppin (1991) and several other social support researchers (Burleson, Albrecht, Goldsmith, & Sarason, 1994; Dunkel-Schetter & Bennett, 1990; Hobfoll & Vaux, 1993) have argued that a clearer understanding of social support relies on taking stock of past research efforts and bringing conceptual clarity to the complexities of the construct.

The past 40 years of social support research has laid the groundwork for several theoretical advances in the field. It is now understood that the structural (support networks), functional (support exchanges), and perceptual (support appraisals) features of social support are interdependent and must therefore be examined comprehensively to reveal the underlying mechanisms guiding the social support/health relationship (Winemiller et al., 1993). Social support theorists (Sarason et al., 1990; Sarason, Sarason, & Pierce, 1994) have also pointed out that because social support is an interactive process, it is influenced by provider and recipient characteristics, characteristics of the relationship they share, and the sociocultural context in which social support takes place. It is also evident that social support is driven by both instrumental goals (enhanced coping and relief from distress) (Burleson, 1994; Cohen & Wills, 1985) and relational goals (relationship formation and maintenance) (Clark & Delia, 1979; Duck & Silver, 1990). Finally, there is evidence that social support influences health and well-being through main effect (preventive) and buffering effect (palliative) pathways (Cohen & Wills, 1985; Schwarzer & Leppin, 1991). These observations are reflected in the conceptual map shown in Figure 1 and are expanded upon throughout this paper.

Although by no means exhaustive, this list of theoretical developments points to some of the major conceptual issues driving social support research today and, for this reason, these issues are addressed herein. The conceptual issues are discussed as they pertain to three major distinctions in the field of social support: the differences between (a) support activities and support messages, (b) perceived support and received support, and (c) support networks, support exchanges, and appraisals of support. As will be demonstrated, all these facets of social support are highly interrelated, but it is only in distinguishing among them that a clearer understanding of social support can be achieved. Furthermore, appreciation of these distinctions has important implications for research design and intervention.

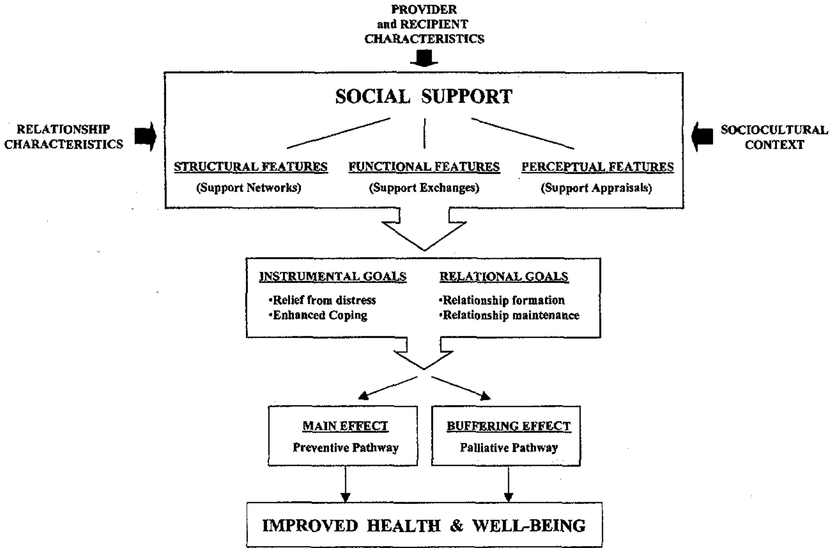

Figure 1 — Conceptual map of the social support process.

Clarification of Terms

Before turning to a discussion of the distinctions, it is essential to clarify what is meant by the term "social support." Definitions of social support abound in the literature, with some authors describing social support as an activity (exchanges of resources) (Hobfoll & Vaux, 1993) and others emphaszing its outcomes (feeling of being valued and cared for) (Burleson, 1994). Both approaches are correct in the sense that people engage in social support activities to achieve a particular outcome. It must be acknowledged, however, that support activities do not always lead to the desired outcome. For instance, a surgeon may describe the details of a surgical procedure to a patient, believing it will alleviate the patient's apprehensions about the impending surgery. Upon hearing this information, however, the patient may become more fearful of the surgery and end up being distressed rather than reassured. The social support activity in this case is nonsupportive rather than supportive because it does not help the patient. Thus, although well-intentioned, social support activities can have adverse consequences.

Recognizing this possibility, Shumaker and Brownell (1984) offered a definition of social support that focuses on the intent of a support activity rather than its actual outcome. They proposed that social support be viewed as activities that individuals engage in with the *intention* of helping one another. By emphasizing the intended rather than the actual outcomes of support activities, Shumaker and Brownell expanded the scope of social support research to include an examination not only of support activities that succeed but also of those that fail. From both a theoretical and a practical perspective, it is equally important to understand why something does not work as it is to understand why it does work. Focusing on intent rather than outcome is also useful because it allows one to distinguish between activities that were intended to be helpful but failed, and those that were

intended to harm and succeeded. The former is social support while the latter clearly is not. For these reasons, the Shumaker and Brownell definition of social support offers substantial advantages for sport and exercise researchers.

Regarding activities that people engage in to support one another, these may take several forms. Building on the work of Pines, Aronson, and Kafry (1981), Hardy and Crace (1993) proposed a taxonomy of eight social support types. As shown in Table 1, they are grouped into three major support categories—emotional, informational, and tangible support. Emotional support is aimed at encouraging and sustaining emotion-focused forms of coping (efforts to manage the distress caused by the stressor or group of stressors). Informational and tangible support, on the other hand, are generally geared toward supplementing and maintaining problem-focused forms of coping (efforts to manage the problem causing the distress). Hardy and Crace pointed out that while emotional and tangible support could be provided by virtually anyone, it is preferable that providers of informational support have expertise or information relevant to the area in question. With working definitions of social support and the various social support types in place, the focus now turns to a discussion of conceptual considerations relevant to social support research in sport and exercise settings.

Table 1 Social Support Types

Social Support Type	Definition
Emotional Support:	*Behaviors that . . .*
Listening support	indicate people listen to you without giving advice or being judgmental.
Emotional comfort	comfort you and indicate that people are on your side and care for you.
Emotional challenge	challenge you to evaluate your attitudes, values, and feelings.
Informational Support:	*Behaviors that . . .*
Reality confirmation	indicate people are similar to you and see things the way you do, helping you keep things in focus.
Task appreciation	acknowledge your efforts and express appreciation for the work you do.
Task challenge	challenge your way of thinking about your work in order to stretch you, motivate you, and lead you to greater creativity and involvement in your work.
Tangible Support:	*Behaviors that . . .*
Material assistance	provide you with financial assistance, products, or gifts.
Personal assistance	indicate a giving of time, skills, knowledge, and/or expertise to help you accomplish your tasks.

Note. Adapted from Hardy and Crace (1993).

Distinction #1: Social Support Activities vs. Social Support Messages

Social support activities are what people do to be supportive, such as offering sympathy or encouragement; they are the explicit, observable aspects of social support. Social support messages, on the other hand, refer to what is implied or communicated indirectly through these social support activities; they reflect the implicit, unobservable side of social support. Clark and Delia (1979) explained that when engaging in social support activities, providers inevitably communicate something about themselves, the recipient, and/or their relationship. By telephoning an injured athlete to inquire about his or her progress, for example, a coach is communicating something about him/herself (I am a caring person), the athlete (You are a valuable person), and their relationship (I care about you). The coach does not say these things (social support messages) directly to the athlete, but they are understood by his or her expression of interest (social support activity).

Until recently, the differences between social support activities and social support messages did not receive much attention in the literature. Burleson (1994) suggested that the distinction between these two constructs was often blurred because they have a strong interdependence. Indeed, social support activities and the social support messages they convey can be viewed as two sides of the same coin in the sense that engaging in a social support activity invariably communicates a social support message. It is important to realize, however, that the two constructs are conceptually distinct. Although social support activities inevitably communicate social support messages, the same activity does not always communicate the same message. For example, an offer of advice may in some instances communicate a desire to be helpful, while in other instances it communicates a lack of confidence in a person's abilities (e.g., I'm telling you what to do so that you'll get it right). It must also be noted that several social support activities can be used to communicate the same message. Expressions of empathy, provision of reassurance, and offering of practical assistance, for example, are all social support activities that can convey concern for the recipient. For these reasons, it is prudent to isolate social support activities from the messages they convey.

Another reason for distinguishing between social support activities and social support messages is that each construct is associated with specific social support goals. Social support activities, for example, are linked with instrumental goals, whereas social support messages are tied to the relational goals of social support (Clark & Delia, 1979). The instrumental goals of social support are to relieve distress and enhance coping (Shumaker & Brownell, 1984). Nestled in the framework of stress and coping theory (Lazarus & Folkman, 1984), social support is viewed as a coping resource intended to facilitate emotion- and problem-focused forms of coping. Social support activities that are intended to meet these instrumental goals include expressing concern, prompting and encouraging articulation of feelings, displaying sympathy and understanding, offering assistance, and providing alternate perspectives, new information, and feedback (Hardy & Crace, 1993).

In terms of relational goals, social support plays a role in the formation and maintenance of relationships (Barnes & Duck, 1994; Clark & Delia, 1979). Drawing on symbolic interaction theory, which emphasizes meanings conveyed through human interaction, Goldsmith and Parks (1990) argued that social support activities

serve as a vehicle for individuals to communicate their feelings about one another. It is believed that people form meanings about the exchanges they have with one another, and that these interpretations of events affect their attitudes and beliefs about the relationship (Barnes & Duck, 1994). Barnes and Duck explained that social support activities that contain messages of love, commitment, and caring, for example, create feelings of warmth, gratitude, and affection between providers and recipients, as well as contributing to the development and strengthening of the relationship. Conversely, social support activities that recipients perceive as derogatory or as showing a lack of appreciation for their point of view could create estrangement between partners in a relationship and interfere with the formation of new relationships.

Implications of Distinguishing Between Social Support Activities and Social Support Messages

An interesting question concerning the distinction between the social support activity and social support message is whether it is the social support activity itself or the message it conveys that makes social support effective. Cutrona and Russell (1990) would argue in favor of the former position, claiming that the link between social support and well-being depends on matching social support activities to stressor characteristics. From their perspective, emotional-support activities are needed when recipients perceive events to be outside of their control and are engaged in emotion-focused forms of coping. Likewise, informational-support activities are likely to be most needed when recipients feel the situation is within their control and they are employing problem-focused coping strategies. An athlete experiencing grief following a career-ending injury, for example, will benefit more from displays of sympathy and understanding than from advice on how to find a job. Similarly, advice on rehabilitation and encouragement of adherence to treatment are more useful to the injured athlete who is actively engaged in rehabilitation than to the athlete who is unable to move.

Symbolic interactionists (Barnes & Duck, 1994; Burleson, 1994; Goldsmith & Parks, 1990), on the other hand, would contend that the value of social support lies not in the activity per se but in the meaning or intent of the action. Their position is that people evaluate their interactions on a generalized or symbolic level rather than in terms of specific actions. Thus, even when social support activities do not "match" a person's need, they can still be seen in a positive light if the recipient views the activities as motivated by a desire to be helpful. Although people can sometimes be clumsy in their attempts to provide social support and end up saying or doing something inappropriate, recipients may nonetheless be moved by the fact that the support provider cares about them.

Barnes and Duck (1994) posit that what matters most to recipients of support is not whether they receive emotional, informational, or tangible types of social support but what these support activities communicate about how the provider views them and their relationship. As long as members of the support network communicate interest, liking, empathy, concern, and a willingness to help, the support activities they engage in are likely to be perceived as satisfactory and, therefore, have a positive impact on outcome variables. On the other hand, social support activities that indicate a lack of understanding or an absence of sympathy are likely to be viewed as unsatisfactory and can have a negative influence on health outcomes.

From a symbolic interaction perspective, it would be expected that the benefits of a coach's support rest more with his or her ability to communicate positive feelings toward the athlete and their relationship than with the coach's ability to match support to stressor characteristics. Findings that uphold both the support-matching and positive-regard positions have been reported in the literature on sport injury (Ford, 1999; Johnston & Carroll, 1998; Udry et al., 1997). For example, in a qualitative examination of the social support experiences of elite skiers recovering from sport injury, Bianco (1999) noted that athletes perceived as beneficial those social support activities that both matched their needs and conveyed positive sentiments toward them. This would suggest that the two perspectives are complementary rather than mutually exclusive.

As to whether it is the type of social support offered or the message it conveys that is the greater determinant of support effectiveness, we know of no published studies that have systematically compared the two. Thus, the issue has yet to be resolved but presents an interesting avenue for future research. Further investigation may reveal that successful support matching is influenced by the degree of caring for the person in need, with providers who care more being better able to determine what is needed and provide it than those who do not care as much for the recipient. Although intuitively appealing, these propositions remain purely speculative.

While it is true that social support activities and social support messages are conceptually distinct, there is no escaping the fact that they are interrelated and that the act of offering social support can simultaneously achieve both instrumental and relational goals (Burleson et al., 1994). Social support, therefore, has implications that extend beyond enhancing coping with stress and that can alter the conduct of and sentiment toward a relationship. In addition to helping an injured athlete remain motivated throughout recovery, as suggested by the work of Bianco (1999), Ford (1999), and Johnston and Carroll (1998) for example, the support offered by a coach can contribute to strengthening the coach/athlete relationship in the sport arena.

Curiously, research on social support in the sport and exercise setting has focused almost exclusively on the instrumental rather than relational effects of social support. Studies have examined the impact of social support on outcome variables such as treatment adherence (Udry, 1997) and rate of recovery (Ievleva & Orlick, 1991). This is a worthy endeavor, but there are other issues that also deserve attention in this area of inquiry. Specifically, researchers have virtually ignored the effects of social support on relational outcomes. For example, what impact does the support received from teammates during recovery have on subsequent team cohesion? Does coach support during injury have a favorable impact on the coach/athlete relationship? If so, what implications does this improved relationship have on sports performance? Broadening the scope of social support research to include examination of relational issues could provide answers to these questions and point to ways to maximize the benefits of social support.

Distinction #2: Perceived Support vs. Received Support

In addition to acknowledging the differences between social support activities and social support messages, researchers must be aware of the distinction between perceived and received support. Each of these conceptualizations is associated

with different explanations of the social support/health outcome relationship. *Perceived* support is linked primarily to the "main effect theory" of social support, which emphasizes how social relationships contribute to overall functioning and inoculate people throughout life against experiencing distress (Sarason et al., 1990). *Received* social support, on the other hand, is most commonly associated with the "buffering hypothesis" of social support, which holds that social support contributes to improved health by acting as a coping resource when people are distressed (Cohen & Wills, 1985).

Essentially, the main-effect theory posits that through their early support interactions, individuals come to develop a perception about whether support will be available when needed (Sarason et al., 1990). The presence of social support influences the manner in which events are appraised and encourages the development of effective coping skills. Main-effect theorists (Sarason et al., 1990) hold that because individuals who are high in perceived support know they have the resources needed to confront difficult situations, they are less likely to view events as stressful compared to persons who are low in perceived support. Sarason and colleagues (1990) claim that perceived support is a stable personality characteristic, and that social support exerts a salutatory effect on health by fostering a positive sense of support and reducing the likelihood of perceiving events as stressful.

Clearly, the perception that one has the resources needed to cope with life events will not necessarily render one immune to distress. There will be times when, regardless of their coping ability and the support available to them, individuals will experience distress and have to call upon personal and social resources to manage this distress (Lazarus & Folkman, 1984). The buffering hypothesis concerns itself with the influence of social support on health outcomes once a situation has been deemed stressful. According to this hypothesis, the social support that individuals receive when distressed will facilitate coping behaviors and thus help offset or buffer the negative effects of stress (Cohen & Wills, 1985). According to the buffering hypothesis framework, exposure to distress is reduced through the enhancement of coping abilities. Thus, whereas perceived support is thought to influence health via a preventive pathway, received support appears to exert its influence via a palliative pathway.

Although the main-effect theory and the buffering hypothesis offer different causal explanations for the social support/health relationship, the two perspectives need not be viewed as opposing one another. In fact, they are quite complementary in the sense that it is through social support activities (received support) that individuals come to develop a sense of the availability of support (perceived support). For research purposes, however, it is essential to decide whether the investigation is based on the main-effect theory or the buffering hypothesis. This decision will determine whether the focus is on perceived support or received support and, hence, the research design.

Both the main-effect theory and the buffering hypothesis have driven research in the area of sport and exercise. In terms of the quantitative work that has been done, studies examining the role of social support in the etiology of sport injury (Andersen & Williams, 1988; Hardy et al., 1991; Rosenfeld et al, 1989; Smith et al., 1990) have focused on perceived support, and studies investigating the effects of social support on treatment adherence and rate of recovery from sport injury (Duda et al., 1989; Fields et al., 1995; Fisher et al., 1988; Ievleva & Orlick, 1991) have focused on received support. With regard to the qualitative

work that has been carried out, research has focused on the relationship between received social support and coping with sport injury.

While this collection of studies has yielded support for the influence of both perceived support and received support on the outcome variables examined, none of the studies have examined both factors concurrently. Thus it is impossible to determine from this research whether the outcomes observed were influenced by received support, perceived support, or a combination of the two.

One question that arises from the perceived/received support distinction is whether it is perceived support or received support that exerts the greatest influence on health. Unfortunately, attempts to address this issue have been marred by the fact that the term "perceived support" has been used to describe both perceptions of support availability and perceptions of support received. As noted earlier, social support is a multilayered construct comprising members of the support network, support exchanges that occur between network members and recipients, and recipients' perceptions of these exchanges (Vaux, 1988). It is this latter subconstruct, the recipient's perception of social support exchanges, that is so often confused with perceptions of support availability. The confusion is such that perceived support is now a construct associated with both the main-effect and buffering frameworks (Pierce, Sarason, & Sarason, 1990).

Recognizing the difficulty engendered by this situation, Pierce et al. (1990) recommended that perceived support as it relates to the main-effect theory be renamed "sense of support" to bring clarity to the issue. Until this proposed changeover is universally adopted, however, the confusion will continue to exist. Thus it is imperative, when reviewing the social support literature, that sport and exercise researchers remain cognizant of the fact that "sense of support" and "perceived support" may or may not refer to the same construct. The same holds true for "perceived support" and "received support." For the rest of this paper, the term "sense of support" will be used when discussing perceptions of support availability as outlined by the main-effect theory, and "perceived support" will refer to perceptions of support exchanges as described within the buffering hypothesis framework

Distinction #3: Support Networks, Support Exchanges, and Support Appraisals

The final and most researched components to be discussed concern the structural (support networks), functional (support exchanges), and perceptual (appraisals of support) features of social support. As with the previous constructs discussed, this triad of constructs is also interconnected in the sense that network resources (potential support providers) are needed for support behaviors to occur, and appraisals of support are made on the basis of the support behaviors that have transpired (Vaux, 1988). Both in spite of and as a result of this interdependence, it is essential to examine each component in isolation in order to appreciate its specific contribution to the social support process.

Paradoxically, the same body of work that has been criticized for its lack of clarity and fragmented approach to the examination of social support is also responsible for paving the way to a greater understanding of the structural, functional, and perceptual features of social support. The contribution of research

investigating support networks, support exchanges, and support appraisals is discussed separately.

Support Networks

Support network research focuses on the relationship between network size and composition on health outcomes. Network size research has revealed that, although it is a necessary condition, the mere presence of potential support providers is no guarantee that social support will be forthcoming, or that the support provided will achieve the desired outcome (Dakof & Taylor, 1990; Sarason et al., 1990; Thoits, 1985). What matters is not how many network members there are but whether these individuals are able to recognize the need for support and are able and willing to provide the appropriate type of social support.

A look at network composition has revealed that support networks are composed of a variety of relationship types, and that specific types fulfill specific needs (Cutrona & Suhr, 1994; Lin, 1986; Sarason et al., 1994). Lin (1986) explained that relationship types vary on four dimensions—time spent together, emotional intensity, intimacy, and reciprocity—and that high levels of each factor typify close relationships while low or nonexistent levels are characteristic of distant ties. According to social resources theory (Lin, 1986), close relationships provide the resources needed for expressive action, such as sharing feelings and venting frustrations, and facilitate emotion-focused coping. More distant ties, on the other hand, provide the resources needed for achieving instrumental goals, such as gaining access to needed information, and thus facilitate problem-focused coping.

In the context of sport injury, social resources theory would predict that, because they are close to the athlete, intimates such as family or close friends would be in a better position to provide reassurance of self-worth than would a casual acquaintance (e.g., a surgeon). Similarly, by virtue of their expertise, physicians and allied health professionals (e.g., physiotherapists) would be better suited to providing medical information than would a caring parent who lacks medical knowledge. Both of these predictions have been supported in the literature on sport and exercise (Bianco, 1999; Ford, 1999; Johnston & Carroll, 1998; Rosenfeld et al., 1989; Udry et al., 1997). It has been observed that, in general, athletes turn to family and friends for emotional support, while for informational support they turn to individuals with relevant expertise, such as coaches or medical professionals.

With respect to the influence of different types of relationships on health and well-being, the research indicates that social support emanating from close relationships has a greater impact, both positive and negative, on health and well-being than does support garnered from more distant ties. For example, Hobfoll and Vaux (1993) reported that, in comparison to more distant ties, close relationships were linked to more supportive behaviors, more positive support appraisals, less loneliness, and greater life satisfaction.

Several authors (Dakof & Taylor, 1990; Pierce et al., 1990; Rook, 1984) have cautioned that not all close ties are supportive, and that the support provided through close relationships marked by a high degree of conflict can exacerbate rather than relieve distress. While it is true that under certain circumstances the support provided through close relationships may not always be beneficial, it is evident that close relationships are essential to health and well-being. In fact, research shows that support from more distant ties cannot compensate for a lack of support from close intimates (Coyne, Ellard, & Smith, 1990).

Lin (1986) explained that the significance of intimate relationships in one's network is attributable to the fact that these relationships fulfill basic human needs, such as the need to feel valued and cared for, and are closely tied to identity formation and maintenance. Moreover, because of a substantial amount of time spent together, along with emotional intensity, closeness, and reciprocity, intimate relationships provide a forum for sharing sentiments, venting frustration, and affirming self-worth and dignity. These expressive actions, Lin claimed, are necessary to the promotion of mental health, and it is for this reason that social support communicated through intimate rather than distant relationships has a greater impact on functioning.

Argyle's (1992) review of the benefits of social support on health also yielded findings that support the importance of intimate relationships. Specifically, Argyle noted that marital relationships have a bigger impact, both positive and negative, on health than friendships do. This is not to say, however, that there are no benefits associated with the social support provided by friends. Indeed, considerable research indicates that friends play a significant role in helping people cope with life crises by facilitating both expressive and instrumental goals (Derlega, Barbee, & Winstead, 1994).

Studies in sport injury (Bianco, 1999; Ford, 1999; Johnston & Carroll, 1998; Rosenfeld et al., 1989; Udry et al., 1997) indicate that coaches and teammates can be important sources of emotional, informational, and tangible support to injured athletes. Moreover, these studies show that while intimates such as family members and loved ones may be important sources of reassurance and affirmation of self-worth, coaches and team members with whom athletes feel close can also provide this type of support. Also noted in this line of research is that in times of crises, athletes may develop close and confiding relationships with persons with whom they otherwise share distant ties, such as physiotherapists. Indeed, several authors (Fisher, 1990; Gordon, Milios, & Grove, 1991; Gordon, Potter, & Ford, 1998; Heil, 1993) have commented on the significant role that sport injury rehabilitation personnel can play in providing social support to recovering athletes.

Support Exchanges

While studies on support network have provided insight on the types of support rendered by different network members, the research on support exchanges (discussed next) has shed light on the intricacies of support exchanges. In particular, research on support exchanges (Coyne et al., 1990; Goldsmith & Parks, 1990; Gottlieb, 1985; Hobfoll & Vaux, 1993; Pearlin & McCall, 1990; Sarason et al., 1990) has contributed to a better understanding of the conditions that facilitate or hinder successful support exchanges. As previously noted, support exchanges rely on the recognition of support needs and subsequent provision of social support (Sarason et al., 1990). Support exchanges are also influenced by how well the person in need communicates his or her need for social support, with better communication increasing the chances for successful exchanges. The research shows that each of these activities is moderated by a combination of sociocultural, personality, and interpersonal factors (Sarason et al., 1990). Thus, support behaviors are discussed in relation to these factors.

Sociocultural Context. Hobfoll and Vaux (1993) explained that individuals have a shared cultural understanding of events that are likely to be distressing

and the type of support needed in such circumstances. It is this understanding, the authors continued, that contributes to an individual's ability to recognize support needs, even if not explicitly stated. In line with Hobfoll and Vaux's assertion, it would be expected that compared to one who knows little about sport, an individual involved in sport would have a better appreciation of the stresses of sport injury and thus be in a better position to determine the type of support needed. Findings from Bianco (1999) and Johnston and Carroll's (1998) qualitative research support these contentions. Specifically, the injured athletes in both studies indicated that individuals who had an understanding of sport and sport injury were better able to provide for their needs than those unfamiliar with the experience.

Hobfoll and Vaux (1993) pointed out that sociocultural norms also dictate what is perceived as acceptable in terms of expressing social support needs and offering support. They proposed that disclosure of need was likely to be influenced by the type of problem encountered and who one would approach for help. Some problems can be particularly stigmatizing (e.g., steroid abuse), and it may be more appropriate to discuss them in a safe and nonjudgmental environment, such as with a sport psychologist, than in a more casual setting where confidentiality may be breached, such as with the news media.

Expression of the need for support is also likely to be affected by gender biases, whereby it may be perceived, for example, that it is normal and acceptable for women to need help but that men should be able to work things out on their own (Hobfoll & Vaux, 1993; Sarason, Sarason, Hacker, & Basham, 1985). In their study, Young, White, and McTeer (1994) noted that the male athletes they interviewed saw pain and injury as a masculinizing experience. Although Young et al. did not directly address the issue of support-seeking in their study, their observation that male athletes took pride in their ability to tolerate pain and injury would suggest that these athletes would not be inclined to seek help even if it was needed. This conclusion is speculative, of course, and further research is needed to adequately address the relationship between gender and support-seeking in sport.

Nixon's (1992) work on the values ingrained in sport subcultures suggests that role expectancy may also have an impact on one's level of comfort with seeking social support. For instance, Nixon observed that there is a "culture of risk" deeply embedded in athletic subcultures that discourages complaints about pain and injury by downplaying the significance of discomfort, and encouraging toughness and acceptance of discomfort as "part of the game." Young and White's (1995) finding that elite female athletes take pride in their ability to tolerate pain and injury lends support to Nixon's work. Furthermore, it raises the possibility that, perhaps at the elite level, the values embedded in the sport culture have a greater influence on support-seeking than do gender issues. Again, the influence of sport values or athletic identity on support seeking has not been investigated directly in the research on sport.

In terms of support provision, Hobfoll and Vaux (1993) suggested that sociocultural norms and attitudes also dictate what is appropriate in specific situations, and among certain age groups, gender types, and relationship types. In the sport of men's rugby, for example, it may be more acceptable for a coach to show support for the players by patting them on the back rather than giving them a hug or encouraging disclosure following a loss. On the other hand, a women's figure-skating coach may feel it is appropriate to comfort her distraught skater by giving her a hug after a poor performance.

Unfortunately, these propositions have yet to be fully explored in the literature on sport and exercise. Clearly, the investigation of individual perceptions of and attitudes toward support seeking, and the provision of social support in sport and exercise environments, can provide useful information about the factors driving social support exchanges in this context.

Personality Factors. In terms of personality influences on support exchanges, the research shows that self-esteem is a major factor in communicating the need for support (Hobfoll & Vaux, 1993). Goldsmith (1994) noted that although they may need more support compared to their high-self-esteem counterparts, individuals low in self-esteem are less inclined to seek the support they need. According to Goldsmith, low-esteem individuals are more motivated to save face, and this makes them particularly susceptible to threats to self-esteem.

Saving-face refers to concerns about self-image and is a driving force in human interactions, particularly with regard to how support messages are communicated between people. Goldsmith (1994) explained that people typically want others to show acceptance of the self-image they project in interaction, that is, they want to maintain "positive face." Persons low in self-exteem experience threats to positive face or self-esteem because they tend to worry excessively about the impression others will have of them. Compared to high-self-esteem individuals, they are more prone to negative self-evaluations, and thus more likely to feel embarrassed, weak, dependent on others, incompetent, and not in control both when asking for and receiving help (Eckenrode & Wethington, 1990).

Goldsmith (1994) claimed that saving face was also a concern for the support providers, who may be concerned about appearing sympathetic and helpful. Coyne and colleagues (1990) pointed out that offering support carries several threats to self-esteem, such as feeling awkward or embarrassed when saying or doing something inappropriate to the situation. There is also the possibility of being rebuffed by the person in need (being told your help is unwelcome). Thus it would be reasonable to expect that those with low self-esteem may be less likely to risk embarrassment and rejection by offering social support.

The research shows that recognition of the need for support and the provision of social support are also influenced by empathy and level of social skill, with high degrees of both factors leading to a better recognition of support needs and the ability to provide more effective support messages (Hobfoll & Vaux, 1993). Burleson (1994) explained that because they have a heightened sense of self and others, empathetic individuals with highly developed social skills are able to produce "sophisticated support messages." These types of messages acknowledge, elaborate, legitimize, and contextualize the feelings and perspectives of distressed others, and have been rated by support recipients as being very helpful.

In terms of the decision to provide social support, there is evidence that this is based on a legitimacy assessment and a cost-benefits analysis. Pearlin and McCall (1990) noted that if the provider does not believe the problem merits distress, that the degree of distress is exaggerated, or that support provided in the past has not been used effectively, then support is likely to be withheld. Others (Coyne, Wortman, & Lehman, 1988) have noted that support is likely to be provided when the provider feels responsible for the occurrence of the stressor, and by the same token feels the recipient shares little responsibility for incurring the need for aid.

In addition to assessments of merit, support providers appraise whether they are in a position to help and what it will cost them personally to do so. Is this a

problem or an issue they feel capable of and comfortable dealing with? Will they be able to say or do anything to help? Do they have the time or the resources required to help the person in need? In general, people are unlikely to involve themselves in situations that surpass their competencies or that require a high investment of time and energy (Coyne et al., 1990).

Although the influence of personality characteristics on support exchanges has been discussed in the literature on sport and exercise (Udry, 1996), there has been little systematic investigation of these relationships. Qualitative research (Bianco, 1999) on sport injury seems to suggest that factors such as self-esteem and saving face can be salient mediators of social support exchanges in the sport setting. For example, in examining social support processes in recovery from sport injury, Bianco (1999) found that the injured skiers' level of comfort in approaching their coaches for social support was influenced by the skiers' concerns about what the coaches thought about them. In general, saving face seemed to be more of a concern for athletes who were new to the team and had not yet "proven themselves" to their coaches.

Further investigation of personality factors such as self-esteem, concerns of saving face, perceptions of legitimacy, and the costs of providing social support are needed in sport and exercise settings. For example, it would be worthwhile to find out whether coaches feel more inclined to provide support to athletes they feel have worked hard versus those showing a poor level of commitment to sport. It would also be useful to determine whether the coach's support is moderated by his or her perceptions of the time and energy required to be supportive.

Interpersonal Factors. With regard to interpersonal factors, the research shows that communication of support needs, recognition of the need for support, and provision of social support are mediated by the level of intimacy between partners and the quality of their relationship (Lin, 1986; Metts, Geist, & Gray, 1994). Coyne and colleagues (1990) explained that people hold different expectations of members of their support network, and that social support is typically expected and sought from close intimates. This is because, unlike distant ties, close relationships are founded on principles of mutual caring and reciprocal exchanges, and people expect that those close to them will be: (a) responsive to their distress, (b) motivated to help, (c) accurate about the nature and degree of their difficulties, and (d) willing to provide help appropriate to their need (Burleson, 1994).

This does not mean, however, that the provision of support is the exclusive domain of close relationships. Indeed, there is ample evidence that people seek and obtain social support from various members of their support network, ranging from close intimates to casual acquaintances (Lin, 1986). Individuals typically seek emotional support from close intimates and informational and tangible support from those with relevant expertise or access to services (Eckenrode & Wethington, 1990; Gottlieb, 1985). These trends can be reversed, however, and there will be times when individuals will turn to more distant ties such as mental health professionals or social workers for emotional support (Dakof & Taylor, 1990). For example, the services of a professional counselor may be sought when empathy and understanding are unavailable or when expression of one's thoughts and feelings carries with it threats of ridicule, rejection, or shame (Burleson, 1994).

This reversal of trends has been observed in the sport injury context, where recovering athletes have turned to allied health professionals such as physiotherapists for emotional support (Bianco, 1999; Ford, 1999; Johnston & Carroll, 1998).

The injured skiers in Bianco's (1999) study, for example, explained that they looked to sport physiotherapists for emotional support when they wanted to speak to someone who understood (a) what being injured meant to them, (b) their need to do as much as they could to recover quickly, (c) their frustration with the rehabilitation process, and (d) their concerns about no longer being able to ski at the elite level. Returning to the point about the personal costs involved in expressing one's emotions, it may be that, for some athletes, seeking emotional support from sport physiotherapists rather than close intimates is the safer option. These athletes may perceive that expressions of frustration about injury and the difficulties of rehabilitation are reasonable and acceptable behaviors in sports medicine settings, but that in a different environment they would be labeled "wimp" or "complainer."

Apart from level of intimacy, the quality of the relationship will also influence support seeking, recognition, and provision. Assessments of the quality of a relationship are based on the history shared between partners and are determined according to the amount of support, depth, and conflict present in the relationship (Pierce, 1994). The support dimension refers to the extent to which an individual can rely on another person for assistance in a variety of situations. The depth dimension refers to the extent to which the individual believes the other person is committed to the relationship, and the conflict dimension reflects the extent to which the individual experiences angry, ambivalent feelings toward the other person.

In general, people are unlikely to seek support from individuals who have been unhelpful in the past, who are not committed to the relationship, or who make them feel bad (Hill, 1991; Pierce, 1994). An injured athlete, for example, is unlikely to seek support from a coach who has not provided support in the past, who appears to not care, or who has ridiculed him or her in the past. Evidence from sport injury studies (Bianco, 1999; Ford, 1999) shows that coach support is unwanted when the coach is ambivalent toward the relationship or when the relationship is marked by a high degree of conflict.

The quality of a relationship is also a consideration with regard to recognition of need and provision of support. People invest more time and energy in getting to know people they like as opposed to those they dislike (Pierce, 1994). Thus, when it comes to recognizing a need for support, providers will be more sensitive to and more accurate about the messages they read in the behavior of someone they like versus someone they dislike or have a difficult relationship with (Coyne et al., 1990). In terms of providing support, individuals draw on their relational history with the person in need to determine how indebted they feel toward that person and how obligated they feel to offer support. People are more likely to provide support to those they care deeply about than to those they feel neutral or ambivalent toward (Sarason et al., 1990).

While some studies in sport and exercise (Rosenfeld et al., 1989; Udry et al., 1997) have considered level of intimacy in terms of describing who provides what, there has not been any systematic investigation on the influences of the quality of a relationship on support seeking and provision. The few qualitative studies (Bianco, 1999; Johnston & Carroll, 1998) in which these issues have been discussed indicate that level of intimacy and quality of a relationship are important mediators of the social support process. Clearly, these are factors that merit attention in future research on social support.

Support Appraisals

Research on support appraisals has yielded many interesting findings. It has been consistently demonstrated that it is the recipient's *perception* of being supported, whether accurate or inaccurate, rather than actual support behaviors that is more reliably associated with health outcomes (Sarason et al., 1990; Schwarzer & Leppin, 1991). The more a person feels supported, the more positive the impact of social support on health. Heller and Swindle (1983) explained that perceptions of support are important because individuals are affected by how they *interpret* the world and not necessarily by how the world actually is. Albrecht and Adelman (1984) echoed this sentiment, claiming that meaning does not reside in the messages exchanged but in the perceptual processes of each participant.

Regarding perceptions of support exchanges, research has shown that providers and recipients often differ in their perceptions, with recipients typically claiming to have received less support than providers reported giving (Antonucci & Israel, 1986). Direct observations of support exchanges also tend to differ from recipients' perceptions. There are several reasons for these discrepancies. First is the fact that recipients evaluate support exchanges on the basis of whether the support provided meets their needs (Brown, Brady, Lent, Wolfert, & Hall., 1987). These judgments may concern instrumental needs, relational needs, or both. Depending on how effectively the person in need communicates these needs and how astute the provider is at recognizing them, there is always the possibility for the support need to be misinterpreted or misunderstood. Providers may sincerely believe they are providing appropriate support when, in fact, the support provided is not what the recipient needed or wanted (Coyne et al., 1988; Rook, 1984).

Another factor that can contribute to discrepant views of social support exchanges is the recipient's expectations for support. Barnes and Duck (1994) explained that as a product of their daily interactions with one another, people come to develop expectations about each other's willingness and ability to provide social support. When a crisis arises, these expectations are set in motion and the provider's actions are evaluated within the context of these expectations and against the backdrop of everyday interactions. Typically, satisfaction with social support decreases when the support received falls short of expectations, but it increases when the support meets or exceeds expectations (Dunkel-Schetter & Bennett, 1990).

Unless providers are aware of recipient expectations, they are likely to fall short of these expectations rather than meet or surpass them. Research shows that expectations for support are highest in intimate relationships, and for this reason there is more opportunity for dissatisfaction with support provided in close versus distant relationships (Cutrona & Suhr, 1994). Furthermore, there is evidence that the affective tone of the relationship also influences judgments of social support (Metts, Geist, & Gray, 1994). For example, a criticism given in a relationship where the tone is generally supportive and positive is likely to be perceived as constructive. The same criticism given in a relationship that is generally nonsupportive and that tends to breed suspicion, however, may be viewed as competitive or antagonistic.

Similar findings have been reported in the literature on sport injury (Bianco, 1999; Ford, 1999). It has been observed that injured athletes have certain expectations for social support from particular individuals in their support network, and that satisfaction with social support is determined in part by how well these

expectations are met. For example, Bianco (1999) reported that injured elite skiers who expected more coach support than they received later reported low satisfaction with coach support. Conversely, support attempts that met or exceeded skiers' expectations contributed to high levels of satisfaction with social support within the relationship concerned. Although these findings are promising, they are limited in their scope. More research is needed to address support appraisals occurring in a variety of sport and exercise settings and across a diverse group of participants. Of particular importance is the identification of factors influencing support appraisals, given that it is the recipient's perception of being supported (whether rational or not) rather than the actual support provided that influences well-being.

Summary

Because of its acknowledged link to health and well-being, social support is a construct that holds a lot of interest for sport and exercise researchers and practitioners alike. Investigating the relationship between social support and selected health outcomes is a challenging undertaking, however. Social support is a complex phenomenon composed of multiple components and goals, and it is essential to distinguish among these to fully understand the social support process and to research it effectively. The purpose of this article was to present and discuss some of the major conceptual issues relevant to the study of social support in relation to sport injury. The issues were discussed within the context of three major distinctions in the social support literature: the differences between (a) support activities and support messages, (b) perceived support and received support, and (c) support networks, support behaviors, and appraisals of support.

The discussion on social support activities and social support messages showed that these two concepts are often confused with one another because the act of offering social support inescapably carries with it a message about the provider, the recipient, and their relationship (Burleson, 1994; Goldsmith & Parks, 1990). As a result of this interdependence, the provision of social support can simultaneously achieve instrumental goals (enhanced coping behaviors and relief from stress) and relational goals (formation and maintenance of relationships) (Clark & Delia, 1979). A question raised by this distinction concerns whether it is the characteristics of support activities or the content of the messages conveyed that influence health outcomes. Clearly, the answers have important implications for the design of social support interventions. At this time, however, we know of no published studies that have examined this issue.

Perceived support and received support were shown to differ in the sense that the former refers to a perception or belief that social support will be available if needed while the latter refers to actual support exchanges (Sarason et al., 1990). Perceived and received support also differ with regard to their theoretical underpinnings. Perceived support is tied to the main-effect theory of social support, which emphasizes the preventive benefits of social support. Received support is linked to the buffering hypothesis, which highlights the palliative role of social support in health and well-being. Because the main-effect theory and the buffering hypothesis offer different causal explanations for the social support/health relationship, it is imperative that researchers be clear about which approach is driving

their research. There is often the tendency to confuse perceptions about the availability of social support with perceptions about support exchanges. Pierce and colleagues (1990) suggested that the term "perceived support" be replaced with the term "sense of support" to avoid further confusion.

The final distinction examined in this paper concerns the differences between the three subconstructs of social support—support networks, support exchanges, and support appraisals. The discussion on support networks showed that these networks are composed of social ties that vary along a continuum from intimate to distant relationships, and that each relationship type suits different support needs (Lin, 1986). Emotional support is typically provided through intimate relationships, whereas informational and tangible support can be provided through distant ties. Having said this, it is important to bear in mind that not all social ties are health-promoting (Dakof & Taylor, 1990; Rook, 1984). In other words, relationships themselves are not directly supportive. Rather, it is the specific actions—and interpretation of these actions—that take place within human relationships that constitute support.

In terms of social support interactions, it was shown that these are moderated by (a) sociocultural factors that foster or discourage support-seeking and provision, (b) characteristics of individuals that facilitate or impede support-seeking and provision, and (c) properties of relationships that facilitate or impede support exchanges (Coyne et al., 1990; Goldsmith, 1994; Hobfoll & Vaux, 1993). Thus, when conducting research on social support, it is imperative to consider situational, intrapersonal, and interpersonal contexts in which supportive efforts occur (Pierce et al., 1990). It is also essential to consider recipients' satisfaction with the support they received. The research shows that individuals have certain expectations for support from people in their support network, and that satisfaction with social support decreases when the support received is less than expected but it increases when the support provided meets or exceeds expectations (Barnes & Duck,1994; Dunkel-Schetter & Bennett, 1990).

Several authors (Pierce et al., 1991; Schwarzer & Leppin, 1990; Winemiller, et al., 1993) have called for research that provides detailed examinations of the communicative and interactional processes through which social support is solicited and conveyed. The more comprehensive the examination, the better the ability to uncover the intricacies of the social support process and develop prescriptive information about how social support can be enacted most effectively. As highlighted throughout this paper, significant inroads have been made in the literature on sport and exercise. Yet more work is needed, particularly with regard to developing methodologies that allow for the investigation of multiple components of social support within the same study. Finally, because social support processes are influenced by relational factors, it is recommended that the study of social support exchanges be contextualized within specific provider/recipient relationships.

Although the topic of assessment is beyond the scope of this article, a brief comment on the issues surrounding social support measures is warranted. As has been demonstrated throughout this paper, social support is a multidimensional construct with multiple goals that can lead to improved health and well-being via multiple pathways. An awareness of the conceptual and theoretical underpinnings of social support is necessary for ensuring appropriate selection and development of measurement instruments. An instrument designed to measure an individual's sense of social support will not be useful to examining social support activities, as

it provides no information on actual support exchanges. Similarly, instruments intended to measure social support exchanges will not tap into the messages communicated through these exchanges. It is essential, therefore, that researchers be clear on what aspect of social support they are assessing. The influence of individual, interpersonal, and sociocultural variables on the social support process must also be taken into account. When examining social support processes in sport, it would be best to use measures that are sport-specific and that allow individual relationships to be examined in isolation.

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