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Attribution in sport psychology: Seeking congruence between theory, research and practice

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Abstract

*Background and purpose:* This paper urges revision of the way attributions are conceptualised, investigated, and applied in sport psychology. There has been a recent decline in attribution research in sport psychology, despite the generally accepted relevance of attributions in applied settings. In seeking closer links between attribution theory, research, and practice, we argue that there is a mismatch between research and practice in sport psychology.

*Methods:* Relevant literature is reviewed and theoretical arguments offered within seven sub-headings: attribution theory in practice; linking consistency, distinctiveness, and consensus information to attribution dimensions; controllability as the primary attribution dimension; the generalisability of controllability; assessing attributions; implications for practice; and the social context.

*Results and conclusions:* Research within sport psychology should focus on the central issue of how controllability attributions generalise across time, situations, and people. Measurement should reflect this approach to research within the field of attributions, and to this end, researchers might consider using a variety of quantitative and qualitative methods of inquiry. Practitioners should use consistency, distinctiveness, and consensus information to challenge clients' attributional thinking and help them attain adaptive perceptions of controllability. Practitioners should also help clients to be their own psychologist. Future research and practice should include a consideration of the social context in which attributions are shaped.


Keywords: attributions; causal attribution dimensions; attributional retraining; controllability

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In sport psychology, there has been a decline in frequency of published studies featuring attributions as the primary topic of interest (Biddle, 1999). This is despite attribution theory being a popular topic in the 1970s and one of the "hot topics" of the 1980s (Biddle, 1999; Biddle, Hanrahan, & Sellars, 2001). We hope that this paper inspires readers to regenerate research inquiry into this important topic. To achieve this aim, we provide a critical review of past research, and propose a focus for the future.

Attributions can be considered under the general heading of explanation (see, e.g., Anderson, Krull, & Weiner, 1996). By *explaining* the causes of events, people create an understanding that they take with them into future situations, and this helps them develop mastery over their lives (White, 1959). The reflections of Heider (1944, 1958) addressed these issues and initiated interest in attributions. Heider considered people naïve psychologists, who try to better understand their own and others' behaviour by piecing together information helping them to link behaviour to its root cause. According to Heider, people use a layperson's form of science that serves a similar purpose to that of scientific research (e.g., Hempel, 1966), namely, to increase control over the environment, and to satisfy a desire to understand and gain knowledge about the world. In a similar way, people also try to derive explanations for their performances in sport. The issues for sport psychology are how people do explain these performances and pinpoint the root cause of them, and what impact an in-depth search for these causes has on future emotions, expectations and performance. This paper focuses attention primarily on attributions for failure, rather than attributions for success. This is because negative and/or unexpected events are generally believed to be more likely to lead to causal search (e.g., Lau & Russell, 1980; Wong & Weiner, 1981).

Building upon the foundations laid by Heider (1944, 1958), Jones and Davis (e.g., 1965) developed Correspondent Inference Theory. This theory focuses on the psychological processes involved when people make judgements about the dispositions and intentions of others, as a result of observing their actions. Correspondence is high when it is believed that a certain action truly reflects the underlying disposition of the actor. A correspondent inference is therefore derived by extrapolating from observation of some behaviour or act to the disposition of the person being observed; for example, in relation to a poor performance in sport, extrapolating rightly or wrongly from this one event the inference that the person is poor at sport.

Kelley's (1967) Covariation Model built upon and extended the work of Heider (1958) and Jones and Davis (1965), placing it in a much more accessible format (Gilbert, 1998). According to Kelley, people use three types of information (consistency, distinctiveness, and consensus) to link outcomes to causes. Főrsterling (1988) also suggested that by using consistency, distinctiveness, and consensus information people can be helped to overcome the negative impact of making maladaptive attributions. Sport psychologists probably intuitively use these concepts as well. For example, having lost a match, a tennis player might become despondent, saying, "I'm just no good. I feel like giving up." A sport psychologist might challenge this way of thinking, asking questions that help the player reassess her initial post-match reaction. Using consistency information, the psychologist might ask about other times the player performed well. Using distinctiveness information, the psychologist might ask about aspects of her performance that were good, even though she lost the match. Using consensus information, the psychologist might ask whether other players have been in a similar situation, had similar feelings, but pulled through. The psychologist might use all three types of information (or just one or two, depending on the most important aspect to work on) to help the sportsperson develop a clearer and

potentially more adaptive and functional way of thinking. These concepts are, however, rarely

mentioned in sport psychology research on attributions. This suggests a mismatch between

research and practice in sport psychology.

*Attribution Theory in Practice*

Attributional retraining (Fŏrsterling, 1988) involves manipulating dysfunctional

attributional thought, to help produce functionally adaptive ways of attributing. For example, in

relation to improving the academic performance of college freshmen, Wilson and Linville (1982,

1985) provided their participants with consensus and consistency information. Those unhappy

with their academic achievements were encouraged to believe that other students experienced

similar problems (using consensus information) and that these problems later disappeared (using

consistency information).

In general (social) psychology, attributional retraining has been guided by the

attributional model of achievement motivation proposed by Weiner (e.g., Weiner, 1979, 1985,

1986; Weiner, Frieze, Kukla, Reed, Rest, Rest, & Rosenbaum, 1971), the reformulation of the

learned helplessness hypothesis (Abramason, Seligman, & Teasdale, 1978), and the self-efficacy

theory of Bandura (e.g., Bandura, 1977, 1982). Recent studies in sport psychology have provided

support for the beneficial influence of attributional retraining on emotions, expectations and

performance. Such studies claimed to have employed an attributional retraining method based

either solely on the perspective of Weiner (Orbach, Singer, & Murphey, 1997; Orbach, Singer, &

Price, 1999), on all three above models (Miserandino, 1998), or on all three models in addition to

a non-explicit use of Kelley's (1967) consensus and consistency information (Sinnott & Biddle,

1998).

In dealing with the consequences of failure, it has generally been considered that the principal prescription derived from attribution models is to recommend people make attributions to lack of effort. This is because the psychological consequences of attributing failure to something that can change, such as a lack of effort (one can increase or decrease effort expenditure), should be more beneficial than attributing failure to something that is less amenable to change, such as lack of ability. It also affords the opportunity for increasing effort in future attempts at the task, hopefully leading to more favourable outcomes. The emphasis on lack of effort attributions can, however, be challenged (Biddle, 1993; Biddle et al., 2001). Following failure, when people subsequently try hard (put in more effort), attributions to lack of ability increase dramatically (Covington & Omelich, 1979). This may be partly due to the perception that the extra effort is compensating for a lack of ability. Further, if there is continued failure, attributions to low ability become even more likely, because further increases in effort still lead to failures. Anderson (1983) also alluded to this point:

> Any attempt to modify a person's attributions assumes that the problem situations *can* be controlled, and the person can learn from failures, can improve with practice, and can reach an acceptable level of success. But in many cases, failure is guaranteed, either by particular ability deficits or by the setting of unrealistic goals. In such cases, maintaining high-motivation levels may be more maladaptive than is recognising the hopelessness of the situation and giving up that particular goal. (p. 1146)

If, for example, a runner had already been expending high effort, but had failed to reach a race final, then encouraging him to attribute the failure to lack of effort might simply demoralise him (see, e.g., Robinson, 1990). If the qualifying standard were simply too difficult to meet, then encouraging attributions to lack of effort might serve little purpose, because increasing effort

would probably do little to improve outcomes. If the wrong race strategy were used, then increasing effort would not logically lead to improved outcomes, if the same strategy were used in future.

Instead of attributing to lack of effort following failures, there has been a shift to encouraging attributions to poor strategy (e.g., Anderson, 1983; Biddle, 1993; Biddle et al., 2001; Clifford, 1986; Curtis, 1992; Hardy, Jones, & Gould, 1996; Holschuh, Nist, & Olejnik, 2001; Sinnott & Biddle, 1998). Anderson (1983) wrote: "Viewing one's failures as the result of a poor strategy should lead one to attend to strategic features of the task, to expect improvement as one learns effective strategies, and to actually perform better" (p. 1144). Instead of increasing effort, this could lead to success being achieved reasonably effortlessly, because strategy is something that could be changed relatively quickly and easily.

The creation of a general prescription, whereby supposedly inappropriate attributions are altered to attributions to lack of effort (or strategy) probably does not match the experiences of practitioners within sport psychology. Indeed, an attribution to either effort or strategy would not necessarily address Anderson's (1983) additional point that sometimes it may be better to simply give up a particular goal. There are also times when it may be better to attribute failure to context specific lack of ability and focus efforts elsewhere, though whether more or less psychological damage would occur if this were done earlier or later is not clear.

Most practitioners would, nonetheless, recognise in their work the basic tenet of attribution theory: the best method for altering a client's unrealistic and dysfunctional attributions is to use *information* in testing these attributions against reality (see, e.g., Főrsterling, 1988). Főrsterling suggested that the covariation principle of Kelley (1967) should be a primary source of support for helping to generate information about a client's unrealistic or dysfunctional

attributions. By focusing on consistency, distinctiveness, and consensus information, one can help people to better understand the cause of an event and help them deal with problems. Because these three types of information help people deal with problems (Fŏrsterling, 1988), their use should be reflected in the research sport psychologists do. In the following section, we make a link between these three types of information and attribution dimensions.

*Linking Consistency, Distinctiveness, and Consensus Information to Attribution Dimensions*

A central premise within attribution research is that there is a dimensional structure underlying the explanations people give for events, and by categorising explanations into dimensions, one can better understand those explanations. As noted by Biddle (1993), "the majority of sport-related attribution research has used a Weinerian perspective" (p. 439), and to date that statement still remains true. According to Weiner et al.'s (1971) perspective, explanations could be assigned to a combination of two attribution dimensions, locus of causality and stability. This work was founded upon academic achievement in the classroom and related to a person's attributions for his/her own successes and failures. The locus of causality dimension referred to whether a cause could be located inside or outside the person (internal or external attributions); the stability dimension referred to whether the cause would remain stable or might change over time (stable or unstable attributions). Later deductive theorising (Weiner, 1979) led to the identification of a third dimension, controllability, referring to whether the cause be viewed as controllable or uncontrollable.

Two further dimensions were highlighted by Abramson et al.'s (1978) reformulation of the learned helplessness hypothesis. The original learned helplessness model (Maier & Seligman, 1976) was based upon the reactions of subjects (initially animals) to situations in which perceptions of uncontrollability were induced. For example, researchers would immobilise a dog

and place it in an experimental setting that eliminated the possibility of terminating an electric

shock. When transferred to a setting wherein the same negative stimulus was used, but this time

with the possibility to escape the stimulus, the dog would simply sit and endure the shocks. The

dog had learned helplessness. This response was not, however, consistently demonstrated in

humans, leading to a reformulation of the learned helplessness hypothesis, drawing upon

attribution theory. This reformulation demonstrated that when people are exposed to

uncontrollable events, they ask themselves why the event happened. The nature of any

subsequent outcomes (such as learned helplessness or lowered self-esteem) is affected by the

attributions the person makes along the dimensions of locus of causality, stability and globality

(Abramson et al., 1978). A global attribution refers to the process of generalising the

uncontrollability to all other situations with which the person is faced (such as generalising from

the uncontrollable negative stimulus condition to a new, controllable negative stimulus

condition). In contrast, a specific attribution refers to the process of perceiving the

uncontrollability to occur only in a narrow range of situations. Abramson et al. also encouraged

the distinction between helplessness that is personal (personal helplessness) and helplessness that

is universal (universal helplessness). That is, the person may consider the cause of the

helplessness to be unique to him/herself, or he/she may believe that the cause is common to all

people.

From this research, five principal attribution dimensions appear to have been proposed:

locus of causality; controllability; stability; globality; and universality. As previously noted,

locus of causality relates to whether the cause is inside or outside the person; controllability

relates to whether the cause is controllable or uncontrollable. The other three dimensions are

somewhat different, in that they deal with the *generalisability* of the cause of the event. That is,

does the cause generalise across time (stability), situations (globality) and/or other people (universality)? These three generalisability dimensions can be linked to the consistency, distinctiveness and consensus concepts of Kelley (1967) and Főrsterling (1988). More precisely, links can be made between consistency and stability, distinctiveness and globality, and consensus and universality.

*Controllability as the Primary Attribution Dimension*

Locus of causality and controllability are not easily distinguished, and an internal locus of causality has been observed to be positively associated with personal controllability (e.g., Ingledew, Hardy, & Cooper, 1996; McAuley, Duncan, & Russell, 1992; Vallerand & Richer, 1988). These two dimensions can, of course, be separated; for example, genetics may be considered internal but not controllable. The suggestion remains, however, that people may feel there is much overlap between where a cause lies and by whom it is controlled (Ingledew et al., 1996). Models of practice imply that a greater focus on controllability rather than locus would be adaptive. Relapse prevention (Marlatt & Gordon, 1985) suggests that, following a lapse in some positive behaviour, attributing to the self is a problem, because this leads to negative emotions and lowered self-efficacy. Instead, attributions to external, unstable and controllable aspects of the situation are recommended (e.g., the cause of the lapse may be external, but one is responsible for finding a way to overcome that cause). Den Boer, Kok, Hospers, Gerards, and Strecher (1991) pointed out that this is at odds with a frequent recommendation from attribution research that failures should generally be attributed to *internal*, unstable, and controllable causes, specifically lack of effort or strategy. There is agreement, however, between relapse prevention and attribution theory with regard to how attributions can be particularly unhelpful after a lapse: stable and uncontrollable attributions, whether they are internal or external, will lead to lowered

self-efficacy or expectations of success and thus a greater probability of total relapse. Compared with locus of causality, controllability may therefore be a more important dimension to focus upon.

Controllability as an attribution dimension is not, however, explicitly assessed in explanatory style research (e.g., Buchanan & Seligman, 1995; Peterson, Semmel, von Baeyer, Abramson, Metalski, & Seligman, 1982). Explanatory style, born out of the work of Abramson et al. (1978) on learned helplessness, reflects the way people habitually explain the causes of "bad events," and spans the dimensions of locus of causality, stability and globality. Neither learned helplessness nor explanatory style explicitly assesses perceptions of controllability. Whilst learned helplessness has concerned itself with reactions to uncontrollable events, it appears to be assumed in explanatory style research that a bad event with an internal, stable, and global cause would be regarded as uncontrollable. This assumption has been heavily criticised by other researchers (e.g., Anderson & Deuser, 1991; Weiner, 1991), who have suggested that controllability is an important attribution dimension that should be directly assessed. In response to these criticisms, the prominent explanatory style researcher, Peterson (1991) noted that neglect of the controllability dimension in explanatory style research had become institutionalised, and that he was unsure how this position might change.

On the other hand, controllability is considered the most important dimension in the research of Anderson and colleagues (e.g., Anderson, 1983; Anderson & Deuser, 1993; Anderson & Riger, 1991). The central theme of this research is that people engage in attributional activity to increase their control of the environment; attributing an event to a controllable cause leads to expectations of control over events in the future[1]. Noting the implications of attribution research for therapy, Anderson (1983) stated, "In short, it is important

to focus attention on the aspects of the problem situations that the person can change and control" (p. 1145).

Regarding expectations of future success, Weiner's model points to stability being the most important attribution dimension: stable attributions lead to increased perceptions of certainty regarding future outcomes; unstable attributions lead to increased perceptions of uncertainty. Following failure, it should therefore help to make unstable attributions (things that could change in the future), such as attributions to effort[2] or strategy, rather than stable attributions (things that will stay the same), such as attributions to lack of ability, because unstable attributions should lead to more positive perceptions about the opportunity for future success. This thinking has, however, been challenged in the sport psychology literature. Citing a sporting study by Grove and Pargman (1986), both Biddle et al. (2001) and Hardy et al. (1996) speculated that controllability could be more important.

Grove and Pargman (1986) conducted three experiments to test whether stability was indeed the key dimension predicting future expectations. These researchers noted that research had tended to use non-competitive situations, so they used various methods to develop competitive situations, including a cash prize in their third experiment. Following success, expectancy of future success should be high, if attributions are made to stable causes (e.g., ability). Following failure, expectancy of future success should be low if the same stable attribution to ability is made. Instead, it would be functional and lead to higher expectancy of success being maintained following failure, if attributions were made to things that could change (unstable attributions, like effort). What Grove and Pargman found was that effort (an unstable attribution) led to the highest expectancy in both failure *and* success conditions. They felt such results could be explained by a focus on controllability rather than stability:

In addition to differing in stability, the causal factors of effort and ability differ in the degree to which the individual can control them. Personal control is more possible over effort than over ability. If one assumes that individuals will expect to do better under conditions where perceived control is high rather than low . . . then the pattern of results obtained in these studies is understandable. (p. 93)

They also speculated that the uncertain nature of real-world competitive situations, involving changing interactions with competitors, conditions, terrain and so on, leads to a greater need to focus on controllability attributions than on stability attributions. Research should therefore focus primarily on controllability attributions.

*The Generalisability of Controllability*

Controllability is the primary dimension to focus upon; alone it is not sufficient, however. How controllability *generalises* across time (consistency/stability), situations (distinctiveness/globality), and people (consensus/universality) may ultimately influence emotions, expectations and performance. The effects of attributions have almost invariably been observed by considering attribution dimensions individually or as composite scores. To model how controllability generalises implies the need to consider interactive effects of attribution dimensions (see, e.g., Carver, 1989). Examples of this practice have been seen (Anderson & Riger, 1991; Brown & Siegel, 1988; Ingledew et al., 1996). For example, Ingledew et al. found that, after failure, if the cause was perceived as likely to recur (stable) and externally controllable, participants were anxious. If the cause was perceived as unlikely to recur (unstable), participants retained efficacy expectations, regardless of degree of external controllability. Based upon the premise of the present paper, research should focus upon the main effects of controllability, together with the interactive effects of controllability and the three

generalisability dimensions of stability (consistency), globality (distinctiveness), and universality (consensus) upon outcomes. By focusing upon these four dimensions, locus of causality is marginalised. Although sport psychologists have accepted uncritically the locus of causality dimension (Biddle, 1988, 1993; Biddle et al., 2001), we are proposing that it is an epiphenomenon of the attribution process. People do make internal and external attributions. These are, however, largely irrelevant for sport psychology, because regardless of where the cause of an event lies, controllability is the central concern.

*Assessing Attributions*

Various methods have been employed in the measurement and categorisation of attributions. Open-ended methods involve the researcher categorising the oral replies of participants to open-ended questions. Derived score methods require the participant to rate his/her reasons for, for example, a success or failure on 5-point scales for different elements (e.g., ability or effort) related to the attribution dimensions. The direct rating method (e.g., Benson, 1989), requires the participant to state his/her reasons for the event and then map those reasons onto items referring to attribution dimensions. For a discussion of measures used in sport psychology research (e.g., Russell's 1982 Causal Dimension Scale; Hanrahan, Grove, & Hattie's 1989 Sport Attributional Style Scale), the reader is referred to Biddle (1988), Biddle and Hanrahan (1998) and Biddle et al. (2001). Based upon the premise of the present paper that controllability is the key dimension to focus upon, measures of attributions should include four scales, for controllability and the generalisability dimensions of stability, globality, and universality. Benson's 5-Attributional Dimension Scale (5-ADS: this is an extension of the 4-ADS, cited in Benson, 1989) does assess these four scales, as well as locus of causality. This scale has, however, been little used, so its psychometric properties are uncertain. Because a well-

validated measure for these four dimensions does not exist at present, this is an urgent future research issue.

As well as the measurement of attributions, there is an urgent need to consider the most appropriate empirical paradigms to use in future research. For example, although cross-sectional studies might help our understanding of the attributions people make and their subsequent effects on emotions, expectations and performance, longitudinal studies could reveal much more important information about how attributions alter over time. Like the conceptualisation of coping (Lazarus & Folkman, 1984), one might consider the process of attributional thought as a dynamic, transactional process over time, with attributions affecting responses, responses affecting future appraisal of the environment, and appraisal leading to altered attributions. The coping literature (Tennen, Affleck, Armeli, & Carney, 2000) offers suggestions for appropriate methodologies here. For example, instead of further cross-sectional studies, or even longitudinal studies using just two or three time points, one should consider methods such as ecological momentary assessment (Stone & Shiffman, 1994), or experience sampling (Csikzentmihalyi & Larson, 1984). These methods would allow a much more detailed observation of naturally occurring attributions over time, the interaction with the environment and the reattribution process.

Researchers should also consider the issue of whether respondents actually think about and comprehend assessment items and attribution dimensions in a similar fashion to researchers. Anderson (1991) noted the lack of familiarity people have with the concept of dimensional thinking, suggesting one should not presume respondents' answers on the scales are an accurate reflection of how they are thinking. In this regard, the direct rating method is potentially problematic. One could, however, take a questionnaire such as Benson's (1989) 5-ADS and

engage respondents in "think aloud" methods, such as verbal protocol analysis (e.g., Ericsson &

Simon, 1993), as they fill out the scales. Such an approach might help to address these issues and

serve to highlight any problems with the measurement instruments constructed.

The CAVE technique (Content Analysis of Verbatim Explanations) has been used as a

means to assess data from open-ended questionnaires completed 35 years previously (Peterson,

Seligman, & Vaillant, 1988). Using the CAVE technique, Peterson et al. were able to

demonstrate that a pessimistic explanatory style in Harvard University students at age 25

predicted poorer health at ages 45 through 60. Alternative approaches to assessing attributions in

sport have already been advocated. Biddle et al. (2001) described the recent development of the

Leeds Attributional Coding System (LACS: Munton, Silvester, Stratton, & Hanks, 1998). The

LACS is used to analyse attributions occurring naturally in conversation, and involves the

researcher coding the participants' responses into attribution dimensions. This part-qualitative,

part-quantitative method might be a useful alternative to questionnaire methods. Alongside this

and the previously mentioned quantitative methods, one could also argue that any number of

varied qualitative methodologies, such as categorical-content analysis (Lieblich, Tuval-

Mashiach, & Zilber, 1998), paradigmatic analysis (Polkinghorne, 1995), conversation analysis

(see, e.g., Faulkner & Finlay, 2002), or narrative analysis, (see, e.g., Crossley, 2000; Sparkes,

1999) might help us better understand and interpret the attributions people make, and allow us to

view the day-to-day process of attributional thinking.

*Implications for Practice*

The relevance of dimensionalising attributions has been questioned, on grounds that

people may or may not think in dimensional terms. Anderson (1991) stated, "People do not

dimensionalise their causal thinking and then derive a cause. The cause emerges quickly, as do

the implications for action" (p. 324). Despite such comments, Anderson admits that people can think in attribution dimension terms, and in sport it has been suggested that in designing attribution (re)training programs, it is important to emphasise the dimensions of attributions rather than the attribution itself (Orbach et al., 1997), because different people can consider specific reasons in different attribution dimension terms. Den Boer et al. (1991) also argued:

> It should be clear that it is not the attribution itself which is important, but the perception subjects have of the [dimensionality] of these attributions. It is this perception of the dimensions that is responsible for the effect of attributions on expectation of success, emotions and behaviour. (p. 243)

Vallerand's (1987) intuitive-reflective appraisal model of emotion in sport suggests that whilst there is an immediate intuitive appraisal of an event, there is also a reflective appraisal, involving greater thought and attributional processing. Because interventions are often about changing people's habitually negative ways of thinking (e.g., Fŏrsterling, 1988), it seems quite legitimate to help people go beyond their intuitive appraisals to think in ways that are not habitual. Indeed, what practitioners might typically do is try to help athletes not to jump to intuitive reactions. Instead, they might encourage athletes to engage in Vallerand's reflective appraisal, and ask questions that challenge attributional thinking, leading them to a clearer understanding of their own reality. This raises an issue of timing (Ingledew et al., 1996); timing when to intervene is a crucial skill for the practitioner. It may require an appreciation of when to wait until the person is ready to be challenged, or waiting until the person has begun to reinterpret the situation, instead of working in a prescriptive manner. This is similar to considering the stage of change the individual is at (Prochaska & DiClemente, 1983), with

different interventions required at different stages of change. Clearly, this would also be a fertile area for future research.

Timing is also pertinent in relation to the self-serving bias (see, e.g., Bradley, 1978). The self-serving bias refers to the way people attribute successes to internal factors (e.g., ability), and failures to external factors (e.g., poor refereeing). Evidence for this bias in sport has been inconsistent (Mullen & Riordan, 1988; Van Raalte, 1994). Schoenemann and Curry (1990) suggested that attributions immediately following an event might indeed reflect the self-serving bias. These authors further suggested that in time, however, people tend towards *personal changeability,* wherein they take personal responsibility for both successes *and* failures, but in a way that makes failure reversible and under personal control.

Regardless of where the cause lies, we would contend that, whilst engaging the sportsperson in Vallerand's (1987) reflective appraisal, the central emphasis of interventions using an attribution theory perspective should be on controllability. The secondary focus should then be on how attributions generalise across time (consistency/stability), situations (distinctiveness/globality), and people (consensus/universality). Vallerand's intuitive-reflective appraisal model raises an important issue in relation to this: immediately following a negative event, one should prevent people from catastrophising and generalising perceptions of uncontrollability. Again, we know of no empirical evidence to suggest people do this, so this would be an avenue for future research. Whilst early work into attributions suggested that "ordinary" people could behave in the manner of lay, naïve, or intuitive scientists, such behaviour may be detrimental when it is unwittingly operated in a dysfunctional fashion in the immediacy of an event. Unless more time and effort is expended on reflection to seek rational explanations for failures or negative events, people can tend towards being cognitive misers

(Taylor, 1981), whereby they jump to quick, often inappropriate and unhelpful, judgments, without careful thought.

Sport psychologists might consider working through the following stages to deal with people's maladaptive attributions: 1) identify the person's current attributional state, paying particular attention to the dimensionality of the attribution, the elapsed time since the event for which the attribution has been made, the controllability of the attribution, and the generalisability of perceptions of uncontrollability across time, situations, and people; 2) use consistency, distinctiveness, and consensus information to probe further, to focus upon what they can and cannot control, and to help them create more constructive attributions; and 3) help them better come to terms with those aspects over which they genuinely have no control. The work of Kelley (1967) and Fŏrsterling (1988) would be an invaluable resource here. Additionally, practitioners might train their clients to conduct this process for themselves. The role of practitioners might then be to create a *context* for empowering individuals and fostering constructive attributions: in a sense, helping them to become their own psychologist.

*The Social Context*

People do not engage in attributional thought in a vacuum. Invariably, attributions are made in a social context, and social factors influence attributions (Hardy & Jones, 1994). For example, publicly declared attributions have been found to show less self-serving bias than private attributions (Rejeski & Brawley, 1983). In private, there is no one to refute the attributions one makes; in public, or in the presence of important, critical, and respected others, and with the possibility of future evaluation, attributions are often tempered. Rejeski and Brawley noted that social conditions may influence self-presentations: "people manage the attributions they make to others in order to gain public approval or avoid public embarrassment"

(p. 87). So, if challenged, attributions could change straightaway. A team manager/coach might

instinctively make attributions to uncontrollable factors in the immediacy of a poor result in a

football match, for example, poor refereeing. Under close personal scrutiny, however, perhaps by

the media, the team manager/coach might be seen to change towards assuming a greater

responsibility for events.

Sportspeople are known to discuss all manner of subjects with family, friends, other

performers, coaches, psychologists, sponsors, the media and so on, with these others providing

different types of emotional, esteem, informational and tangible social support (Rees & Hardy,

2000). Attributions may be discussed either explicitly or implicitly in these formal and informal

settings. Because maladaptive attributions often lead to performers getting into a helplessness

spiral, people might readily offer advice to the sportsperson that helps him/her think differently

about the causes of events. This advice may help the performer. Equally, potential supporters

might do more harm than good; they might misread the situation and misdirect their support

(e.g., Lehman, Ellard, and Wortman, 1986). For example, they might encourage a focus on lack

of effort as a reason for failure, even though the person had expended high effort.

Potential helpers frequently make attributions about the cause of the behaviour before

considering giving help and support. For example, if it is considered that a negative event could

have been controlled by the person, a potential helper may be less inclined to offer help than if

the event was considered personally uncontrollable. How people subsequently behave towards us

can have a tremendous impact upon our thoughts, feelings and behaviours following an event

(e.g., Gilbert, Fiske, & Lindzey, 1998). The work of Meyer and colleagues (e.g., 1982, 1992) has

highlighted just this, demonstrating how indirect communication influences a person's

attributional thought. For example, take the scenario of two runners attaining the qualifying time

for the Olympics, but just one being heavily praised for this achievement by the national coach.

This runner might engage in attributional thought, asking himself a number of questions as to

why this isolated praise was offered. The questions might take the following form: "Why did I

alone receive praise? Was the coach surprised? Was the coach commending me for my efforts?

Was the coach implying that my efforts had made up for my lack of genuine ability?" This might

precipitate an attribution to low ability. The extent to which this uncontrollable attribution then

generalises (is seen as stable, global and/or universal) might determine emotions, expectations,

and subsequent performance. Equally, when trying to solve problems, recipients of unsought for

help often jump to the conclusion that the help-giver considers them to lack ability. Even

praising intelligence has been found to undermine motivation and performance (Mueller &

Dweck, 1998). So, indirect communication can have a profound influence on attributional

thought. Although in physical education teachers have been observed to show a preference for

students expending high effort (Biddle & Goudas, 1997), more direct feedback to a student that

he or she succeeded because of high effort expenditure might unintentionally undermine ability

beliefs (Okolo, 1992; Rejeski & Brawley, 1983).

An adjunct to the social context of attributions is actor-observer differences. Hardy and

Jones (1994) and Biddle et al. (2001) have suggested that, as well as personal attributions for

interpersonal and achievement outcomes, one should consider actor-observer differences in

attributions. These researchers suggested that this would be particularly beneficial to the study of

athlete-coach interactions and refer to this as a divergent perspectives approach, because two

people might make different attributions for the same event. The work of Heider (1944, 1958),

Jones and Davis (1965), and Kelley (1967) did indeed address such social phenomena. Their

work dealt with people's attributions for others' action. The focus of this work was on how

people try to develop a meaningful understanding about events they *observe* in everyday life. This social-psychological framework for studying attributions is still an area of interest (e.g., Carr & MacLachlan, 1998; Choi & Nisbett, 1998; Hewstone, 1989; Robins, Spranca, & Mendelsohn, 1996). The correspondence bias, or fundamental attribution error (see, e.g., Gilbert & Malone, 1995; Jones, 1990) relates to how, even when it is fairly clear that behaviour has been situationally driven, people tend to attribute behaviour to others' dispositions. Indeed, observers tend to make dispositional attributions for the actions of others, whilst the actors themselves make situational attributions for the same event (see, e.g., Hewstone, 1989). Heider (1944) wrote: "Changes in the environment are almost always caused by acts of persons in combination with other factors. The tendency exists to ascribe the changes entirely to persons" (p. 361).

In alluding to the social context of attributions in sport psychology, Rejeski and Brawley (1983) expressed concern that researchers had tended to examine only performers' self-attributions, and had not considered that "observers of a skill, a competition, or a social interaction process in sport make attributions about the outcomes of actors" (p. 84). This is probably because research had tended to focus attention on the work of Weiner. Whilst Weiner's work has had a great impact on research in sport psychology, it has done so at the expense of earlier, fruitful perspectives. In Rejeski and Brawley's review of the status of attribution research at that time in sport psychology, they criticised the unquestioning use of Weiner's model, stating, "it may not necessarily be an appropriate model to test in the sport context" (p. 83). Instead, they suggested that the passive acceptance of Weiner's model should be switched to a broader conceptual approach in future work. Twenty years on, this criticism remains at least as valid as when it was originally written (see, also, Biddle, 1988, 1993; Biddle et al., 2001). Indeed, the present authors would contend that this narrow focus, coupled with a failure to ask and answer

interesting questions, has been a major factor in the demise of attributional research in sport psychology.

*Summary and Conclusions*

This paper has outlined the complex and subtle role of attributions in sport psychology. It has hinted at a mismatch between research and practice in sport psychology. In this regard, consideration of the consistency, distinctiveness, and consensus information outlined by Kelley (1967) and Fŏrsterling (1988) would be beneficial. A link has been made between these three types of information and attribution dimensions: consistency with stability, distinctiveness with globality, and consensus with universality. The similarity between locus and controllability has been highlighted, with the proposal that controllability is the key attribution dimension. Although people do make internal and external attributions, the locus of causality dimension is of less psychological significance to research and practice in sport psychology than is controllability. This is because, regardless of where the cause of an event lies, controllability is the central concern. It is little wonder then that there has been a decline in research interest in attributions in sport, if sport psychologists have been researching the wrong variable and asking the wrong questions. Research should now focus upon the main effects of controllability, together with the interactive effects of controllability and the three generalisability dimensions of stability (consistency), globality (distinctiveness), and universality (consensus) upon emotions, expectations and performance. Measurement needs to reflect this, and both quantitative and qualitative forms of inquiry may help aid understanding in this area. In applied settings, one should focus on the generalisability of controllability across time, situations and people, and challenge people's attributional thinking, engaging them in Vallerand's (1987) reflective appraisal. Finally, the social context of attributions should be considered. Research has tended to

view the attribution process in a narrow, non-social and prescriptive way, and has not taken heed of many of the diverse attribution concepts in the literature in general (social) psychology. Research has also missed the subtle process and the skills of the applied, reflective, scientist-practitioner. Just as research informs practice, so practice can help guide research.

Footnotes

[1] One should note here the sometimes illusory nature of control and the debate (e.g.,

Colvin & Block, 1994; Taylor & Brown, 1988, 1994) on whether a realistic or an illusional view

of events has advantages for psychological health and well-being. For example, Alloy and

Abramson (1979) were drawn to ask whether depressives, being perhaps more accurate in their

perceptions of uncontrollability than non-depressed participants, were "sadder but wiser,"

because they simply had more realistic views of events.

[2] For the purpose of this argument, effort is considered an unstable attribution. We

appreciate, however, that categorising attributions is sometimes unclear. For example, some

individuals would characterise themselves as always being lazy (a stable attribution).

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