Attribution Case Studies with Elite Junior Australian Footballers and Their Coach

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DECLARATION

I, Alyse Wilcox, declare that the Doctor of Applied Psychology (Sport) thesis entitled “Attribution Case Studies with Elite Junior Australian Football Players and Their Coach” is no more than 40,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Signature: 

Date:
ABSTRACT

The purpose of the current research was to extend knowledge of attribution processes in sport. Specifically, the attribution processes of coach-athlete dyads were investigated over several weeks of competition, focusing on the application of theoretical frameworks (i.e., Heider, 1958; Kelley, 1967; Rees, Ingeldew, & Hardy, 2005a; Weiner, 1985) to attribution processes. Attribution change and the influence of coach feedback and post-game review procedures on attribution processes were also investigated. Three elite junior Australian Football (AF) players (18-19 years) and their head coach (45 years) were interviewed on multiple occasions through an attribution lens. Each athlete was interviewed on three occasions (pre-game, post-game, post-feedback) and the athletes’ coach was also interviewed two days post performances for the same three games. Player-participants’ stories are presented as case studies, with attention given to how their stories related to the literature. Participants’ stories reflected several aspects of theoretical frameworks (i.e., Heider, 1958; Kelley, 1967; Weiner, 1985). There was evidence of actor and observer divergence with the coach-participant providing more dispositional causal ascription than player-participants. Player-participants demonstrated attribution change after their post-game feedback possibly revealing the influence of review processes for mediating attributions. For example, after coach feedback, athletes used the coach’s attributions to explain their performance outcome. In addition, their attributions tended towards using more dispositional causes in their post-coach feedback interviews than were used in their post-game interviews. The findings may demonstrate the strong influence that coaches have on athletes’ perceptions of their performance outcomes. The research findings extend knowledge of attribution processes in sport and could inform researchers and sport psychologists in determining interventions of choice to assist athletes and coaches.
DEDICATION

I dedicate this thesis to my family; Mum, Dad, Steph, Sam and Tom. I would not have completed my thesis and my studies without the support from my family and my partner. Your support and unconditional love has helped me through my ten years of study. I cannot thank you enough!
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CHAPTER 1: INTRODUCTION

For almost sixty years, social psychology researchers have been interested in the influence of attribution processes on the everyday lives of people. Exploration of people’s attributions can be fascinating as attribution processes infiltrate virtually all aspects of their lives and dictate future behaviours. For example, peoples’ attribution styles influence their interpretation of past events, establish meaningfulness in their social environment, and influence their motivation levels (Heider, 1958; Weiner, 1979). People also engage in attribution processes to maintain consistency between their thoughts and beliefs, and prevent adverse effects of internal inconsistencies. People use attributions to make their everyday circumstances understandable, predictable, and controllable (Försterling, 2001).

Researchers have used several explanations to describe and define attributions (e.g., Försterling, 1988; Kelley, 1967). Hazelwood and Burke (2011) defined attributions as individuals “strive(ing) to explain, understand, and predict events based on their cognitive perceptions and appraisals such as internality, powerful others, and luck, which influence the level of attainment in cognitive, affective, or motor tasks” (p. 330). Peoples’ cognitive interpretations of the events in their lives influence their wellbeing and interactions with others in their environment. The desire of individuals to understand and predict future events is essentially the premise of attribution theories.

Attribution theories in mainstream psychology represent conceptual frameworks used to understand how the layperson interprets and explains events, and the psychological consequences of such explanations. For example, researchers using attribution theories are not necessarily concerned with the actual causes of behaviour
rather they focus on the perceived reasons for behavioural outcomes (Försterling, 2001). Researchers have used attribution theories to explore achievement behaviour, helplessness and depression, and social affiliation (e.g., Försterling, 1988; Kelley, 1967; Weiner, 1985). Attribution researchers have also analysed close interpersonal relationships from an attribution perspective to evaluate how intimate partners interpreted and explained their social affiliations. Finally, researchers have used their exploration of attribution processes in interpersonal relationships to develop conflict resolution strategies, to enhance partner satisfaction and relationship longevity (e.g., Rempel, Ross, & Holmes, 2001).

In the 1980’s researchers began investigating attribution processes in achievement settings and sport. Generally, sport psychology researchers adapted social psychologists’ definitions of attributions and applied them to a sport context. Grove and Prapavessis (1995) defined attribution theory in a sporting context as a “cognitive approach to motivation that focuses on how to interpret causes of success and failure” (Prapavessis, 1995, p. 92). Athletes and coaches have desires to understand performance outcomes so they can predict and plan for future performances. For example, an unsuccessful performance outcome attributed to poor skill execution may lead to an adjustment in training strategies. Whereas, following poor performances, attributions of luck are likely to result in frustration but are unlikely to cause alterations to training strategies. Causal ascriptions, therefore, have implications for future behaviour and performance expectancy. Sport psychology researchers generally focus on the motivational properties of attributions for performance expectancy (Anderson & Riger, 1991) and sought to determine whether athletes’ attribution styles led to persistence in sport. In addition, researchers have focused on attribution processes related to winning
and losing (e.g., Allen, 2011; Duda & Treasure, 2006). Possibly, a stronger focus on the broader benefits of sport beyond success and failure is needed to broaden the research lens. Attribution theories could be applied to physical wellbeing, psychological wellbeing, and social wellbeing, and particularly to why people start, continue, and eventually quit sport.

Sport attribution theorists have reconstructed and modified theories (e.g., Kelley’s Covariance Theory, 1967; Weiner’s Achievement Motivation Theory, 1979) initially proposed by social psychologists to explain and understand casual attributions in sport. More recently, researchers have re-reconceptualised attribution theories in sport (e.g., Allen, Coffee, & Greenlees, 2012; Rees, Inglede, & Hardy, 2005a). For example, Rees, Inglede, and Hardy (2005a) proposed a more contemporary and sophisticated framework to encompass the complexities of sport environments based on Abramson, Seligman, and Teasdale’s (1978) reformulation of the learned helplessness hypothesis. Despite the fresh approach by Rees and colleagues, additional research is needed to determine the applicability of attribution theories in different contexts.

The numerous theories proposed to explain and understand attribution processes have not necessarily translated or readily been applied to guide practitioners. Some researchers, however, (e.g., Chodkiewicz, & Boyle, 2014; Haynes-Stewart, Clifton, & Daniels, 2011; Kelley, 1967) have discussed attribution interventions designed to correct maladaptive attribution styles. Broadly, attribution retraining has been extensively adopted by educational, clinical, and social psychologists. There are several similarities between attribution theories and cognitive psychology (i.e., focus on irrational thought patterns, understanding why things occurred, behavioural outcomes and change) that lend themselves to applied practice (Försterling, 2001). Attribution
retraining strategies include cognitive behavioural strategies, positive reinforcement, persuasion, and modelling (Sinnott & Biddle, 1998). These attribution retraining strategies are generally designed to prevent the adverse effects linked to maladaptive attribution styles (e.g., learned helplessness, depression, low self-esteem, and low motivation) ( Försterling). Although there are several attribution retraining strategies, Chodkiewicz and Boyle (2014) questioned the limited application of retraining strategies to applied contexts. Specifically, they argued there has been a significant decline in attribution retraining strategies since the early 1990’s, and suggested that researchers have consistently conducted studies in laboratory settings rather than naturalistic settings. Finally, they argued that to better understand the effectiveness of attribution retraining strategies, researchers and practitioners need to reduce the theory to practice gap. More concentrated and definitive research is consequently needed to determine the most applicable retraining strategies to facilitate adaptive attribution styles.

Some attribution retraining strategies have been investigated by sport psychology researchers albeit in a limited manner. Peoples’ reactions to the perceived cause of a performance outcome affects emotions, behaviour, self-efficacy, and expectancies regarding future outcomes (e.g., Allen, Jones, & Sheffield, 2010; Bond, Biddle, & Ntoumanis, 2001; Sinnott & Biddle, 1998). The limited focus on producing evidence-based and effective intervention strategies in sport is surprising given the central role that attribution styles have on every day sporting lives. Wong and Weiner (1981) suggested that people spontaneously engaged in attribution activities. Thus, research conducted in laboratory settings may not accurately depict the true spontaneity and complexity of attribution processes. Arguably, a research correction trend is needed
with a consequent greater effort and focus on applied settings to better explain athletes’ attribution processes.

**The Current Research**

The role of attributions in individual and team performances needs further exploration (Allen, 2011). Many of the published studies have focused on unidimensional reasons for achieving desired performance outcomes. Conceivably, the focus on unidimensional casual ascription is due to the scarcity of attribution research conducted between 1990 and 2005. Research designs have also become more sophisticated and diverse allowing for a broader exploration of attribution processes than were conducted in the early stages. Attribution researchers in sport have primarily used quasi-experimental studies (e.g., Bukowski & Moore, 1980; Le Foll, Rascle, & Higgins, 2008; Orbach, Singer, & Price, 1999; Taylor & Doria, 1981; Taylor & Tyler, 1986). Athlete, coach, and team attributions are invariably dynamic with several key characteristics for performance outcomes. When researchers compact multi-faceted phenomena into a narrow conceptualisation of performance outcomes, the results can be overly specific and lack external validity. Faulkner and Findlay (2005) highlighted the need to explore attributions using qualitative methods as feasibly more detail regarding athlete and team attributions may be elucidated through use of interviews than relying solely on quantitative studies. In addition, the use of qualitative methods may allow for greater exploration of player-participants’ attribution expectations regarding performance outcomes through understanding the influence of emotions and time on athlete attributions.

In addition, Rejeski (1979) suggested that divergence between coach and athlete attributions can lead to conflict that “may be catalytic to negative consequences of an
evaluative, motivational, and behavioural nature. It may, therefore, be beneficial to explore attributions in sport using qualitative methods to gain additional and specific insights into coach-athlete relationships, the influence of such relationships on Attribution change, the influence of emotional responses and time on Attribution processes. Specifically, in the current research, attribution processes in coach-athlete dyads and attribution change were investigated with elite junior Australian Football (AF) players and their coach. Shapcott, Carron, Greenlees, and El Hakim (2008) suggested that performance review processes within teams influenced athletes’ attribution changes in the days following competition. The current study was also used to investigate the influence of post-performance feedback on athletes’ attributions (e.g., is a shift in athletes’ attributions following feedback from coaches) and determined the impact of coach feedback on athletes’ perceptions of performance outcomes.

**The Research Aims**

The overarching aim was to present realistic in-depth representations of the lived experience of AF players from an attribution perspective. The primary aim was to explore the attribution processes of coach-athlete dyads over several weeks of competition. In addition, there were four secondary aims:


2. To explore the influence of player-participants attribution expectations regarding performance outcomes.
(3) To explore possible convergence and divergence between actors (players) and observer (coach) in casual ascription for players’ performances.

(4) To explore the influence of performance feedback on attribution change in the days following performances.

Context

Australian Football (AF) was chosen because I [student researcher] have an intimate knowledge of the game and have connections to high level participants. I have been a mental skills coach for a number of years and have consulted extensively with elite junior AF players and their coaches. I have observed young athletes experience successes and failures on their journeys and in striving to reach their often lofty goals. The pressures for young elite AF players, many of whom have desires to transition to the open aged professional level, are numerous. Athlete attributions of performance outcomes can influence motivation, self-esteem, and emotions generally (Anderson & Riger, 1991). The complexity of athlete attributions is heightened in a team context, with the potential to examine how multiple explanations are constructed and used to explain an event or a series of events. I have seen young athletes ‘stumble at the final hurdle’ while some contemporaries have flourished in the open age professional national competition. From my perspective as an early career applied sport psychologist, I wanted to develop insight into the role of attributions in Australian Football and cultivate a stronger understanding in applying theory when consulting one-to-one with athletes and coaches.
CHAPTER 2: REVIEW OF THE LITERATURE

Theoretical Perspectives on Attributions

Since attributions in social and sport contexts became the focus of research attention, attempts have been made to provide a formal framework for understanding attribution processes. Researchers in sport psychology have used mainstream psychology theories and applied them to the attribution processes of athletes, coaches, and teams (Allen, 2012). A brief overview of the most widely used theories, their application to attributions in sport, and relevant research findings is provided.

The Basic Assumptions Underlying Attribution Theories

Researchers have developed a number of theories to explain attribution processes and these theories are empirically linked and share several commonalities (e.g., Heider, 1944, 1958; Kelley, 1967; Weiner, 1985). Försterling (1988) suggested that common to all attribution theories are three central assumptions: First, people are motivated to link events causally; second, people seek to make realistic attributions; and third, cognitions are central for behaviour, affect, and experiences.

The motive to link events causally. Individuals make causal inferences about outcomes of events because they want to understand why things happen in their lives. Försterling (1988) suggested that making causal inferences about the outcome of an event has hedonic value. For example, people are likely to experience pleasurable states of consciousness (e.g., satisfaction) when they can determine the causes that led to event outcomes. People that are unable to understand causal ascription for events can experience confusion or psychological unrest (Weiner, 1990). Festinger and Hutte (1954) suggested that people disliked uncertainty and inconsistencies in their thoughts and were motivated to seek consistencies between their thoughts and behaviours. When
individuals are unable to reach consistency in their beliefs about event outcomes, they can become agitated. Consequently, they are motivated to reduce inconsistencies and the negative emotions (Cooper, 2007). Indecisiveness about causal inferences has been linked to self-doubt, uncertainty, and feelings of worthlessness (Försterling, 1988). When people are able to understand their causal judgements they are better placed to predict future outcomes and behave appropriately in given situations. Associated with this, people engage in reflective processes to find consistency in their beliefs and event outcomes.

**Desire to make realistic attributions.** A basic assumption often applied to attribution research is that individuals attempt to construct realistic causal ascriptions based on events in their personal domains. Heider (1958) described people as ‘lay scientists’ who search for answers about why they respond to events in particular ways. People are motivated to use the information available to them for their causal attributions by weighing the information rationally before making decisions on the causes for performance outcomes (Försterling, 1988). For example, an individual who fails an exam may consider study time, the teacher’s proficiency, and their own mental state before they determine the likely causes of failure.

Attributions can have a profound influence on the likelihood of persisting or avoiding situations. People who consistently make inaccurate attributions are more likely to experience learned helplessness than those who make accurate attributions (Maier & Seligman, 1976). Seligman (1975) suggested that when individuals’ interpret the information available to them as uncontrollable they develop expectancies consistent with not being able to control future events. People in a state of ‘learned helplessness’ lack perceived control over their experiences and life outcomes. Seligman found that
these people are more inclined to disengage and also exhibit avoidance coping behaviour to avoid unpleasant and unsuccessful outcomes.

**Attribution theory as a cognitive approach.** Researchers use cognitive-based psychological theories to “specify how individuals select, process, store, recall, and evaluate information about the self and the environment” (Försterling, 1988, p. 11). Individuals use reflective practices to determine the causes of, and explanations for, behavioural outcomes, thus generating expectancies for future results. The information individuals choose to store and recall may be determined through attribution recall processes (Försterling, 1988). In their attribution cognitions, people may choose to include feedback from superiors, others in their interpersonal relationships, information from the environment, and others perceptions of event outcomes. They may, however, choose to omit feedback from external sources that contradict their perceptions of themselves (Carron, Burke, & Prapavessis, 2004). The interplay between individual perceptions of the social setting and the analysis of others in the social environment influences peoples’ conclusions about the causes of an event (Cooper, 2007).

**Attribution Theories**

Attribution researchers have generally explored attributions from two perspectives. For example, Försterling (1988) suggested that the main “concern of attribution theories is to analyse the antecedent conditions of different causal ascriptions” (p. 32). More recent researchers have suggested that attribution theories provide frameworks for analysing behavioural, affective, and cognitive consequences of attributions (e.g., Allen, Jones, & Sheffield, 2009; Ball, 2013; Weiner, 1985). Försterling (1988) classified attribution theories into two categories, antecedents of causal attributions (Heider, 1958; Kelley, 1967), and consequences of attribution
theories (Weiner et al., 1971; Weiner, 1979, 1985). Both attribution theory classifications are discussed in the following section.

**Antecedents of Causal Attribution Theories**

Initially, researchers were interested in the antecedents of causal attributions and developed theories to explain intent and motives (Heider, 1958; Kelley, 1967). People were motivated to gain mastery and understanding of why ‘things’ occurred for themselves, and to understand the motives of others within their social environment (Weiner, 1985). There are two predominant theories that explain the antecedents of causal attributions; Heider’s (1958) naïve psychology of action, and Kelley’s (1967) co-variation principle. Heider (1958) and Kelley (1967) base their theories on the presumption that people search for mastery and understanding. They focus mainly on attributions related to interpersonal relationships presumably because of the centrality of human relations to overall wellbeing (Heider, 1958).

**Naïve psychology of action.** Heider (1944, 1958), a pioneer of attribution research, first considered the influence of the causes of behaviour on motivational and emotional processes. Heider (1958) described attribution process as the naïve psychology of action. He suggested that “naïve psychology gives us the principles we use to build up our picture of our social environment and which guides our reactions to it” (Heider, 1958, p. 16). In addition, Heider suggested that naïve psychology can be considered as common-sense psychology and this guides our behaviour toward others. People formulate perceptions of others in their social environment and social situations in their everyday lives. Furthermore, people will use the prior behaviours of others as indicative of their characters or other stable dispositions. Heider suggested that casual
ascriptions about behavioural outcomes are finite. Once individuals believe they have identified the causes of behaviour they stop asking causal questions.

Heider (1958) suggested there are nine underlying concepts that influence peoples’ interpretation of their environment; (1) the subjective environment, individuals and other people are responsive to their environment and relative events; (2) perceiving, people engage in an interpretive process based on existing frameworks within their social environment; (3) suffering, experiencing, or being affected by, people or events in their environment; (4) causing, people need to attribute events to causal sources to explain and understand their reaction to their surroundings; (5) can, is related to the possibility of change and is linked to causation; (6) trying, the specific act of trying to change; (7) wanting, is linked to causation because when a person wants something, they aim to bring about certain actions and results; (8) sentiments, the positive or negative valuation attached to people and objects; (9) belonging, the concept of belonging is applied when separate entities form a unit.

Heider (1958) also suggested that in “common-sense psychology, the result of an action depends on two sets of conditions; factors within the person and factors within the environment” (Heider, 1958, p. 82). He proposed a bipolar construct termed causality, whereby people attribute the outcomes of behaviour to either dispositional causes or situational causes. Outcomes of individuals’ behaviours that are attributed to dispositional causes are associated with factors within the person. These dispositional characteristics are relatively stable over time (i.e., motivation, ability, personality and effort). Conversely, outcomes of individuals’ behaviours that are attributed to situational causes are associated with factors lying outside of the person (social context and role obligations) (Augoustinos, Walker, & Donaghue, 2007). Heider’s work formed
a theoretical basis for the ensuing work of Jones and Davis (1965), Kelley (1967) and Weiner (1971, 1979, 1985) who both further developed the premise of dispositional and situational causes for behavioural outcomes and developed the locus of causality concept.

**Correspondent inference theory.** The correspondent inference theory was developed to continue the work of Heider (1958) and represents a theory that accounts for a perceiver’s inferences about what an actor is trying to achieve with a particular action. They suggested that people make correspondent inferences about another person when their actions are freely chosen, are unexpected, and undesirable. Observers seek to identify circumstances under which a behavior is interpreted as a reflection of an internal and personal disposition of the actor (Jones & Davis, 1965). Jones and Davis (1965) emphasised that the less likely the event, the greater the level of information obtained if this event occurs. When a person acts in a manner that is different to what is expected, observers make more confident attributions about their behavior than if an event is expected (Jones & Davis, 1965). For example, when an observer observes someone acting in an aggressive manner, the correspondent inferences is that they are an aggressive person. If, however, the observations of the aggressive act are ‘out of character’ and non-correspondence is observed, there is a tendency to take more notice of the actor’s behaviour. Jones and Davis’ model provided insight into the Attribution processes of observers, however, it has not been cited regularly in sport research possibly due to Kelley’s (1967) advances on the attribution theory.

**Co-variation principle.** Kelley (1967) proposed the co-variation principle to explain attributions of behaviour. Kelley’s (1967) theory has been primarily used to describe how observers use information to attribute the behaviour of others. Kelley
suggested there are three classes of causal attributions for effects that are relevant in social psychology: First, attributions to persons (ability); second, attributions to entities (task ease); and third, attributions to circumstance (time, chance). Kelley suggested that attribution processes refer to peoples’ perceptions of dispositional properties, interactions, and events in the social environment. Kelley argued that when individuals seek to determine locus of causality, they attempt to acquire information about three aspects of behaviour; consistency, the frequency of behaviour exhibited by an individual in particular settings; distinctiveness, the frequency of a behaviour exhibited in other settings by the individual and; consensus, the number of other individuals also demonstrating the behaviour in particular settings. Determinations of consistency, distinctiveness, and consensus in causal ascriptions and behaviours will lead to either internal or external attributions being made (Wann, 1997; Wann & Dolan, 2001).

People use cues from the social environment when they determine the behaviour of others in their social settings (Kelley, 1967, 1972, 1979; Kelley & Michela, 1980). First, people (observers) seek to determine whether the cause of an outcome was considered stable over time. If the cause is considered stable over time its presumed effect should also remain stable and the confidence in the attribution increased. Second, if there is covariance between two individuals’ behaviours it may be assumed that behaviour can be attributed to the social context rather than the individual (actor). Third, Kelley and Michela (1980) suggested that behaviour that departs from what is expected is attributed to temporary causal factors (i.e. circumstance, or emotional states) rather than internal or dispositional.
The information pattern in attribution processes using the co-variation principle effects causal inference (see Table 2.1). Orvis, Cunningham, and Kelley (1975) suggested that:

The pattern of high consensus, high distinctiveness, and high consistency typically indicates something about the relevant stimulus; that the pattern of low consensus, low distinctiveness, and high consistency was interpreted in terms of something about a person; and that a pattern of low consensus, high distinctiveness, and low consistency was usually interpreted as something about the particular circumstances (p. 606).

If an outcome (e.g., the person’s failure) only co-varies with entity (task) and not with the person or circumstances, attributions that focus on the task are primarily made. When task attributions are made there is high distinctiveness (e.g., they only failed at that task and not others), high consensus (e.g., everyone failed at that task), or high consistency (e.g., they failed at this task every time) (Orvis, Cunningham, & Kelley, 1975).

People generally engage in interpersonal relationships to gain positive affective consequences (i.e., love, affection, enjoyment) and they may leave interpersonal relationships when they no longer experience positive interactions with others (Kelley, 1972). Kelley (1967) suggested that individuals rationalise events in their interpersonal relationships in a sensible and systematic way. Kelley’s theory provides an applicable and systematic approach to social attributions because it accounts for the possible influence of social interactions in causal ascriptions.
Table 2.1

*Orvis, Cunningham, and Kelley’s Information Patterns for the Three Attributions* (1975, p. 607)

<table>
<thead>
<tr>
<th>Attribution</th>
<th>Consensus</th>
<th>Distinctiveness</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Entity</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Circumstance</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>

Consequences of Causal Attribution Theories

Researchers in the 1980’s moved away from the antecedents of attributions and focused more on the consequences of causal attributions. Weiner and Kukla (1970) and Weiner et al. (1971) used previous attribution theories to develop a theory of achievement motivation. They extended Kelley’s (1979) work on the locus of control and focused on the behavioural and motivational consequences of attributions rather than focusing on the processes that individuals use to arrive at specific types of attributions. Researchers, in using consequences of attribution theories have sought to determine the influence of attributions on behaviour, affect, and cognitive processes (Ball, 2013; Rees et al., 2005a; Stoeber & Becker, 2008). Weiner and colleagues were particularly interested in the role that attributions play in expectancy for future success in achievement settings.

Initially, Weiner and Kukla (1970) sought to determine ‘why’ a performance outcome had occurred rather than ‘what’ motives and incentives lead to causal ascription for certain behaviours. They investigated rewards and punishment to
determine the influence of the locus of causality on expectancy for future successes. They asked participants to play the role of a teacher by administering an exam to a class. These ‘teachers’ evaluated students’ performances and administered rewards (1-5 gold stars) or punishments (1-5 red stars). Teachers rewarded high effort in achievement settings, whereas they punished students’ low effort (Weiner & Kukla, 1970).

Conversely, Weiner and Kukla found that ability had little bearing on the provision of rewards or punishment in outcome evaluation. They emphasised that ability is relatively fixed whereas effort was variable. Ability, therefore, has limited influence on reward versus punishment. From their research, Frieze and Weiner (1971) subsequently made a distinction between ability and effort and formed the dimension of stability to signify differences.

**Achievement motivation theory (AMT).** Weiner (1972) initially constructed his initial two-dimensional model (locus of control, and stability) that included four determinants of behavioural outcomes (ability, effort, task difficulty and luck), and the linkages of value (incentive, affect). The four determinants of behaviour are “placed along two dimensions: (a) an internal/external dimension that differentiates between causes that are within the person (e.g., ability and effort) and causes that are outside of the person (e.g., luck and task difficulty); (b) a stable/unstable dimension that differentiates between causes that are temporary (e.g., luck and effort), and causes that are permanent (e.g., ability and task difficulty)” (Bukowski & Moore, 1980, pp. 195-196) (See Figure 2.1).
Later, Weiner (1979) proposed a third dimension, controllability, after poor strategy was considered the cause of failure and contrasted with a lack of effort. Both strategy and effort are considered as internal and variable. A lack of effort, however, leads to greater punishment for failure than poor strategy. The proposed additional dimension, controllability, is the extent that individuals believe their behaviour is under voluntary control (see Figure 2.2). Weiner (1985, 2010) argued that attributions falling on the controllability dimension are vital for individuals’ motivation, decision-making, and future performance.

**Attribution theory of emotion and motivation.** Central to Weiner’s (1979) research was the influence of attribution processes on emotions following performance outcomes. Weiner (1985), therefore, proposed a comprehensive attribution theory of motivation and emotion that has been widely used in research to explain the influence of attribution processes on expectancy. Weiner (1985) suggested that expectancies for
future performance outcomes were influenced primarily by the stability dimension, and emotions (incentives) by the locus of causality dimension. With further research, Weiner (1985) found that emotions were also linked to controllability of future performance outcomes (see Figure 2.3). The components of Weiner’s (1985) attribution theory of motivation and emotion are discussed in the following sections.

**Outcome-dependent affect.** Emotional responses following success or failure result from three distinctive phases in the attribution process (Weiner, 1985). First, people appraise their performance on a continuum ranging from subjective failure to subjective success (Roberts & Pascuzzi, 1979; Weiner, Russell, & Lerman, 1979). Peoples’ evaluations of their outcomes are likely related to the prior standards of both current and past performances. Individuals will experience short-lived emotional reactions based on their appraisal of the outcome (Weiner et al., 1979). Second, people immediately and reflectively provide causal ascriptions for outcomes. Sometimes people provide spontaneous statements about their performances in addition to more reasoned judgements. For example, Lucy believed that she was unlucky after not being
Figure 2.3. Weiner's (1985) attributional theory of motivation and emotion.
promoted. She further analyses missing the promotion and reasons that Julie deserved the promotion because she was with the company for four years longer than Lucy. A number of attribution specific emotions follow causal ascription. For example, Lucy may experience frustration and sadness about missing out on a promotion; however, she may also experience happiness for her colleague Julie. Third, the attributions for success and failure can be classified into causal dimensions (i.e., locus of causality, stability, controllability) (Weiner et al., 1979).

**Causal antecedents.** There are several antecedent factors that influence attribution processes following success or failure. For example, social comparison, past outcome history, attribution biases, and effort expenditure influence casual decisions (Weiner, 1985). Some researchers have investigated social comparison and sought to determine whether there are differences between actors and observers in attributions after event outcomes (e.g., Jones & Nisbett, 1972; Miller & Norman, 1975). Apparently, there is a tendency for actors to attribute their actions to situational requirements, whereas observers tend to attribute the same actions to stable, personal dispositions. Miller and Norman (1975) suggested that there should be a distinction made between passive and active observers. Passive observers are those who neither influence nor are influenced by the actors they are observing. Active observers are those persons who influence and are influenced by the actors they are observing (e.g., teacher).

Attribution biases are another key component of causal antecedents. People use attribution biases to protect, maintain, or enhance their self-esteem, a tendency linked to motivation for future participation and performances (Weiner, 2010). Individuals who use attribution biases demonstrate a propensity to make dispositional (internal) attributions for successful outcomes, and situational (external) attributions for
unsuccessful outcomes (Allen, 2010). People generally feel a sense of pride and satisfaction if they attribute successful outcomes to internal causes, and maintain their feelings of self-esteem, and protect against negative emotions (i.e., embarrassment, sadness) by attributing failure to external sources (Weiner, 1985).

**Causal ascriptions.** Goal attainment influences emotional responses after outcomes in achievement settings, such as subsequent thoughts and future actions. Weiner (1985, 2010) suggested that following the outcome of an event there is a general positive or negative reaction based on perceived success or failure. Primitive emotions are influenced by the attainment (e.g., happiness) or nonattainment (e.g., sadness, frustration) of a desired goal. People then engage in a causal search after goal attainment or non-attainment to determine why the outcome occurred (Weiner, 1985). Causal ascription to an event outcome is made following primary appraisal and immediate affective emotions. Causal ascription leads to a new set of emotions labelled as attribution-dependent; these emotions are determined by the cause of the prior outcome. Weiner (1985) suggested that the “the causal decision is biased towards a relatively small number of causes such as stability and effort in the achievement domain” (Weiner, 1985, p. 564). The cause is located in dimensional space (i.e., locus of causality, stability, controllability) once casual ascription has been made (Weiner, 1985).

**Causal dimensions.** There are three causal dimensions consistently referred to in attribution research (e.g., locus of causality, stability, controllability). Weiner (1985, 2010) suggested that although there are three primary casual dimensions of attributions, there may be two further causal dimensions, intentionality and globality. Intentionality is used to distinguish between bad strategy and effort as “people do not purposefully use
bad strategy” (Weiner, 1985, p. 554). For example, a student who crams for an exam may not purposefully use this strategy of revision, rather, they may have several exams and have poor time management skills. Weiner (1985) found that intent and controllability co-varied highly despite the initial promise of an independent intentionality dimension. He argued that although there are conceivable distinctions between controllability and intentionality, there are several empirical issues with the dimension of intentionality and thus excluded it from his attribution theory of motivation and emotion (Weiner, 1985). Abramson, et al. (1978) proposed the dimension of globailty by arguing that some causes are specific to a situation, whereas other causes generalise across settings. For example, an individual may perceive failure at an archery task due to poor archery skills (specific) or to poor co-ordination (general).

**Psychological consequences.** There are several psychological consequences associated with dimension-related emotions (Weiner, 1985). Weiner (2008, 2014) suggested that attributions assigned to the locus of causality relate to self-directed emotions (i.e., pride, self-esteem). If a successful outcome is attributed to dispositional (internal) causes, or an unsuccessful outcome is attributed to situational (external) causes, the person is likely to experience heightened or stable self-esteem levels and a sense of pride. If, however, failure is attributed to dispositional (internal) causes, or success to situational (external) causes, they will likely experience lowered or stable self-esteem.

Causal ascriptions that are suggestive of the stability dimension are related to the psychological consequence of expectancy of success. Attributions influencing expectancy of success are also related to the interaction between locus of causality and stability. Depending on whether the attribution was linked to internal or external causes
will likely influence the emotions experienced. For example, an attribution made to internal and stable causes (e.g., aptitude deficiency) will likely lead to feelings of lowered self-esteem, hopelessness, and lowered expectancy. Attributions made to internal and unstable causes (e.g., low effort) will likely lead to individuals’ remaining hopeful of performance improvements; however, it may lower self-esteem in the short term. Conversely, attributions made to external and stable causes (e.g., poor teacher) are unlikely to lower self-esteem but lead to feelings of hopelessness. Finally, individuals making external and unstable attributions (e.g., bad luck) will likely maintain or increase hope (Weiner, 2014).

Causal ascriptions related to the dimension of controllability are generally related to other-directed emotions (Weiner, 1985, 2014). People who feel in control of unsuccessful outcomes may feel a sense of guilt or shame. Conversely, they may experience anger or pity if they feel others have caused the unsuccessful outcome (personally uncontrollable). For example, individuals’ receiving poor maths results may feel anger towards their teachers if they believe their teachers were largely responsible for the poor result. In this scenario, students lack perceived control regarding the performance outcome and thus assign blame to others in their social environment (Weiner, 2014). People may manipulate attributions to protect the self and maintain self-esteem. Attribution manipulation for self-protection may lead people to be unaware of repeated behavioural consequences and lead to learned helplessness (Seligman, 1975).

**Behavioural consequences.** The behavioural consequences of causal ascription are dependent on the expectancy of success and affective reactions related to causal ascription of an event (Weiner, 1985). People who experience positive psychological
consequences for their performance outcomes, and who feel in control of their future performances, are likely to persist in tasks and continue to work towards goal attainment. People who experience negative psychological consequences, and who do not feel in control of future performances, may avoid similar tasks in the future and the consequent feelings of helplessness (Weiner, 1985).

**Judgements of responsibility.** Weiner (1995) furthered his attribution theory of motivation and emotion and proposed that judgements of causal responsibility should be included to better understand Attribution processes. He suggested that researchers should determine differences between attributions of controllability and responsibility. For example, Weiner suggested that controllability “refers to the characteristics of a cause – such as the absence of effort or lack of aptitude, and are not subject to volitional alteration” (p. 8). Responsibility, however, refers to “a judgement made about a person – he or she ‘should’ or ‘ought’ to have done otherwise”. He suggested that causality should only be assigned if people are referring to the characteristics of a cause rather than judgements about a person. Although Weiner proposed the inclusion of judgements of responsibility in his theory of motivation and emotion, it has rarely been adapted by researchers in sport attribution.

**Overall Summary of Theoretical Perspectives on Attributions**

The antecedent and consequences of causal attribution theories provide different and interesting perspectives for studying peoples’ attribution processes. Kelley’s (1967) co-variation principle and Weiner’s (1985) attribution theory of motivation and emotion have received strong and sustained empirical support. Both these theories provide sophisticated variations of the mechanisms behind attribution processes and outcomes. For example, Kelley’s (1967) theory provides a conceptual framework of assessing
people’s social interactions and Weiner’s (1985) model provides a framework for understanding the causes of events in everyday lives. Both theories contain particular strengths and do not necessarily represent fundamentally different processes (Martinko & Thomson, 1998). The major strength of the antecedent theories of causal attribution is the consideration of the social environment’s influence on the motives for future behaviour. The major strength of the consequences of casual attributions theories is the focus on expectancy, behavioural and affective outcomes. Thus, considering both antecedent factors and consequences of causal ascription should provide a more holistic understanding of peoples attribution processes.

**Theoretical Perspectives on Attributions in Sport**

Attribution research in sport was considered a ‘hot topic’ in the 1980’s. There was, however, a significant decline in the popularity of attribution research in the 1990’s (Allen, 2012). It is difficult to determine why there was a decline of attribution research in sports contexts. Nevertheless, attributions remain a central body of knowledge with strong links between theory and practice. Attribution inquiry has, to some extent, re-emerged as an area of interest for sport psychology researchers in the last decade. Several sport psychology researchers have re-examined aspects of attribution theory and the practical application of working with athletes in the attribution area (e.g., Ball, 2013; Coffee & Rees, 2008; Rees et al., 2005a).

**Antecedents of Causal Attribution Theories in Sport**

The antecedents of casual attribution theories have not been widely applied to sport. Although Kelley’s (1967) co-variation principle has been empirically tested, only a few sport psychology researchers have used co-variation to explain the motives behind peoples’ behaviours (e.g., Ball, 2013; Coffee & Rees, 2008; Rees et al., 2005a). Using
the antecedent theories people gain mastery of their environments by understanding motives of others (i.e., coaches, teammates) (Heider, 1958; Kelley, 1967). Given the central role of social interactions (e.g., coach-athlete dyads) in sport contexts, it is surprising antecedent theories of attributions have been scarcely referenced in the sport psychology literature. There may be merit in applying antecedent theories to sport considering the central role that coach-athlete interactions have on motives for future participation. Furthermore, antecedent theories may be applied to the social interactions of athletes and sport psychologists.

**Naïve psychology of action in sport.** Heider’s (1958) naïve psychology of action has also not been directly applied to attributions in sport possibly because he considered every day attributions for behavioural outcomes rather than sport environments. He suggested that individuals did not continue to ask causal questions about behavioural outcomes once causal ascription has been determined. In sport, however, athletes and coaches do not necessarily have ‘final causes’ for events. They continually ask causal questions to determine the behaviours that led to performance outcomes. Therefore, it is unsurprising that Heider’s theory has not been directly applied to sport.

**Co-variation principle in sport.** Sport psychologists may influence casual ascriptions of athletes through assisting them to make realistic attributions, providing feedback for, and reframing of, performance outcomes (Rees et al., 2005a). A sport psychologist might challenge negative thinking related to poor performance outcomes by asking questions that help athletes reassess their initial post-match reactions. For example,
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 (their) performance that were good, even though she (they) 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 performer develop a clearer and potentially more adaptive and functional way of thinking (Rees et al., 2005a, p. 190).

Rees et al. (2005a) suggested that using the co-variation theory of attributions may assist sport psychologists working with athletes to overcome the negative influence of habitual or frequent maladaptive attributions by using consistency, distinctiveness, and consensus information to probe further and focus on what athletes can control (Rees et al.).

Kelley (1967) suggested that people rationalise performance outcomes in a sensible and systematic way. In sport, however, there are several social influences that may lead athletes to sometimes misinterpret the information presented to them. Athletes may attribute their performance outcomes in a manner that protects their self-esteem and ego. Athletes may also not perceive all the information presented to them by their coaches and teammates, ignore some of the feedback, or distort the significance of the feedback (Rees et al., 2005a, 2005b). Rees et al. (2005a) also suggested that the co-variation principle can be applied to the attributions of coaches. Coaches will acquire information about three central components in Kelley’s co-variation principle (i.e., consistency, distinctiveness, and consensus). For example, coaches may determine
consistency by comparing their athletes’ performances (e.g., effort). Coaches that
determine athletes’ effort as stable generally make confident predictions about athletes’
effort in future performances (Rees et al., 2005a). The co-variation principle accounts
for social interactions between coaches and athletes in causal ascription, and future
performance outcomes. It does not, however, account for expectancy of future success,
affective reactions to, and behavioural consequences following performances.

Consequences of Causal Attribution Theories Applied to Sport

Contemporary sport psychology researchers have generally explored athletes’,
coaches’, and teams’ attributions by focusing on the consequences of causal attribution
theories (e.g., Allen et al., 2009; Coffee & Rees, 2008). As noted earlier, Weiner’s
(1972, 1985) theories (i.e., achievement motivation theory and attribution theory of
emotion and motivation) have been applied extensively to attributions in sport. Sport
psychology researchers did not begin using attribution theories as frameworks for
understanding casual ascription until the late 1970’s. Due to this somewhat delayed
application of attribution theories to sport, most sport attribution researchers’ have used
Weiner’s (1985) attribution theory of motivation and emotion to understand and explain
attributions in sport (e.g., Grove, Hanrahan, & McInman, 1991; Rascle, Le Foll, &
Higgins, 2008; Scanlan & Passer, 1980). Rees et al. (2005a) furthered Weiner’s (1985)
work and proposed an expanded conceptualisation of attribution theories. They
suggested that sport psychology researchers should consider the main effect of
controllability and interactions of generalisability dimensions (stability, globality,
universality) when determining causal ascription. The applications of Weiner’s
attribution theory of motivation and emotion, and Rees et al.’s expanded
conceptualisation of attribution theories to sport contexts are discussed in the following sections.

**Outcome-dependent affect in sport.** Initially, emotional responses to performances are attribution free as there is little time to reflect on the reasons for performance outcomes (Weiner, 2010). That is, athletes will experience a primitive emotion related to their performance outcomes immediately after completion of a task. Similarly to Weiner, Anderson and Lindsay (1998) suggested that some attributions are generated rapidly and automatically, while others take time, effort, and gathering of information before causal ascription is made. In addition, Vallerand (1987) proposed that in sport, there are two types of cognitive appraisal: (1) *intuitive-appraisal*, automatic arousal and emotional feelings immediately after a performance related to success and failure; (2) *reflective-appraisal*, thoughts that moderate the appraisal-performance response. Vallerand found that the augmenting function of reflective attribution processes was only apparent for stability and controllability factors suggesting that internal locus of causality in not related to emotional responses following performance. Rees et al. (2005a), however, suggested that the locus of causality dimension influences self-directed emotions (i.e., pride, shame). For example, athletes will likely experience feelings of pride and personal satisfaction after successful outcomes. Internalised perceptions of success have also been linked to feelings of happiness, relief, and pleasure (Duda & Treasure, 2006). Furthermore, Stoeber and Becker (2008) suggested that negative reactions to imperfection relate to maladaptive characteristics (i.e., anger, frustration, hopelessness). Kerr, Wilson, Bowling, and Sheahan (2005) explored the influence of game outcomes on pleasant and unpleasant emotions and stress during an elite level of competition and found that the relationship
between game outcomes and emotions was not straightforward. For example, they suggested that several factors, including cognitions, pre-game arousal levels, and coping mechanisms influence event appraisal along with performance outcomes. In addition, athlete emotions can affect their career decisions, training methods, routines and approach to subsequent competitions (Rejeski & Lowe, 1980a, 1980b).

**Causal antecedents in sport.** Coach-athlete relationships are central to the causal antecedents for attributions in sport. Several researchers have examined the differences between actor (athlete) and observer (coach, teammate) attributions of the same performance (e.g., Amrose & Weiss, 1998; Luginbuhl & Bell, 1989; Webb, 2008). For example, Felson (1981) conducted research in a naturalistic setting to determine differences between coaches and athletes in their perceptions of successful and unsuccessful outcomes. He found that athletes were more likely than coaches to emphasise the external factors of luck, injury, and opponents. There were, however, very little differences between coaches and athletes in their emphasis on internal factors such as ability and effort. Felson concluded that athletes and coaches differed in their attributions to situational factors but not on dispositional traits. Felson’s findings were somewhat in contrast with Jones and Nisbett (1972) who found that actors (athletes) were more likely than observers (coaches) to account for their performances using internal perspectives. They suggested that differences between coaches and athletes may be due to athletes’ detailed knowledge of their circumstances, history, and motives for participation. Observers’ conceptualisation of actors’ dispositional traits have been used to predict how actors will behave in the future (Jones & Nisbett, 1972). Alternatively, Miller and Norman (1975) claimed that actors are more likely to refer to internal
dispositional traits, whereas observers use situational or external factors when explaining the outcome of an event.

There have been very few sport psychology researchers investigating differences between coaches’ and athletes’ perceptions of performance outcomes since the 1980’s. Coaches are not necessarily objective observers because they are not independent onlookers. Coaches can directly influence the performance of athletes because they speak with athletes in vivo, that is, during a performance. Coaches construct their own attributions for athletes’ performances, just as athletes assign causal inferences for their coaches’ performances (Amrose & Weiss, 1998). Nevertheless, examining both athlete and coach attributions may provide further insight into the complexities of athlete attributions.

Attribution biases are another key component of causal antecedents in sport (Allen, 2012; Carron, 2004, 2012; Gill, 1980). Allen (2010) suggested that attribution bias exist in several sporting contexts is fairly conclusive and robust. Generally, researchers have used locus of causality to explain attribution bias (e.g., Gill, 1980; Green & Holman, 2004). Mark, Mutrie, Brooks, and Harris (1984) reformulated the attribution bias to account for the sport environment and suggested that the situational norm in sport encourages acceptance of personal responsibility for outcomes and discourages externalisation for failure. Athletes may, therefore, alter their attributions along the stability and control dimensions rather than the locus of causality dimension in response to success and failure. Several attribution researchers have found support for the reformulated attribution bias model (e.g., Grove et al., 1991; Grove & Prapavessis, 1995). For example, Grove and colleagues (1991, 1995) found that athletes made internal attributions regardless of their performance outcomes reinforcing Mark et al.’s
beliefs about the influence of situational norms on causal ascription. In addition, Carron, Burke, and Prapavessis (2004) suggested that social influences may contribute to the use of attribution biases. They suggested that athletes selectively present aspects of them or omit information to optimise the probability that a favourable social impression will be created and an undesirable impression will be avoided (Carron, Burke, & Prapavessis, 2004). Similarly, Hanrahan and Cerin (2009) found that athletes in individual sports made more internal, stable, global, and uncontrollable attributions for positive outcomes, and more internal attributions for negative outcomes than team sport athletes. These findings reflect the reality that in teams, people have teammates to potentially credit or blame for sporting outcomes and “people manage the attributions they make to others in order to gain public approval and avoid public embarrassment” (Rejeski & Brawley, 1983, p. 87). Furthermore, researchers suggested that athletes public appraisal of their performance outcomes may not reflect their private perceptions of their performances (e.g., Rejeski & Brawley, 1983; Shapcott & Carron, 2010).

Attribution conflict is another area of interest for researchers exploring Attribution differences in coaches and athletes. Coach-athlete relationships are crucial in determining the motives and abilities of individual athletes as both athletes and coaches are involved in ascribing meaning to behaviour. Rejeski (1979) suggested that divergence between coach and athlete attributions can lead to conflict that “may be catalytic to negative consequences of an evaluative, motivational, and behavioural nature. Rejeski, Rae, and McCook (1981) explored the potential for Attribution conflict in their study with runners and their coaches. They found that coaches perceived more dispositional cause in athletic behaviour that did athletes. Coaches generally agree that some strategies (e.g., running technique) often separate average performers from
superior performers. Coaches also believed that natural ability was important in successful outcomes. In addition, Rejeski, et al. (1981) found that coaches underestimated athletes’ ratings of perceived exertion. Effort is a key factor in athlete motivation. For example, if athletes believe they are exerting significant effort but their coaches believe they are lacking in effort, conflict may arise and athletes may become disenchanted with the training program. Further research is needed in the area of Attribution conflict to determine possible strategies to prevent the negative consequences of such conflict.

Team-serving bias has also been investigated by sport psychology researchers. Similar to the self-serving bias, team-serving biases exist when individuals in teams collectively attribute successful performance outcomes to internal, stable, and controllable causes (e.g., Allen, Jones, & Sheffield, 2009b). Several researchers have found team serving-biases exist (e.g., Martin & Carron, 2012; Mullen & Riordan, 1988; Taylor & Doria, 1981). The concept of team-serving bias has not, however, consistently been supported by sport psychology researchers. Several researchers found only partial support for the team-serving bias (e.g., Gill, 1980; Green & Holman, 2004; Greenlees, Lane, Thelwell, Holder, & Hobson, 2005). Gill (1980) found that members of an athletic pair tended to assign responsibility internally for successes and assign responsibility for failures externally, to opponents. Within the athletic pair, however, self-serving attribution bias was not evident with team members assigning credit to their partners for successes and blaming themselves for unsuccessful outcomes. Gill (1980) suggested that the findings might be due to the face-to-face analysis present within teams. Also, team-members may not have been as quick to assign blame to others as might be evident in individual sports. Shapcott, Carron, Greenlees, and El Hakim
(2008) suggested that team members attributed team success to internal, stable, and controllable factors, and failures to external, uncontrollable, and unstable factors reflecting a team-serving bias. They believed that the team serving bias is a product of collective beliefs rather than idiosyncratic processes. They also suggested that team meetings may lead to greater consensus than attributions advanced immediately following events. Athletes are likely to adopt coach’s attributions for performance outcomes following team meetings due to coaches’ authority and insights into performance outcomes.

Martin and Carron (2012) conducted a meta-analysis to determine team-serving biases in sport given the inconsistencies in previous findings. Generally, the overall trend showed that when athletes made attributions for teams’ performances, they were team-serving. Athletes emphasised internal factors for successful outcomes and downplayed the role of internal factors in unsuccessful outcomes, and focused on external factors for failures. In addition, Naquin and Tynan (2003) suggested there may be a halo effect in teams whereby team members demonstrate a tendency towards provision of more credit to teams for successful outcomes and responsibility to individuals for their failures.

Teams may experience enhanced team-cohesion through the use of team-serving biases (Taylor, Doria, & Tyler, 1983). Shapcott, Carron, Greenlees, and El Hakim (2010) found that social cohesion has a strong link with team-referent attributions, possibly due to prolonged social interactions present within groups. Coaches emphasise team cohesion and group members need to work together to achieve both personal and collective goals. In addition, Taylor, Doria, and Tyler (1983) conducted a study with a single team over 21 games and found a clear role for attributions as a link between
cohesion and performance. Furthermore, Taylor et al. (1983) suggested that team cohesion remained high because of a team-serving pattern of attribution. Taylor et al. concluded that good interpersonal relationships within teams are pertinent to long-standing groups and may explain the use of the team-serving pattern of attributions. Taylor and Tyler (1986) conducted a follow-up study by investigating the social influence of team-serving bias. They found that athletes who used team-serving bias were considered to be high contributors to team-cohesion. Possibly, the team-serving bias was used by athletes in the study, either intentionally or unintentionally, to maintain group cohesion, satisfaction, motivation, and collective efficacy.

Coaches may adopt team-serving biases, or self-serving biases in their attribution processes. Brawley (1984) was particularly interested in determining whether athletes gave credit to their coaches for their performance outcomes. Brawley was also interested in whether coaches took more credit for successful performance outcomes than assigned to them by the athletes they coached. He found that both athletes and coaches focused more on their own personal contributions to their joint venture than the other contributing person. Researchers are yet to determine whether there are consistencies between athletes’ and coaches’ causal attributions for the same performance.

The influence of performance expectancy and competition importance on athlete attributions has been explored by sport psychology researchers (e.g., Chow & Feltz, 2008; Greenlees et al., 2005; Lau & Russell, 1980). Chow and Feltz (2008) found that when team members go into a competition feeling confident of success, they generally report more team controllable and stable attributions. In addition, Chow and Feltz suggested that expectations against opponents, rather than specific characteristics of
opponents, shape attributions before a performance. The influence of competition importance has also been investigated by sport psychology researchers. Greenlees, Lane, Thelwell, Holder, and Hobson (2005) found that competition importance influenced formation of attributions. They suggested that important competitions are more threatening to athlete self-esteem than unimportant outcomes. Allen (2010) found that over time, competitions become less important to athletes, thus are less threatening to self-esteem. Athletes’, therefore, emphasise controllable attributions rather than internal, self-serving casual ascriptions (Allen, 2010). Allen, Coffee, and Greenlees (2012) suggested that to understand team attributions, attribution models should include performance expectancy and competition importance as casual antecedents. Most researchers have explored performance expectancy and competition importance with teams rather than individual athletes, with evidence that both influence athlete causal ascriptions.

Causal ascriptions in sport. Athletes and coaches engage in a causal search after goal attainment or non-attainment to determine why the performance outcome occurred (Weiner, 2010). Athlete, coach, and team goal attainment are central to feelings of accomplishment, continued motivation, and feelings of high self-esteem. Numerous researchers have found that athletes are more likely to attribute their successful performances to internal, stable and controllable factors, and unsuccessful performances to external, unstable, and uncontrollable factors (e.g., Bukowski & Moore, 1980; Martin & Carron, 2012; McAuley, Russell, & Gross, 1983; Spink & Roberts, 1980). Conversely, Mark et al. (1984), and Grove et al. (1991) found that winners were more likely to attribute their successful outcomes to controllable and stable reasons. Gill, Ruder, and Gross’ (1982), however, found that winners were no
more internal in their attributions than losers. All participants in the Gill et al. (1982) study provided predominantly internal causes for success and failure. Gill et al. found that the main differences between winners and losers was on the dimension of controllability, with winners citing more controllable causes for successes than losers for unsuccessful performances. Spink and Roberts (1980) suggested that in sport, winning and losing is not necessarily the same as perceived success and failure. They suggested that emotions may not only be influenced by attributions that are given for outcomes but also player performances, which may explain differences in researchers’ findings.

Coaches and athletes consistently emphasise effort in their performances and may experience shame and guilt if their effort is not consistently high during a performance. Ability, however, is not emphasised as much as effort in unsuccessful outcomes. For example, Wann et al. (2002) found that coaches praised athletes’ effort more than their ability in successful performance outcomes. In addition, athletes’ who perceive high task difficulty after unsuccessful performances may not experience the same level of shame or guilt as athletes who ascribe failure to a lack of effort. Morgan, Griffin, and Heyward (1996) found that athletes defined success and failure as internal and controllable, though success was perceived as more internal and controllable than failure. Pedersen and Manning (2004) found that people competing individually or in teams use mostly stable and controllable attributions. Pedersen and Manning’s findings suggested that controllable and stable attributions are the most important factors in the attribution process. Interestingly, as with the findings of Morgan et al., (1996), there were no differences between the attribution styles of successful and unsuccessful
athletes. These findings further highlight the emphasis that personnel in sport place upon effort in performance outcomes.

**Causal dimensions in sport.** After a hiatus in attribution research in sport, Rees et al. (2005a) used Abramson, et al.’s (1978) reformulation of the learned helplessness hypothesis, and applied it to sport. They suggested that sport psychology researchers should examine how controllability “generalises across time (consistency/stability), situations (distinctiveness/globality), and people (consensus/universality)” (Abramson, et al., p. 195) as these dimensions may ultimately influence emotions, expectations, and performance. Rees et al.(2005a) also suggested that the “locus of causality was an epiphenomenon of the attribution process” (Rees et al., p. 195) because controllability it is not easily distinguished from the locus of causality and that in sport psychology, controllability of future performances was more important than where the cause lies (i.e., internal or external). Rees et al. proposed that *globality* refers to causes that are perceived as localised or occurring across many situations, and *universality* refers to causes that are deemed either common among others or unique to the individual. Several researchers have used Rees et al.’s. (2005a) generalisability dimensions (stability, globality, universality) in their research (e.g., Allen et al., 2012; Coffee & Rees, 2008). Allen et al. (2012) used the expanded conceptualisation of generalisability dimensions in their theoretical framework for attribution processes in teams.

**Psychological and affective consequences in sport.** There are a number of psychological consequences related to casual ascription in sport based on the attribution-affect relationship. Rajeski and Lowe (1980), and Robinson and Howe (1989) found that locus of causality is central to understanding the attribution-affect
Researchers have also linked an internal locus of causality to self-esteem and pride when success is ascribed to internal causes (e.g., Allen et al., 2011; Cox, 2012). Internalised perceptions of success have also been linked to feelings of happiness, relief, and pleasure (Duda & Treasure, 2006; Robinson & Howe, 1989).

The dimension of stability has been linked to expectancy emotions including hope and fear (Weiner, 2010). Weiner (2010) also suggested that stability rather than locus of causality was linked to determination of outcome expectancy. In addition, athletes who feel their poor performance was linked to stable causes may experience fear of losing their position in the team. Athletes may, therefore, remain hopeful of future success if they attribute unsuccessful performance to unstable causes (Stoeber & Becker, 2008). The dimension of stability also contributes to understanding the reactions of athletes after unexpected performance outcomes (Gernigon & Delloye, 2003). Ball (2013) investigated the influence of unexplained sporting slumps on athletes’ psychological states. He found that attributions for failure made to internal, stable, and uncontrollable factors increased the likelihood of unexplained sporting slumps. Ball suggested that sport psychologists should focus more specifically on assisting athletes’ development of positive attribution styles. In line with research conducted by Rees et al. (2005a), Ball also suggested that coaches and athletes should focus on the attributions that athletes make for negative performance outcomes. That is, after an athlete makes internal, stable attributions for poor performances, coaches and psychologists can “provide the athlete with consistent, distinctive, and consensual information to challenge these attributions” (Ball, 2013, p. 238). For example, when an athlete makes an internal, stable attribution for a poor performance (i.e., inability to perform under pressure), coaches and sport psychologists can discuss examples from
past performances when the athlete did perform well under pressure. Coach and sport psychologist feedback can help athletes reframe their maladaptive attribution styles and create realistic attributions for their performance outcomes.

Several social and sport psychology researchers have suggested attention should be focused on the controllability dimension, as it may have a greater psychological significance for athletes than locus of causality (e.g., Anderson & Riger, 1991; Coffee & Rees, 2009; Rees, 2007; Rees et al., 2005a). In addition, there are several affective responses related to perceptions of control that may influence outcome expectancy, interpersonal relationships, and future behaviour. For example, the dimension of controllability has been linked to feelings of anger, guilt, gratitude, and possibly depression, when failure is assigned to uncontrollable causes (Allen et al., 2011; Anderson & Riger, 1991).

The dimension of controllability has been linked to other-directed behaviour (Weiner, 1985). Researchers use controllability to explain athletes exhibiting anger, gratitude and sympathy towards others. For example, athletes may experience anger due to their teammates’ lack of effort or blame the coach for playing them out of position. Weiner (1985) suggested that anger is a blame attribution and is experienced when others are perceived as responsible for failure or when people feel personally responsible for failure (Allen et al., 2012).

The causal attribution dimensions may be considered as interactive or as individual components of the attribution process (Coffee & Rees, 2009; Coffee, Rees, & Haslam, 2009). Researchers found that both stability and controllability were the primary determinants of post-performance emotions (e.g., McAuley, 1991; McAuley & Duncan, 1990a, 1990b; Orbach, Singer, & Price, 1999). Graham, Kowalski, and Croker
(2002) conducted two studies with youth sport participants. In their first study, they found that stability and personal control were predictors of positive emotions. In addition, there was one primary causal predictor (either stability or locus of causality) of negative emotions. In the Graham et al., (2002) second study, conducted in a naturalistic setting, they found that causal dimensions were weak predictors of both positive and negative emotions, and found no support for theoretical links between specific causal dimensions and individual emotions. Graham et al. concluded measurement of discrete emotions in sport is difficult because of several influencing factors (i.e., interpersonal relationships, attribution feedback).

Coffee and Rees (2008, 2010) have extensively investigated attribution processes by examining the main and interactive effects of the controllability and generalisability dimensions. Specifically, they have investigated the influence of attribution processes on self-efficacy. Generally, Coffee and Rees reported that attributions of failure to controllable, unstable causes led to enhanced self-efficacy. Unfortunately, examination of self-efficacy and attribution processes was beyond the scope of the current research due to prescribed maximum word limit.

**Behavioural consequences.** Explorations into attribution change should result in a better understanding of the behavioural consequences of casual attributions rather than focusing solely on casual ascription at a singular point post-performance. Allen et al., (2009a, 2010) conducted research to determine affect-attribution changes over a 2-day period with a sample of golfers. They found that the intensity of anger receded over time after poor performance were attributed to unstable causes, however, when attributions to stable causes were made, feelings of anger did not subside. Furthermore, anger may lead to a lack of effort and withdrawal from participation, or to increased
determination to avoid failure in the future (Grove & Pargman, 1986). Allen, Jones, and Sheffield (2011) extended their previous research by using a pre-post competition design with golfers and found that locus of causality was important to the emotional states of golfers. The interaction of personal control and stability influenced golfers’ feelings of anger, happiness, and dejection. Stability of performance outcomes influenced the intensity of emotions generated from perceptions of control. Golfers were likely to improve their future performances if they perceived causes of performance outcomes as controllable and unstable. Golfers may be left with feelings of dissatisfaction and immobilisation to improve future outcomes if poor performance is attributed to controllable and stable factors. Not surprisingly, anger was exhibited more by golfers who identified themselves as personally responsible for poor performance (Allen, et al., 2011).

Allen et al., (2011) suggested that although anger is considered a negative emotion, it can have facilitative effects on future performance outcomes. For example, athletes who perceive they are personally responsible for performance outcomes, and direct anger inwardly, are likely to work harder at training. Conversely, anger directly outwardly (i.e., teammates, umpires, opponents) may lead to negative behaviour (i.e., arguments with teammates, umpires, and dejection). Athlete attributions should focus on the interaction of the controllability and stability factors to regulate happiness and dejection. Athletes’ attributing poor performance outcomes to controllable and unstable causes (poor performance) are likely to remain confident of positive performance outcomes in the future. Conversely, athletes’ attributing poor performance outcomes to uncontrollable and stable causes are likely to experience dejection and feelings of hopelessness regarding future performance outcomes.
Overall Summary of Attribution Theories in Sport

Biddle (1999) suggested that attribution research has been somewhat myopic. He suggested that very little has been learned about attributions in sport since the 1980's because of the focus on Weinerian theories. Possibly because of Biddle’s comments Rees et al. (2005a) have attempted to reconstruct and broaden the Weinerian theory to account for the dynamic sporting environment, however, the research has been sporadic. In addition, Biddle suggested there should be a broad focus on attributions in social contexts such as coach-athlete relationships and how these differ from individual attributions. Perhaps because of the popularity of attribution research in the 1980’s, Weiner’s (1985) attribution theory of motivation and emotion has been widely applied to sports contexts.

Attributions and Australian Football

Sport psychology researchers have rarely investigated the mental aspects of Australian Football (AF) despite its popularity and extensive history. Specifically, researchers have not investigated attribution processes of AF players and their coaches. There are numerous factors that may influence the attribution processes of AF players and their coaches, including past performance outcomes, preparation, pre-game mental state, competition importance, coach-athlete feedback and review processes, and the emotional responses following performance outcomes. In addition, AF players and coaches engage in rigorous and lengthy review processes at several time points post-game (e.g., immediately post-game, two or three training sessions each week) which may influence athletes’ attribution processes. AF players probably alter or fine tune their post game attributions several times in a week following their performances given the feedback and analysis provided by coaches. Research is needed to explore the
attribution processes of AF players and coaches to determine possible attribution change resulting from feedback sessions in the week following a performance. Once further research has been conducted in the area of attribution change, there may be a possibility for development of interventions and retraining strategies to maximise performance persistence and minimise withdrawal from the sport.

**Rationale for the Current Research**

Most attribution researchers have used quasi-experimental designs with a focus on quantitative methods. Allen (2012), after conducting a systematic review of content themes in sport attribution, found that less than 1% of 167 studies reviewed had been a qualitative research design. Most of these 167 studies were conducted in naturally occurring sport settings that provided high external validity to findings. Further research using qualitative analysis in applied settings may provide a more detailed or nuanced picture of the formulation of attributions and possible influences of environmental factors on sport attribution processes. Coffee (2010) suggested several avenues for future research, including assessing athlete attributions at multiple time points over a competition to determine changes in attribution style, and investigating the influence of attribution feedback on individual athlete attributions.

There is little published research investigating attribution processes in coach-athlete dyads. For example, no research has been published to determine whether the interactions between coaches and athletes during post-performance reviews alter athletes’ attributions of their performances. Investigation of the influence of post-game or post-competition reviews on athlete attributions may be an area of sport researcher interest because most athletes, coaches, and teams engage in detailed performance review processes. In addition, researchers have often used singular causes for
performance outcomes when investigating athlete attributions, however, due to the complexity of sports environments, there may be more than one cause for event outcomes. Finally, sport psychology researchers have generally focused on a theory to practice approach to attribution research in sport. Theories to practice approaches have elucidated useful information for understanding the attribution processes of athletes and coaches. Using an applied practice to theory approach, however, may allow for further insights regarding the influence of social dialogue on attribution processes. Further research is needed to understand how to apply attribution theoretical frameworks to working with athletes in applied settings, rather than simply investigating how attributions of athletes might fit into theoretical frameworks.

Attributions in sport have been described in much of the research as multi-factorial with several influential factors determining athletes’ perceptions of performance outcomes. The reasons athletes provide for their performance outcomes have been shown to influence future performance motivation and emotions associated with the interpretation of the events that preceded their attributions. Most attribution researchers until now have focused on the experiences of coaches, athletes, or teams without considering the sometimes lengthy process of performance reviews. A detailed review of performances often occurs at several time points after a performance, with several layers of information regarding a single athlete’s performance outcomes. Little is known about how regular and consistent feedback using different informational sources (e.g., statistical measures, coach feedback, and team feedback) influence athletes’ interpretations of their performance outcomes.

Faulkner and Findlay (2005) called for more attribution research using a qualitative designs. In addition, Coffee and Rees (2005a) suggested that attribution
research should include longitudinal designs to determine attribution change over a season or competition. The current research project addresses the need for qualitative research to be conducted using a longitudinal design by focusing on Attribution change and the coach-athlete dyad. Coaches are central to the review processes and often determine AF players’ role within the team week to week. Australian Football players’ roles within the team likely influence their attributions due to number of possessions and feedback provided by the coach. In addition, review processes in AF are rigorous and lengthy, allowing for several possibilities of attribution change between performances. I believe the time is right, therefore, for an in-depth exploration of AF athletes’ experiences of post-performance feedback, and the attribution processes of coach-athlete dyads over several weeks of competition performances.
CHAPTER 3: METHOD

A multiple case-study design was used to better understand and explain athlete attributions in Australian Football (AF). Researchers using multiple case study designs often collect data from the same individuals over two or more distinct time periods, and compare data between or among time periods (Menard, 1991, 2008; Sparkes & Smith, 2013). In the current study, the case study design allowed for identification and analysis of inter-and intra-individual attribution differences. The overarching research aim was to present realistic in-depth representations of the lived experience of AF players from an attribution perspective. The overarching aim of the current research was to explore the attribution processes of coach-athlete dyads over several weeks of competition. In addition, there were four subcomponents of the current study:

(1) To explore attribution processes in applied settings using tenants of Kelley’s (1967) co-variation theory, Weiner’s (1985) theory of attribution and emotions, and Rees et al.’s (2005a) re-conceptualisation of attribution theories as research lenses.

(2) To explore the influence of player-participants attribution expectations regarding performance outcomes.

(3) To explore possible convergence and divergence between actors (players) and observer (coach) in casual ascription for players’ performances.

(4) To explore the influence of performance feedback on attribution change in the days following performances.

Participants

Four male elite athletes (player-participants) and a senior coach (coach-participant) were recruited for the current study from the Transport Accident
Commission (TAC) Cup. The TAC Cup is a Victorian based under 18 Australian Rules football representative competition. The TAC Cup is one of the primary sources of recruitment for the open age professional Australian Football (AF) competition. The four player-participants ($M_{\text{age}} = 18.5$, age range: 18-19 years of age) had competed in the TAC Cup competition for between two and three years. These four player-participants were eligible to be drafted to the Australian Football League in the forthcoming months.

Player-participants were recruited following standard consent procedures being administered and discussions with the senior coach and talent manager. The coach-participant (45 years of age) had been the head coach for two years. All participants were from the same team and the senior coach was included in the sample to explore possible convergence and divergence between players and the coach on causal ascriptions for players’ performances. Use of a single coach-participant who coaches all player-participants in the current study strengthens consistency in the feedback provided to player-participants. For example, a single coach-participant ensures consistency in a coaching approach, style, and delivery of messages in the post-game feedback sessions.

**Procedure**

Once the Human Research Ethics Committee at Victoria University granted approval for the current study, interview training sessions were provided by a senior academic who is experienced in qualitative research. The interview training sessions involved a series of observed mock interviews with feedback provided after each one. The sessions moved from interviewing into transcription and content analysis. They were assessed based on information elucidated from the mock interviews and ability to extract informative and detailed information from participants. I then contacted the TAC cup club talent manager and senior coach to discuss recruitment and data collection. I
addressed players at a regular training session and outlined the purpose of the study, the potential risks to participants, benefits of participating, and the procedure. Finally, I provided potential participants with an information sheet and consent form (see Appendices C & D).

Ten AF players volunteered to participate, however, for several reasons a smaller sample of four athletes were delineated in consultation with the head coach. First, the study required access to player-participants within 15-45 minutes of their upcoming performances. Logistically, I could only manage four pre-game interviews within the 15-45 minute time frame. Second, the case-study design required data collection at several time points for each player-participant and the coach-participant over a number of weeks. Including more than four player-participants may have compromised data quality and reliability. Third, it is rare to have access to athletes at crucial stages in their pre- and post-performance routines, and hence I did not want to jeopardise the good will of team management. Fourth, selection of more than four player-participants’ may have caused disruption to team pre- and post-performance routines, and potentially influence performance outcomes. Thus, the final player-participants were selected using purposive sampling from the initial ten volunteers.

There are three key (positional) lines in AF, comprising the forward line, midfield, and back line. Consequently, one forward line player, one back line player and two midfield players participated in the study.

Once the four player-participants were delineated, I explained that the study would comprise of a total of 9 relatively brief interviews (3 games x 3 interviews for each player-participant). Pre-game interviews were conducted approximately 15-45 minutes before the beginning of each game. Post-game interviews were conducted
within 90 minutes of each game and post-feedback interviews were conducted during the second training session in the week following the game (4-5 days post-game). I emphasised to player-participants that there would also be 3 interviews (one per game) conducted with the coach-participant about player-participants’ performances. Finally, I explained that in addition, player-participant game statistics would be uploaded from Champion Data Holdings PTY LTD following each game as supplementary information. Although four player-participants agreed to take part in the study, unfortunately one mid-field player-participant (18 years of age) withdrew from the study after the first week of interviews due to injury.

The interviews were conducted in three sections, pre-game interviews, post-game interviews, and post-feedback interviews. The pre-game interviews were designed to explore the influence of player-participants attribution expectations regarding performance outcomes. These pre-game interviews were necessarily brief and were conducted in a quiet space in the team’s change-rooms to minimise disruption to athletes’ pre-game routines. The post-game interviews were designed to determine player-participants’ perceptions of performance outcomes and to link footballer attributions to associated explanatory theories. The post-feedback interviews were designed to explore possible attribution change after social interactions with teammates and coaches. After all performances, the coach-participant provided feedback to player-participants via one-on-one interviews and team meetings. As a central aspect of current research was attribution processes in a naturalistic setting the feedback provided by the coach-participants was not altered. Both the post-game and the post-feedback interviews were conducted in a quiet space at the team’s training and performance facilities. The second training session post-game was intentionally chosen for the post-feedback
interview as all player-participants had received their post-game review and coach feedback in the first post-game training session.

The specific purpose of the coach-participant interviews was to investigate whether there was evidence of convergence or divergence between actors (AF players) and observer (coach) in the causal ascription for athletes’ performances. There were 9 interviews conducted with the senior coach (3 games x 3 players). Interviews were semi-structured, allowing for follow-up questions or probes where appropriate, to be used to elucidate further information. The coach-participant interviews were conducted two days after the game. The Champion Data team statistics were provided by team management and were later used as an objective assessment of players’ performances to supplement other forms of data collection.

**Ethical Considerations**

There was a small risk of distress, with participants required to reflect on, and explore their performance outcomes and their weaknesses. To minimise the risk of distress, I thoroughly explained the purpose of the study before asking whether players and the coach would participate in the research. Participants were also informed that they could withdraw at any time. Participants were thanked and debriefed after each interview and offered free independent counselling, at no cost, if required. I also ensured that participants understood the interview data were confidential and: (a) pseudonyms were used in both the transcriptions and the thesis, (b) all identifiable information was removed from the transcription and the thesis, (c) data will be stored in a locked cabinet at Victoria University for 5 years, and (d) only the principal supervisor and I have access to the data.
Design

A series of case studies were adopted for the present study. Stake (2000) described the investigation of two or more cases as a collective case, where interest lies in both what is particular to each case and what is common to all. Case study designs are useful in examining events when one cannot precisely manipulate behaviour (Hodgetts, & Stolte, 2012; Yin, 2011). A case-study design was chosen because the research project was exploratory and conducted in the field (i.e., Australian Football setting). Hancock and Algozzine (2011) suggested that case study research is used to investigate a phenomenon within its natural context using multiple sources of evidence. A number of individual case studies were used as this approach is more robust than a solitary case study (Baxter & Jack, 2008; Yin, 2011). The case study design transposed into the AF setting because it is dynamic with numerous sources of information (i.e., coach feedback, visual feedback, the game statistics, team meetings) contributing to athlete attributions post-performance. Data were collected over a four week period during a critical stage of the season for the player-participants.

Interviews

Interview guides were developed to provide the foundation for the semi-structured interviews and contained topics for discussion derived from published research and attribution theories (i.e., Kelley, 1967; Rees et al., 2005a; Weiner, 1985). Two interview guides were developed, one for player-participants, and one for the coach-participant. The player-participant interview guide was comprised of three sections: pre-game perceptions of the upcoming game (i.e., antecedent factors), post-game perceptions of performance (i.e., consequential factors), and post-feedback perceptions of performance (i.e., attribution change). The coach-participant interview
guide paralleled the post-game player-participant interview guide, however, the coach-participant was designed to further investigate player-participants’ performances rather than his own performance (see Appendix, A).

The interview questions were predominantly open-ended to access potentially rich contextual information regarding attributions in AF. A few questions, however, were directive and related to demographic information for each game (i.e., player-participant performance positions, positional change week to week). In line with the first sub-aim, each interview included questions related to the key components of Kelley’s (1967) co-variation theory, Weiner’s attribution theory, and Rees, et al. (2005a) re-conceptualised dimensions.

**Game Statistics**

Coaches and athletes routinely analyse game statistics post-performance to supplement their perceptions about performance outcomes. Team and individual statistical information provides detail regarding areas for improvement, individual strengths, and provides a marker for future performance outcomes. Individual and team statistics are regularly referred to in AF as key performance indicators (KPI’s). For instance, AF players’ who attain a high number of possessions\(^1\) during a performance are considered to have excelled in the game. All elite AF competitions use an external provider (Champion Data) to collect and collate statistical information regarding AF players’ and teams’ performances. Consequently, game statistics were downloaded from the relevant Champion Data source following each game and used as an objective measure of players’ performances.

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\(^1\) A possession is the act of obtaining and disposing of the ball via handball or kick (AFL, 2014).
Field Notes

Researchers using case study designs are not passive observers in the research process. They become part of the social context being investigated and aim to provide a rich description of the phenomena being studied (Yin, 2011). Etherington (2004) suggested that case-study researchers are part of the social context in which the cases are studied. Researchers using case-studies can also benefit from using a reflective journal to help “attend to our senses, what we see, what we hear, and sense in our bodies – all of which are needed for reflexive monitoring” (Etherington, 2004, p. 128). Consequently, throughout the data collection process a reflexive journal was kept to record my thoughts during the observed games and after interviews. The reflexive journal was referred to, and the content considered, when analysing the transcripts.

Data Analysis and Interpretation

The data were analysed from a constructivist paradigm and a narrative enquiry (Smith & Sparkes, 2009a; Smith & Sparkes, 2009b; Woike, 2008). A constructivist paradigm posits that reality is socially constructed and that truth is dependent on the perspectives of individuals (Smith & Sparkes, 2009a). In addition, Woike (2008) suggested that narrative analysis may be a particularly good choice for researchers interested in complex subjective experiences, as well as intentions, patterns of reasoning, and attempts to find meaning in personal experiences. (p. 434)

I explored subjective experiences of coach-athlete dyads and coaches’ and athletes’ patterns of reasoning for performance outcomes. Narrative inquiry within a constructivist paradigm allows for two sides of a story, the individual and the social, to
be told (Smith & Sparkes, 2009a). I reflected on and analysed my interpretation of interviews and included my voice and a confessional element in the stories.

All interviews were transcribed verbatim and I reviewed each interview several times to gain familiarity with the content. Through these reviews, I coded key aspects of attribution theories (i.e., emotions, antecedents, causal ascription, attribution biases) for player-participants and the coach-participant, and pieced together their interview responses to form a coherent story. I also reviewed my field notes and the Champion Data team statistics and explored how the participants’ stories related to the literature. I analysed and interpreted the participants’ stories based on my experiences as a mental skills coach and my training in sport psychology.

**Presentation of Data**

I needed to consider how to present participants stories in a coherent and accurate way. I have, therefore, tried not to edit participants’ quotes in presenting the case studies. It was, however, not always possible to preserve all quotes in detail due to limited space. For example, I removed non-essential language (e.g., um, ah) to clarify the core of what is being voiced by participants. I have presented participants quotes separately to the body of text for ease of the reader rather than strictly following APA quotation guidelines. There is an apparent tradition in sport psychology research for individual case study results to be followed by a discussion of current findings with the literature. I chose to integrate previous findings with current findings throughout case studies, rather than adding a separate section at the end of each case study, due to the complexity of athlete attributions and to ensure coherent stories were presented. For the purposes of this study, I refer to “internal, stable, and controllable” attributions in the context of the team rather than internal to the player-participant unless otherwise stated.
CHAPTER 4: CASE STUDY 1

Sam’s Story

Introduction

My impressions of Sam were of a happy and laid back person. He proved to be friendly and engaging throughout our interviews. Sam and I had worked together briefly in the past (see ethical considerations, Chapter 4), consequently, to a degree, we had a pre-established rapport. Generally, Sam was excitable, he used humour often, and the ‘glint in his eye’ suggested Sam had a cheeky personality. There were times, however, when his tone and demeanour shifted to frustration and guilt. He also demonstrated a tendency to rush his responses and lacked deliberation, resulting in some disjointed dialogue. Despite some incoherent sentences Sam was detailed in his exploration of his and other players’ performances.

Sam was a talented player in the elite junior competition, however, dream goal as a professional Australian Football player in the senior competition was uncertain at the time of the study. Sam was 19 years old, and was part of the leadership group; thus he played a senior role in the team. Sam’s talent was recognised by State selectors, and he had recently represented his state at the National Australian Football Under 18 Championships. Sam was invited to participate in the study after I consulted with his coaches. The coaches believed that as a talented and relatively experienced junior player, Sam understood the team dynamics and the importance of the coming weeks of competition. He was hopeful of being drafted to an AFL club and had been invited to attend the forthcoming State Draft Combine (but not the National Draft Combine). Prospective AF players from Australian underage football competitions are invited to participate in either the National Draft Combine (three or more interested AFL clubs),
or State Combines (two or less interested AFL clubs). All team outcomes were successful in the current study.

**Pre-Game Mental State**

Athletes’ pre-game mental states influence their performance expectancies and motivation (Försterling, 2001; Weiner, 1985). Sam had only three home and away games left in the season and reported feeling pressure to excel during these games. Sam’s pre-game mental state fluctuated throughout the study. For example, Sam initially used internal, controllable, and unstable (i.e., team cohesion) predictive attributions, however, by the final pre-game interview he referred to external, uncontrollable, unstable (i.e., wind, conditions of the ground, opponents traits) predictive attributions. Sam’s pre-game mental state is discussed in the following section.

**Pre-game emotions.** Sam’s pre-game emotions changed over the three weeks. Before the first game, Sam reported feeling confident, however, as the interview progressed, it was apparent that he was somewhat anxious as evidenced by his rapid speech. In addition, he consistently looked over his shoulder to see where his teammates were in their pre-game routines. Feasibly, Sam’s demeanour was caused by the interruption to his pre-game routine, and he wanted to progress through the interview quickly to re-join his teammates. Sam said that he needed to “get the nerves out” so he could focus on task-relevant cues (i.e., effort, opponents).

Sam was unsure about his team’s ability to work cohesively to achieve their performance goals and suggested that the team lacked cohesion in previous weeks. Sam attributed his team’s past unsuccessful outcomes to an internal and unstable cause (e.g., low effort) when he stated, “[I’m feeling] confident. If everyone pulls their weight, we
should get a win”. His causal ascription for recent performance outcomes had led him to feel hopeful of future successful performances. Weiner (2014) suggested that attributions made to internal and unstable causes (e.g., low effort) will likely lead to individuals’ remaining hopeful that their performances can improve in the future. Sam’s causal ascription (e.g., low effort) for past performances highlighted the influence of previous results on outcome expectancy and attribution-dependent emotions, thus supporting Weiner’s (1985) theory.

Sam’s pre-game emotions shifted from confidence to nerves and apprehension before the second game:

A: How are you feeling about today’s game and why?
S: I’m a little bit nervous today. It’s a big game for the team so if we win the game, we hopefully get the finals spot, in the eight, so I’m pretty nervous.
A: Is that what the nerves are about, the finals spot?
S: Yeah, nah [sic] it should be good.

Sam used minimising language to describe feeling nervous and avoided the question about whether his nerves were due to the uncertainty of the team playing in the finals series. Although Sam acknowledged his nerves, he did not want to dwell on them or discuss them in detail. In addition, Australian sportspeople tend to respond colloquially with “yeah nah” when they do not want to commit to an answer. Possibly, Sam’s response of “yeah nah it should be good” suggested that the pressure to succeed was not the cause of his nerves. When I asked Sam to clarify his perception of his nerves he began to reassure himself through the use of inclusive language:

A: What do nerves feel like for you?
S: Like nervous. I just want to get out there. As soon as you get out there, you’ll be right.

Sam’s comments are consistent with the view that before a performance athletes are unlikely to openly admit or dwell on their nerves because of the possible link to
performance outcomes. Generally, athletes are invested in positive self-interpretations of their emotions in the period immediately before the game, and prefer to focus on controllable factors (i.e., routines).

Before the last game, Sam began to interpret his nerves as excitement, although he continued to use minimising language (e.g., a little bit nervous, pretty excited). By this time, the team had guaranteed themselves a finals appearance and the pressure had subsided. Sam’s future prospects of fulfilling his career goal of being drafted by an AFL team were, however, partly dependent on his team’s performance. The finals games represented additional opportunities to showcase his talent and impress team recruiters (scouts) to enhance his chances of being drafted.

**Team cohesion.** Team cohesion is pivotal to the realisation of success and Sam discussed in detail the importance of team cohesion before the first game. It was evident that Sam had some doubts about his teams’ ability to work together to achieve a common goal:

S: If everyone pulls their weight, plays their role, we should get a win. If the team comes out together and plays as one, we have a really high standard. If they don’t then we have a really low standard.

Sam suggested that to have a really high standard the team needed to have the right attitude:

S: I just reckon [sic], our attitude really. That’s probably the hardest thing about today. If we have a good attitude, we will probably win, but if we have a poor attitude, well, it’s going to be tough really.

Sam reported that team cohesion was more than just an attitude; however, he may have felt that team cohesion was the manifestation of attitude. Apparently, Sam believed that a good attitude meant working hard for his teammates so that they could experience group success. Contextually, the team had performed poorly leading into the last three
games of the season. They had lost focus and experienced negative feedback from the coaching team, thus Sam was apprehensive about the team’s ability to work together to gain joint success. Again it was evident that Sam was attributing past performances to internal, unstable, controllable (i.e., team effort) factors that had influenced his feelings of hopefulness (Weiner, 1985). He believed the team would work well together in future based on their previous successes. Weiner (2014) suggested that casual ascription to internal, stable, controllable factors may influence feelings of hope and motivation for success. Possibly, Sam’s ascription of previous performance outcomes (positive or negative) to internal, unstable, and controllable factors may have translated to feelings of motivation and expectancy of successful outcomes in the future.

**Antecedent influences.** There were several antecedent factors that led to Sam’s perceptions and expectations for upcoming performances. Sam played in several different positions in previous games and discussed the pressure of playing a new role. During the season, Sam had played in a ‘swing role’ requiring him to play adaptively. Before the first game, I wondered whether Sam may have become confused about his role in the game. He accidently referred to playing an assistant role for the “talls in the back”, however, quickly corrected himself, “ah in the forward line”. Sam may have been confused about his role in the game (i.e., that had recently changed). In addition, throughout the interviews Sam based his beliefs about upcoming performances on his past performances and demonstrated general confidence in his ability to play his role in the team.

**Causal dimensions.** Throughout Sam’s interviews he referred to several causal factors as potential determinants of performance outcomes:

G1.  A: What do you think will be challenging today?
S: Challenging? Beating them (laughs)
A: Any reasons why they [opponent] might be hard to beat?
S: Our attitude really. It’s all about that.

G2. S: Probably the team structures. The size of the ground is a bit smaller than last week and it’s slippery conditions as well.

G3. S: Yeah definitely the wind. I reckon [sic] that’s the main one. It’s pretty strong down one end. You’ve gotta [sic] hit up, hit up, hit up, and then when you go to the other end you just go [kick] long.

Before the first game, Sam suggested that “beating” them (i.e., external) would be a challenge. Sam, however, switched to internal explanations about challenges in the forthcoming game when asked to clarify why the opponent would be hard to beat. Sam reverted to discussing challenges that he could explain and control (i.e., attitude) rather than focusing on the strengths of his opponent. In addition, I thought Sam may have been providing pre-emptive explanations for an unsuccessful outcome when he spoke about situational factors (i.e., ground conditions, weather) in his discussion of the challenges in the second and third games. On further reflection, however, Sam had analysed challenges and implemented behavioural strategies to overcome them. Sam suggested that forward line players needed to use the wind to their advantage. In Australian Football, players discuss “hitting up”, a strategy of ball retention to prevent a turnover, and Sam suggested that players would need to ‘hit up’ when the team was kicking into the wind. Sam discussed the behaviours that he and his teammates would implement to avoid turnovers and goals kicked against them.

**Summary of pre-game mental state.** Sam’s pre-game mental state changed throughout the study. Sam said he was feeling confident about the team’s ability to work together before the first game. As the first interview progressed, however, it became apparent that previous performance outcomes left Sam feeling unsure about the cohesiveness of the team. After the first game, and a successful outcome, he began to
focus on the outcomes of games (i.e., making finals, and beating opponents). Sam was not concerned about team cohesion and instead focused on situational factors that he could not control (i.e., opponents’ strengths, weather conditions, ground conditions). Possibly, Sam was experiencing pressure to perform and to impress the recruiters (scouts) and wanted the opportunity to play with his teammates in the finals.

**Post-Game Mental State**

Athletes experience intense and short-lived emotions in the minutes and hours after performance outcomes (Graham, et al., 2002) as they attempt to rationalise successes and failures. Sam’s post-game mental state and emotional responses to his performances changed throughout the study. I interviewed Sam immediately after the coach’s post-game address and before his post-game recovery routines. The team had cemented their place in the forthcoming finals series and Sam would have the opportunity to further demonstrate his talent to recruiters (scouts). Generally, Sam was happy with the team’s successes in all three games during the study. Contrary to my expectation that Sam would be buoyant after every game, he was disappointed and dejected about aspects of his performances. Sam’s post-game mental state is discussed in detail the following section.

**Outcome-dependent affect.** Athletes often experience initial outcome-dependent emotions that are intense and short lived (Weiner, 1985) and Sam’s emotions immediately after games fluctuated throughout the study. After the first game, he was buoyant and excited about his performance and he joked and laughed during our post-game interview. The reality was that Sam had kicked five goals and made a significant contribution to the team’s success. He was humble and reluctant to credit himself for the team’s successes and instead credited his teammates and minimised his role in the
performance outcome. Athletes competing in team sports selectively present aspects of them or omit information to optimise the probability that a favourable social impression will be created (Carron et al., 2004; Gill, 1980). Conceivably, Sam may have omitted details about his performance due to social expectations of humility and modesty in performances. He hinted at satisfaction with his performance through laughter and jokes. His modesty was highlighted when asked about his performance during the game. He stated, “I did alright (laughs)”. I believed he wanted me to understand that he was happy with his performance without needing to explicitly state his satisfaction or be boastful.

Despite his laughter and jovial attitude after the first game, Sam reported feeling disappointed in his inconsistent communication and leadership during the game. He felt that he did not demonstrate the required initiative from a team leader:

A: What improvements could you have made today on your performance?
S: I went up [for the mark] a few times when I shouldn’t have gone up. Like [I should have] talked and communicated with the other forward. We both went up a few times and I spoiled him. I should have communicated a bit more. I am in the leadership group so I try to be vocal on the field and help out the other players.
A: What about going up for the contest with the other forwards? How can you improve that?
S: Yeah in the first half it [spoiled each other] happened, and then the coaches came to us and told us that we were competing in the same contest. After [that] we sort of communicated with each other about who should go up and not go up. We should talk and communicate, don’t wait for the coaches to tell ya [sic], I should do it myself.

Athletes’ often exhibit perfectionistic traits and Sam prided himself on his leadership skills. Steober and Becker (2008) suggested that athletes who experienced negative reactions to imperfection showed a positive correlation with fear of failure or guilt. Sam may have been feeling guilty because he did not demonstrate his usual level of initiative in the game. Sam also suggested that he was disappointed in his competitiveness. Sam
spoke of his laziness in the forward line and his disinclination to follow his opponent to
the contest. Toward the end of the first post-game interview, Sam reassumed his larrikin
caracter and joked about the wind being a potential influence on his performance
outcome.

In the second and third post-game interviews, there was a stark difference in his
demeanour, considerably less laughter than in the first post-game interview, and he used
less internal attributions than initially. Sam experienced guilt and embarrassment rather
than happiness or laughter. By the final game, Sam had begun to attribute his
performances to a combination of dispositional and situational factors rather than
focusing on purely dispositional and internal factors:

A: What improvements could you have made on your performance?
S: I went a bit quiet in the third quarter so I should probably try not to fade away as
much and try to stay involved as much as I can.
A: So what do you think caused the fade away in the third quarter?
S: I played a lot in the forward line and then the ball was just getting kicked up
high to me. I had to take marks standing still and just people [opponents] were
coming over the top and trying to spoil my marks.
A: So delivery was one of the causes? Do you usually have fade outs in the game?
S: Last season I had a few [fadeouts] but this season. I haven’t really had them. I
dunno [sic] that I really work on it. I just try to be an option up forward just
obviously they [teammates] didn’t kick to me well.

Possibly, Sam was protecting his self-esteem through the use of externalised
attributions. Sam reported that the midfielders’ ineffective delivery of the ball into the
forward line affected his performance. He used minimising language to justify his
performances (i.e., a little bit, just one of those days) and may have been brushing off
the pressure of the last two games. Sam also began to elicit relief in his team’s
successful performance outcomes rather than happiness. He felt guilty at his laziness in
the forward line, however, he attributed this indolence to the position (e.g., playing in
the forward line) rather than his effort:
A: Rate yourself on the team rule ‘find your man if you cannot influence the contest’?

S: Probably a four. I was pretty lazy again this week, just like, playing up forward is pretty lazy.

In our final post-game interview, Sam became uncomfortable when discussing his lack of intent to tackle his opponents. He laughed uneasily, became restless, and lost eye contact:

A: Rate yourself on the team rule ‘tackle and pressure with intent’.

S: Ah (laughs). Jeez [sic] I don’t think I got a tackle. Maybe a three? I don’t really know. Like just the fast moving ball, they [opponent] just move it short and they just skipped the handballs out the back a lot of the time so it’s pretty hard to tackle a team that is good out the back.

Sam had played a defensive role in the first half of the season, however, during the study he played an attacking role. As mentioned earlier, Sam prided himself on being a leader in the team and actually felt his defensive capabilities were his greatest asset. Sam, however, believed his tackling of opponents was lacking and attributed his performance to external factors (i.e., opponent, position). Although it is not uncommon for athletes to attribute successful outcomes to internal causes; internal and external attributions are common findings in the literature (Duval & Silvia, 2002). Sam made internal failure attributions for his personal performances despite the team’s successful outcomes. Duval and Silvia (2002) suggested that highly self-focused people who believe that feel that behaviours related to unsuccessful performance outcomes can rapidly remedied in future performances will make internal attributions for failure. Sam may have believed that his poor tackling technique could be improved in the coming game and, therefore, constructed internal attributions for his personal performances.

Outcome-dependent affect is related to appraisal of performance on a continuum from subjective failure to subjective success (Weiner et al., 1979). Weiner (1985) suggested that people evaluate their performance outcomes based on their prior
standards for performance and consistencies between their current and past performances. Sam had his own overriding personal standards of what constituted successful outcomes and used his past performances as a benchmark (i.e., “tackling is usually a strength of mine”). Weiner (1985) also suggested that people progress through numerous cognition-emotion scenarios based on attribution processes. Sam experienced a number of cognition-emotion scenarios within the post-game interviews:

A: How do you think you performed today?
S: I thought I did alright today. Not one of my best games but I thought I tried to be a hit up target down deep but it was pretty crowded and I couldn’t really get much [of the ball].

Sam felt disappointed in his personal performance during the final game because he had not performed to his personal standards. Morgan et al. (1996) found that athletes attributed successes and failures to internal and controllable causes. Specifically, they found that success was more related to internal and controllable factors than failure. Sam, however, attributed his performance to a combination of internal, controllable factors (i.e., ability, effort) and external, uncontrollable factors (i.e., task difficulty, crowded forward line). He also alluded to frustration with his teammates’ delivery of the ball to him in the forward line:

A: What do you think might have caused your fade away in third quarter?
S: I played a lot in the forward line and the ball was just getting kicked up high to me. You get a bit frustrated as a forward when the midfield is just mucking around with it.

Sam’s demonstrated other-directed behaviour (i.e., frustration towards midfielders) when he explained his fade out in the game. Allen et al., (2011) suggested that attributions made to uncontrollable causes (i.e., teammates’ delivery of the ball) lead to feelings of anger and possibly Sam experienced anger or frustration with his teammates’
skill errors during the game. Despite his disappointment, Sam also experienced pride and happiness in his teammates’ performances:

A: How do you think your teammates in the forward line performed today?
S: I thought they performed extremely well and when I played forward we played pretty well. It was a really big game for us to win. If we win we cement our spot in the finals and to win by a point with a kick after the siren was just, really good to get the win.

Sam’s use of internal attributions to explain the forward line’s strong performance is consistent with Duda and Treasure’s (2006) findings that internalised perceptions of success is linked to happiness, relief, and pleasure. Sam experienced a number of emotions rather than feeling just happy, or sad depending on the performance outcome.

Researchers have reported mixed results relating to emotions post-performance (i.e., Allen et al., 2011; Duda & Treasure, 2006; Morgan, et al., 1996). Possibly, Sam experienced guilt because he perceived his effort as below his usual performance standards, frustration and anger at midfielders’ skill errors, and happiness, relief, and pleasure in the overall success of the team. Sam’s story supports Graham et al. (2002) findings that it is difficult to measure discrete emotions in sport due to several influential factors that lead to mixed emotions post-game.

Causal antecedents. There are several antecedent factors that influence attribution processes following success or failure. For example, past outcome history, social comparison, and effort expenditure influences causal decisions (Weiner, 1985). For Sam, I also needed to consider social influences to understand his story from an attribution perspective. Sam trained with his team regularly and spent considerable time analysing his performances. He based some of his attributions on the team’s outcomes and thus it was necessary to explore the role of social elements in his casual ascriptions. I interviewed Sam’s coach, John, to explore possible convergences or divergences
between Sam and John’s causal ascriptions for Sam’s performance outcomes. John was an imposing figure with a booming voice. I had watched John coach in the first game and was surprised by his composure during the quarter and half time breaks. I have worked with several coaches in Australian Football and there is a general tendency towards assertive and strong feedback during the breaks. I had incorrectly assumed that John would be the same. John asked the players for their feedback about the team’s performances and provided his feedback to the team in a calm and constructive manner.

Actor and observer differences. John and Sam differed in their attributions across all three games. For example, Sam tended to attribute successful aspects of his performances to his teammates and unsuccessful aspects of performances internally. Sam’s attribution style was possibly indicative of humility and modesty. John, however, discussed Sam’s dispositional traits in the successful performances of the team:

G1:  
A: How do you think you performed today and why?  
S: I thought I did alright (laughs). I kicked a few goals and the team played well together.

A: How do you think Sam performed today and why?  
J: I thought Sam had a very good game. He kicked more goals today than he has ever kicked in the competition before. His ability to win the contested football when he was in the middle and his ability to come up at the football and provide a genuine target as he came out of full forward was very important. I certainly thought he was in our best two or three today.

G2.  
S: I performed pretty well. I provided the contest for the midfielders coming up and I kicked a few goals which helped the team.

J: Sam had another good game, no doubt about it. It’s going to sound a little strange but his game was very good. Don’t ask me why it wasn’t excellent. He’s having a fantastic end to the season which personally for Sam is fairly important. He needs to keep pushing himself up in front of the AFL recruiters [scouts] and I think he is ticking a lot of boxes.

G3.  
S: I did alright today. Not one of my best games. I thought I tried to be a hit up down forward but it was pretty crowded and I couldn’t really get it much.
J: Sam’s performance on the weekend, look it was pretty good. He didn’t have the influence on the scoreboard that he’s had in the last couple of weeks and I think that’s very much because of the work the opposition put into him. He still had an influence on the outcome of the game.

Unlike John, Sam was reluctant to provide internal determinants of behavioural outcomes and instead focused on team cohesion. Sam demonstrated humility and was embarrassed to focus on his own performances when the team was performing well (i.e., team cohesiveness). When the team was not performing well, however, he used external attributions to explain his poor performance (i.e., crowded forward line). Possibly, Sam used external factors in his causal ascriptions to avoid focusing on inconsistencies in his performance outcomes.

John and Sam also differed in their attributions of the coach’s influence over performance outcomes. After the first game in the study, John and Sam both felt that the coaching team did not directly influence Sam’s performance. As the week’s progressed, Sam and John contrasted in their attributions of the coaching team’s influence over Sam’s performances:

G2: A: Do you think that the coach (you) directly influenced your (Sam’s) performance?
S: It was Jeremy coaching us today. It was the first time he has been the coach and everyone was pumped up to win for him.
J: Yes but more the week before the game we made the decision to play him out of full forward and change him there. That worked so well last week that we went again with it this week so from that point of view yes we did have an impact.

G3: S: Yeah a little bit. It was more the players. It was a really big game for us to win. If we won, we cemented our spot in the finals. To win by a point after the siren was just, really good. It was really good to get the win.
J: No, not so much this week. I mean, sort of. He’s not used to the role of playing out of the forward line and going through the midfield. We gave him a little bit more time up forward this week which was probably the right thing because his teammates ran out of steam. I don’t think we directly influenced him this week because he’s not used to the change we’ve made for him. He just went back to playing the way he normally plays.
John did not coach the team in the second game because the team had a development week and he stepped aside for an assistant coach, Jeremy. Jeremy was a team-member within the last five years and was the first ex-player to coach the team. Jeremy and John had different coaching styles. John was calm and composed, whereas Jeremy was twitchy, anxious, and at times, and assertive. Sam was excited when he spoke of “being pumped up” for Jeremy. Apparently, Jeremy had a motivating influence over Sam’s performance. Interestingly, John did not mention the change of coach as an influential factor in the team’s successful performance outcome. I had expected that John would provide the change of head coach as an influential factor on the performance outcome. Instead, he focused on his influence through positional changes within the team. Conceivably, John may not have mentioned the change of coach as an influential factor because we were specifically speaking about Sam’s performance. The current findings are consistent with Brawley’s (1984) proposition that coaches and athletes often differ in their beliefs about the coaches input during performances.

Sam used several casual antecedents (e.g., teammates’ skills, past performance outcomes, personal standards for success) relating to different causal dimensions (e.g., internal, unstable, uncontrollable, and controllable, external, uncontrollable) when assigning reasons for performances outcomes. John, however, focused predominantly on Sam’s dispositional (e.g., internal) traits when he discussed his performances. This is consistent with Miller and Norman’s (1975) findings that actors demonstrate a propensity to attribute their actions to situational requirements whereas observers tend to attribute the same actions to stable and personal dispositions. Whereas, Jones and Nisbett (1972) suggested that athletes were more likely to attribute their performances to internal factors than coaches. In Sam’s story, however, John generally attributed
Sam’s performance outcomes to dispositional traits than Sam. John consistently suggested that Sam has “full control over his work rate” and future performances and generally believed that there was consistency in Sam’s performances over the three games. His observations of consistency in Sam’s performances may have led to dispositional attributions. This is consistent with Kelley’s (1979) suggestion that people use past interactions with others to determine consistency in their behaviours.

John discussed team balance regularly throughout our interviews and referred to Sam’s individuality and distinctiveness within the team:

A: Do his teammates have similar strengths and weaknesses to him?  
J: No. we try to get balance with our tall forwards. Jacob, Benny and Sam play our tall roles but even inside of that, they have different traits. Sam leads up at the football. They are all slightly different. Sam’s hands are very good. Sam’s conversion is very good, his competitiveness is his greatest weapon.

He also made reference to consensus traits suggesting that Sam had different capabilities to his opponents and teammates:

A: How do you think his opponents played today?  
J: Sam beat his opponents in the forward line and the midfield. The opponent’s strength is their running midfield. Sam shuts down time and space as well as anyone we’ve got. He’s not super quick in terms of leg speed but he is very smart and runs angles very well. Anyone that’s played on Sam wouldn’t like the experience because he just denies them time and space and is constantly laying tackles and bumps. Very few people get through a Sam tackle.

John had coached Sam for three years and believed he had the qualities to become an AF player at the open age professional AFL level. It appears that Kelley’s (1979) covariation principle could be used to understand the interactions of coach and athlete attributions due to John’s use of consistency (e.g., consistent tackling ability), and consensus information (e.g., differences in player performance traits).

Sam and John had different opinions of his competitiveness over three games. Sam consistently suggested that his tackling skill and competitiveness was poor due to
his laziness (e.g., specific to the situation). John, however, suggested that Sam’s ability to tackle his opponent and compete was his biggest attribute (i.e., global across all games and situations):

J:  His competitive nature. On the weekend we literally needed every player to compete every time they got the opportunity which is Sam’s dream instruction. In fact, that’s a lie. It’s a waste of time giving Sam that instruction because he does it naturally. His competitiveness is his greatest weapon.

The globality (Abramson et al., 1978; Coffee & Rees, 2008) facet was evident when John discussed Sam’s competitiveness and regularly reported that Sam was in the best few players for the team. He praised Sam for his ability to compete for the ball under pressure and suggested that Sam’s competitive trait was unlike his opponents or teammates. John’s impressions of Sam’s performances may have been coloured by his past interactions and observations of his performances.

On reflection, I was unsure whether it was Sam’s modesty, or John’s previous interaction with, and observations of, Sam’s skills that caused the divergence in actor and observer attributions of performances. Over a number of consecutive games it became apparent from the game statistics that Sam had not tackled well and in the final week of interviews, Sam did not lay an effective tackle (see Appendices C).

Conceivably, John was biased in his view of Sam’s tackling capabilities due to a halo effect caused by his previous knowledge of Sam. Conversely, he may not have noticed, or been concerned with, Sam’s low number of tackles. Sam’s statement that “I’m usually good at tackling” suggested that he measures his performances on his number of tackles during a game. He may emphasise his tackling as a measure of successful performance outcomes because he feels that his tackling technique is generally a strength in his performances. The coach-athlete relationship is complex and little is known about the interaction of coach and athlete attributions. Attributions are coloured
by prior events and possibly current performances cannot be explained without considering past performances as influencing current perceptions of events.

**Attribution biases.** Throughout my interviews with Sam it was evident that he was using several forms of attribution bias. Originally, Sam spoke of team-serving biases when he credited his teammates in the forward line and midfield for his five goals. He also spoke about his opponent’s good performance considering his teammates’ “perfect” delivery into the forward line:

A: How do you think your opponents played?  
S: I thought they played pretty well. It’s pretty hard to stop someone who’s running and the ball’s being delivered perfectly to them.

Sam discussed his areas for improvement and contrasted his lacklustre performance to the “amazing” performances of his teammates. Within the team he credited his teammates for the successful performance outcome rather than himself:

A: How do you think you performed today?  
S: I did alright. Kicked a few goals and the team played well together. It’s pretty easy to play well when the team’s playing well.

Researchers have reported similar findings and found that individuals in athletic pairs’ demonstrated attribution bias, however, within the pair individuals’ assigned credit to their partners rather than themselves (e.g., Gill, 1980; Green & Holman, 2004). Sam’s analysis of his performances was in contrast with John’s. John praised Sam’s performance and suggested that he was amongst the team’s best performers. Sam, however, credited his teammates.

Sam also demonstrated a tendency to use team-serving biases within his performance line (i.e., forward line) and assigned blame to the other performance lines (i.e., midfield). His forward line team-serving bias was evident in his discussion of the team rule, “positive at all times”:
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G1. A: Rate yourself out of ten on the team rule “positive at all times”?  
S: Yeah a ten. Just when I pulled a bag (kicked five goals), everyone was up and about.

G2: S: Probably an eight. I was getting a bit frustrated with the midfielders just handballing it around but then towards the end of the game it was all just happening and everyone was playing well.

G3: S: Probably a seven. You get a bit frustrated as a forward when the midfield is just mucking around with it.

Sam’s attribution of blame to the midfielders and protection of the forward line players may demonstrate the sense of belonging desire of athletes. Allen et al. (2012) suggested that group members use team-serving biases to build group morale, esteem, and establish a sense of belonging. Sam used both the team serving bias and the intragroup bias (Allen, 2010; Bird & Brame, 1978). He used the team serving bias to explain positive performance outcomes and the intragroup bias to explain performance issues within the team. Sam used two-levels of bias to maintain his level of self-esteem and socially acceptable behaviours. Attribution models are discrete and clear, however, athlete attributions in naturalistic settings are complex with several nuances. Athlete attributions within a performance may contradict prior attributions, and psychologists and researchers may experience difficulty in deciphering the complete set of attributions and related emotions after a performance. Furthermore, attributions in naturalistic settings are difficult to holistically conceptualise due to the circumstances of each performance outcome.

Sam used self-serving biases towards the end of the study and discussed his teammates’ poor delivery of the ball to him. On several occasions when we discussed the team rules he suggested that he “didn’t really get any opportunities”. By the final game he spoke about several of the team rules not being related to “his role” in the team:
A: Rate yourself out of ten on the team rule “work front and square”.
S: Probably like a four. It’s sort of not really my job or my role in the team to be front and square. I’m more of a hit up forward and try to take the mark out in front.

Sam was using external, unstable, and uncontrollable attributions possibly to protect his self-esteem. Stoeber and Becker (2008) have suggested that highly motivated athletes, who demonstrate perfectionistic traits, have a propensity to exhibit self-serving bias. Conceivably, as the weeks progressed, Sam was feeling the pressure to perform and had lost some confidence in his skills in the forward line and midfield. After the first game, Sam used team-serving biases; however, by the final game he was using self-serving biases to protect himself from disappointment.

**Causal ascription.** The team had experienced successful performance outcomes in all three games. Sam did not base his attributions for performances on the successes of the team rather he provided several explanations for his, and the team’s performance outcomes. His explanations represented several of the causal dimensions (i.e., locus of causality, stability, controllability). After the first game, Sam discussed team-cohesion as the primary attribution for the team’s success. He attributed team cohesiveness to internal, unstable, controllable causes (i.e., team effort). Sam’s reference to the team effort partially supports past researchers’ findings. Morgan et al. (1996) found that success was perceived as more internal and controllable than failure.

Sam changed his causal ascription following performances as the weeks progressed. After the second and third games, Sam discussed several internal and external factors for his and the team’s performance outcomes. He referred to the ground and weather conditions that represented external, uncontrollable, unstable causal ascription. He also spoke of the team’s unwillingness to work together cohesively and lack of spatial awareness around the ground. Sam used several attribution ‘styles’ to
explain his performances. The findings in Sam’s story support Le Foll, Rascle and Higgings’ (2008) proposition that the idiosyncratic factors in sport are likely to be responsible for the varying findings. The sport environment is fluid and dynamic with consistently changing attribution factors (i.e., environments, teammates, coaches, opposition, strategy, and rules).

**Attribution Change and the Coach-Athlete Dyad**

The psychological and behavioural consequences of performance evaluations are likely to be determined by the post-game feedback and review processes. Weiner (1985, 2014) suggested that athletes will experience primitive (outcome-dependent) emotions related to performance outcomes. As athletes review their performances and provide causal ascriptions they experience different attribution-dependent emotions. Australian Football players and their coaches engage in rigorous review processes in the week following competition. I interviewed Sam after his post-game feedback and reviews to understand the behavioural and psychological influences that performance reviews and the coach-athlete dyad have on attribution change. There was evidence of attribution change across all three games with Sam’s intense emotions evident in the post-game interviews.

Sam used strong adjectives to describe his teammates’ performances after the first game (i.e., amazing, perfect). After the post-game review, however, the intensity in his descriptions dissipated somewhat:

**Post Game.**

A: How did your teammates in the forward line and midfield perform today?

S: Probably pretty amazingly actually. The separation leading up to the target, knowing when to go and when not to go, they did really well.
Post Review: S: Oh I thought they did really well. There was good separation, just the only thing we can work on is communication because I spoiled another tall forward a couple of times and he spoiled me.

Sam’s use of strong language may be due to his initial excitement after experiencing team success. The energy and atmosphere in the team rooms may have influenced Sam. Heider (1958) suggested that people are affected by events in their environment and want to experience a sense of belonging.

Sam described his frustration at his own lack of defensive effort in the forward line and his annoyance did not subside following his post-game feedback. Sam discussed his laziness throughout the study, however, he changed his causal ascriptions related to it. After the first game in the study, Sam attributed his laziness to internal, unstable, controllable factors (e.g., “I was pretty lazy to chase”). Allen et al. (2011) suggested that anger (frustration) is exhibited by athletes who identified themselves as personally responsible for failure. Allen et al. (2011) found that athletes who attributed their poor performances to stable causes experience anger and frustration in the days following performance. Sam, however, did not attribute his performance to stable factors. He continued to experience frustration about his laziness during the game in the days following his performance:

Post Game. A: Rate yourself out of ten on the team rule “tackle and pressure with intent.
S: I was pretty disappointed with myself, maybe a four. I only got two opportunities to tackle. There were probably more but I only got two tackles so I should have got more.

Post Review: S: Probably like a four (laughs). I didn’t really get any tackles. I like to get around the six tackle per game mark but I think I’ve only done it twice this season. But yeah I didn’t really get any tackles because [playing] forward is pretty lazy.

Possibly, Sam experienced frustration because he perceived that he failed to accurately perform his role in the team. As the games continued and our interviews progressed, he
began to attribute his performances to his position on the ground. His shift towards external, uncontrollable, unstable factors (i.e., playing in different positions) may have been a strategy for protecting his self-esteem and deemphasised his emotional responses to his performances.

Sam’s attributions of his teammates’ performances changed after the team and coach reviews. In the post-game interviews Sam had discussed his frustration with the midfielder’s poor delivery of the ball into the forward line. In the post-review interviews, however, Sam attributed their poor delivery to task difficulty:

S: Because of our forward line structures, it was really hard for the midfielders to actually hit a forward line player. There was just no space to lead in to.

Sam’s other-directed emotions had subsided on reflection of his performances and he had now provided a different causal ascription and justification for the performance outcome. Researchers suggested immediately following performances, intuitive-appraisal occurs with automatic and emotional feelings leading to casual ascriptions (e.g., Anderson & Lindsay, 1998; Vallerand, 1987). Athletes also experiences reflective-appraisal of an event, with athletes taking time, effort, and gather information, before making causal ascriptions. It appears that after initial intuitive-appraisal, Sam used reflective-appraisal and changed his causal ascription.

Sam also changed his opinion about John’s influence on his performance. After the first game, Sam suggested that both the coaches and his teammates had provided him with confidence to perform in the forward line. After his feedback, however, Sam spoke about John’s plea with the team to think about the importance of the game:

Post Game. A: Do you think that your coach directly influenced your performance?
S: Yeah. It wasn’t just the coach. I thought the players as well. They sort of stepped up and knew what was up for stakes, the finals spot. To lose this would have been pretty hard to come back
from. The coaches just let us be individual leaders on the field. They sort of guide us but also let us have the ability to coach ourselves.

Post Review: S: Yeah he did. During training he was like, you’ve just gotta [sic] come together as a team, win a few games to make the finals and we bonded really well together.

John spoke about his pre-game preparation and he had discussed the significance of winning the game:

A: Do you think that you influenced Sam’s performance today?
S: Look, we prepared them very well all week and we certainly spoke to them about how big the occasion was.

After his feedback, Sam reiterated John’s message to the team. Sam discussed the team’s motives for achieving a successful performance outcome and their desire to play in the finals. It was evident that the review process had sparked Sam’s memory of John’s influence on his performance. Consistent with the current findings, Shapcott, et al. (2008) suggested that following team meetings, athletes may adopt the coaches’ attribution perspectives due to coaches’ authority. In addition, there is possibly a cyclical process involved in AF players’ feedback and reviews of their performances. Coaches and athletes will review the past performance and preview the upcoming performance. Coaches often revisit several aspects of past performances and highlight areas for consolidation in game previews.

After the post-game feedback and reviews, Sam discussed additional behavioural factors in his performances. He spoke about the strategies he needed to implement to improve his future performances. Sam spoke about his routine and reported that his pre-game routine should lead to goal conversion:

S: I just need to make sure that I settle myself down, take a few deep breaths and just kick the goal. I need to use my routine and not rush my kick.
He also discussed strategies that the team needed to implement to maintain their performance in the coming weeks:

S: During training you’ve just gotta [sic] come together as a team. We need to win a few games to make the finals and we really bond together.

It was evident that the team had devised strategies for their forthcoming games to maintain their successful performance outcomes. The team had changed their forward line structures and had considered the need for better communication than they had leading into the first of the three games.

In Sam’s post-feedback interviews he used his game statistics to provide justification for his attributions. In the final post-feedback interview, Sam spoke about the influence that viewing his statistics at half-time had on his performance:

S: I had a goosey gander [look] at how many stats I had at half-time and that just mentally got to me. I was where I wanted to be but it just got to me mentally.

Coaches and athletes use the statistics from games to determine individual and team key performance indicators. Sam believed viewing the statistics, although positive, caused was a distraction, rather than a motivator.

**Sam and I: Reflections on the Research Process**

Of the three participants in the study, I felt the most comfortable with Sam possibly because we had briefly worked together previously. I knew he was a perfectionist and that he found it difficult to credit himself for successful performance outcomes. Furthermore, I was feeling anxious about my first group of interviews as I was allotted a relatively short period of time to collect the pre-game data from the AF players. I was concerned that my anxiety may affect Sam and influence his performance through emotional transference. The pre-game interview was relatively short and I was unsure about how much useful information I could take from the interview. I wanted to
make sure that the information I collected was meaningful and worthwhile. I experienced self-doubt about my interviewing skills because I had not used enough follow-up questions to help Sam explore his pre-game mental state. As the weeks progressed, I began to feel more comfortable. My greater level of comfort during the interviews coincided with a greater level of detail in Sam’s responses.

I experienced countertransference to Sam and it is not a coincidence that I used the pseudonym Sam, as it is my brother’s name. When I reflected on my interviews with Sam, I realised that I had adopted a nurturing and caring approach, much like a sister. I continually noticed similarities between Sam and my brother that strengthened my countertransference to Sam as the interviews progressed. Similarly to my brother, Sam was cheeky, had a strong internal self-critic, and wanted to be a leader within the team. I was, however, relaxed during the interviews and my relaxed approach facilitated detailed exploration of Sam’s performances. At the completion of the study, I ruminated over Sam’s story because I wanted to make sure that I told his story accurately.
CHAPTER 5: CASE STUDY 2

Ollie’s Story

Introduction

My impressions of Ollie were of a kind, laidback, and approachable person, who was well spoken and thoughtful throughout our interviews. I was immediately struck by Ollie’s maturity because he was friendly, and made me feel welcome and comfortable. I felt that Ollie trusted me and wanted to share his experiences. Ollie spoke softly and slowly and I initially interpreted his speech as a sign of disappointment. As I built rapport with Ollie, I realised he was calm and composed rather than sad or disappointed. He enjoyed analysing his performances and did not require much prompting. Ollie described his performances in detail, was able to identify and articulate his thoughts and feelings, and was pragmatic. John, the senior coach, told me that Ollie was a ‘footy head’ and possessed an exceptional knowledge of football. His knowledge of football was evident in his considered and detailed analysis of each game.

Ollie was a pivotal member of the team, however, his Australian Football career trajectory was somewhat ambiguous at the time of our interviews. He was 19 years old, was a team leader, but was in his final year with the club. Ollie had aspirations of being drafted to the AFL in the coming months, however, he was not selected to play in National’s Championships. The team had successful outcomes in all three games.

Pre-Game Mental State

Ollie’s pre-game mental state remained relatively stable throughout the study. He was consistently willing to speak about forthcoming games freely. He regularly discussed challenges and strengths for forthcoming games using internal and
controllable (e.g., preparation and training) factors. He knew his goals in each performance and the behaviours he needed to execute his skills.

**Pre-game emotions.** Emotions can influence athletes’ arousal levels leading into a performance, thus influencing their behaviours during a game (Gould & Udry, 1994). Ollie expressed feeling nervous and excited consistently throughout the study:

G1: O: I always get a little bit nervous before the game. I think as the game comes closer, I get a bit nervous but once I’m out there it’s fine.

G2: O: I think excitement. We all know how important it is today so [we need to] go out and have a good time but also be really competitive, hit ‘em [sic] hard and get the win hopefully.

G3: O: I woke up this morning feeling a little bit nervous [to be] playing on Opal Stadium [senior AFL ground] and [we] are against a quality opposition, but now that I am here I am raring to go and just excited, definitely.

Ollie discussed the pervasiveness of his pre-game nerves, however, like Sam, he used minimising language (e.g., a little bit) to describe his nervous tension. Apparently, he embraced his nerves, and thought of them as facilitative and helpful in focusing on the upcoming game. Throughout the study, Ollie reported feeling “excited” about performing, however, his nerves persisted. The team performed on an AFL ground in their final game resulting in Ollie experiencing heightened pre-game jitters. Ollie was an experienced athlete who followed stringent preparation regimes to manage his pre-game emotions. His routines apparently gave him confidence in his ability to execute his skills and achieve a successful performance outcome.

**Preparation.** Ollie consistently spoke about his preparation throughout the study and was an organised and diligent athlete. Over the weeks, it became apparent that there was a relationship between Ollie’s level of preparation and his perceptions of control:
G1: A: How are you feeling about today’s game?
O: Pretty good. It is that time of the season where we need to get a win. We all know what we have to do so I’m feeling pretty good.

G2: O: Yeah good. I had a good sleep and trained well during the week on both nights so I am feeling good.

G3: O: Confident. I think we’ve prepared well all week so I am raring to go. I am going to be playing on their [opponent] key forward. I think on my notes on the kid that I’m playing on say that he is pretty quick off the lead so I’ve just gotta [sic] get my body on him early and just spoil hard all day.

Before the first game, Ollie believed the team could be successful because they had a clear goal and could control their performance outcome. As the study continued, Ollie discussed his preparation as facilitative of his confident pre-game mental state. The team had won both games leading into the final week of interviews and Ollie gained confidence from his successful outcomes, and thus dedicated even more time to his preparation. After each successful outcome Ollie believed the team could maintain their success in future performances. Weiner (2014) suggested that attributions of successful outcomes to internal factors can enhance outcome expectancy.

Perceptions of leadership. Ollie prided himself of being a leader in the team and felt his role was to help others to perform at their best:

G1: A: Why do you think you were selected to play for your team today?
O: I think my experience maybe. I’ve played for the majority of the season this year and I play a key role in the team. I bring some leadership and lots of communication around the back line.

G2: O: I provide experience, a lot of leadership down back. I play a key position and I think that Parko (line coach)\(^2\) likes me in the team.

G3: O: Same as every week really. I provide some leadership to the back six and a little bit of experience as well. I think my knowledge of the game and my footy smarts is something that John and Parko, and all the coaches really appreciate.

\(^2\) Each performance line in AFL (e.g., forward line, midfield, back line) has an assistant coach dedicated to it. Performance line coaches work with athletes within the performance line (AFL Community, 2015).
Although Ollie prided himself on being a leader in the team, he was reluctant to refer to his leadership skills without justifying his statements through references to his coaches. Ollie reported that his role in the team was “make his teammate a better player” during our first pre-game interview in a selfless manner.

**Deflection and false humility.** Ollie had a tendency to use clichés when he spoke about the challenges in forthcoming games. On several occasions he spoke about needing to give a “four quarter effort” and “do the little things”. Australian Football players regularly use clichés (e.g., ‘we are taking things one week at a time) to deflect focus from individual goals and instead focus on the team goals. In addition, Ollie’s tendency to deflect individual pre-game predictions to team attributions may reflect a general false humility among AF players. Generally, in Australian Football it is culturally inappropriate to credit oneself for performances and highlight individual roles within teams. Ollie was, therefore, deflecting questions about his performance through these clichés.

**Antecedent influences.** Ollie used his knowledge of previous encounters with opponents to judge the difficulty of the upcoming challenge. In some instances, Ollie had not played against the opposition team for over a year and he referred to the dispositional traits of the opposing team:

O: We played them [opposition team] last year and I think we just won. I’ve spoken to John who knows a few of the boys and I know one of the boys in there and I think half of them play for a northern state side so I know they’re a pretty skilled squad.

I was surprised by Ollie’s assessment of the opposition team’s ‘skill’ (i.e., external, stable, uncontrollable) based on what was now relatively old information. The personnel within teams change significantly (i.e., unstable) after every season as older athletes
become ineligible to play in the competition but his predictive attributions did not reflect this. Chow and Feltz (2008) suggested that expectations against rather than specific characteristics of opponents shape attributions. After the first game, Ollie referred to dispositional traits within his team and the team behaviours required for them to negate the opponents’ skills. As mentioned earlier, Ollie spent several hours preparing for his direct opponent before the final game. Ollie gathered information about opponents to implement strategies to minimise his opponent’s influence in the game, and feel in control and prepared for upcoming challenges.

**Game importance.** Perceptions of competition importance influence the formation of attributions pre-performance, particularly in reference to team-serving bias (Allen et al, 2012; Greenlees, et al., 2005). Ollie consistently referred to game importance in his pre-game interviews:

G1:  
A: How is this game different to others that you have played in the last month?  
O: This is a must win game to make the finals, well one of the games to make the finals, and it’s got a high importance to it. It’s pretty pivotal if we win so I think that’s what makes the difference to the other games.

G2:  
O: I think as a team we know how important it is. I think we’re going to all be up and about for this game and we’re trying to make a stretch for the finals.

G3:  
O: If we win then we are pretty much going to the finals and we will solidify our finals campaign so we all know how important it is to win.

In Australian Football, the top eight sides play in a finals series and Ollie’s team was in ninth position at the beginning of the study. Ollie suggested that he, and his teammates, were feeling pressure to produce successful outcomes in all three games to ensure they made the finals series. Allen (2010) suggested that over time, competitions become less important to athletes and their self-esteem, thus athletes replace attribution biases with a desire to have greater control over outcomes. In keeping with Allen’s (2010) findings,
Ollie consistently referred to game importance as an indicator of success and often referred to controllable attributions (i.e., preparation) for realisation of success.

**Causal dimensions.** Ollie discussed several causal factors as potential determinants of success. Initially, he discussed factors related to his effort (unstable, controllable, internal) and his position on the ground (unstable, uncontrollable, external):

A: What do you think your strengths are going to be today?
O: I am not playing on the key forward today, so I’ll probably just try and play the rebounding role. I see my ability to play the rebounding role as a strength today. Maybe try to get the body on my opponent. That’s something that I haven’t been doing much over the last couple of weeks so I will try to focus on that.

As the study continued, he referred to his skills, ability (internal, stable, and controllable), and the strategies (controllable) he would use to combat his opponent.

Ollie respected his opponent’s ability in the final game and reported that his opponent was “fast and had really good hands (strong ability to mark the contested ball)”. Ollie regularly made controllable predictive attributions and believed he could control his future performance outcomes by dedicating time and effort to his preparation.

**Summary of pre-game mental state.** Ollie’s pre-game mental state remained relatively stable over a number of weeks and was confident and comfortable in his role. His team’s goal was to play finals, however, they were not guaranteed a finals place until the final week of the study. Furthermore, Ollie was aiming to be drafted to the AFL, he therefore, experienced pressure to perform in the all games. Ollie used pressure as a motivational influence rather than interpreting pressure to perform as stressful.

Despite the pressure to perform, Ollie was confident that players within his team had played together for long enough to execute their skills effectively and consistently to reach their shared goal of qualifying for the finals series.
Post-Game Mental State

Ollie’s post-game mental state was generally consistent throughout the study. Ollie was considered in his responses and showed little emotion after each game. Ollie was balanced in his causal ascriptions and reflected on all aspects of his performances (i.e., his performances, teammates’ performances, opponents’ performances, performance conditions). He regularly used a range of causal ascriptions (e.g., positional change, statistics, and weather conditions) related to all causal dimensions (e.g., internal, unstable, uncontrollable; external, unstable, controllable; external, unstable, uncontrollable).

Outcome-dependent affect. Athletes often experience initial outcome-dependent emotions that are intense and short lived (Weiner, 1985). Generally, Ollie did not appear to experience intense emotions immediately following his performances. I was confused about Ollie’s lack of affect in the first post-game interview. His teammates displayed excitement and satisfaction, however, Ollie was muted in his emotional expression, with a mismatch between Ollie’s emotion and performance appraisal. As the weeks continued, I began to understand Ollie’s affect and noticed slight changes in his intonation and facial expressions.

As mentioned earlier, Ollie consistently exhibited cultural humility and rarely praised himself or provided internal causal ascriptions for his personal positive performance outcomes. Ollie’s humility was evident in the final post-game interview when he directly referred to his reluctance to appear arrogant:

A: Overall, how would you rate your game out of ten?
O: Maybe about an eight I think, an eight or nine. Oh an eight I don't want to seem like arrogant (both laugh). Eight. I think I did what the coach and what the team expects of me. I beat my man, kept him to one goal and just tried to bring a little bit of leadership and rebound off the half back and off the full back.
Ollie believed he performed well, however, he did not want to violate socially accepted ‘rules’ of maintaining humility and modesty. Researchers suggested that athletes public appraisal of their performance outcomes may not reflect their private perceptions of their performances (e.g., Rejeski & Brawley, 1983; Shapcott & Carron, 2010). Ollie, however, negotiated socially accepted rules to communicate his satisfaction with his performances by using significant others (i.e., coach, teammates) to justify his scores and provided examples of strengths in his performances. After the final game, Ollie reported pride in his performance and reported that he was “impressed with my ability to keep my opponent to only one goal”. His opponent had kicked seven goals the week prior. Attribution researchers have consistently referred to the influence that emotions have on causal ascription (e.g., Allen et al., 2011; Duda & Treasure, 2006). Cultural humility, however, was more influential over Ollie’s causal ascriptions than outcome-dependent affect immediately post-game.

**Causal antecedents.** Ollie consistently referred to casual antecedents (e.g., coach influence, past performance outcomes) when he reflected on his performance outcomes:

A: Rate yourself out of ten on the team rule bodyline the ball.
O: Yeah I thought I was pretty good at that today. I would have rated it about an eight. It was definitely another level up from last week. I got down to ground a number of times and picked up the footy pretty cleanly.
A: What do you think the difference was between last week and this week?
O: I guess last week it was pretty poor so during the week, before training, I really made an emphasis to work on that [clean possession of the football] and focus on picking up the ball instead of just making my next move if I don't have the footy.
A: Is that something that your coach instigated or you did yourself, you decided to work on that?
O: I guess when I was doing my vision last week, sort of just both of us [instigated the change]. I knew and he knew [I needed to work on it].
Ollie often referred to the previous game to guide his analysis of his current performance. For example, when Ollie reflected on his performances he gathered information from his previous performance (e.g., was a step up from last week), compared it to the current performance (e.g., focused on picking up the ball), and developed strategies (e.g., training) to maintain consistency in his future performances.

Similarly to findings of Allen et al. (2012), who suggested that athletes collect information from a range of sources before making casual ascriptions, Ollie collected information from a range of sources in his social environment (e.g., coach feedback, game footage) to inform his casual ascriptions. Ollie consistently referred to his coaches as antecedent influences on his performances and enjoyed the pressure of playing a key position in the team. John, the head coach, requested two-way communication (e.g., asked athletes how they could counteract opponents rather than dictating strategy).

**Actor and observer differences.** Ollie and John used similar causal ascriptions for Ollie’s performances across all three games. For example, after the first game, both Ollie and John felt that a new role (e.g., on the half back flank) had provided Ollie with freedom to play up the ground and gain a high number of possessions:

A: Do you think that the coach directly influenced your performance during the game and why?
O: Maybe not the actual head coach, maybe the line coach [Parko]. Every week he places a sort of expectation on me to play in the deep back so this week he gave me a little bit more freedom, as I said, to play up the ground.

A: Do you think that you directly or a coach directly influenced his game on the weekend?
J: I think the back line coach [Parko] had instructions for him and told him to get up the ground a little bit more which he followed, it probably gave him a little bit more freedom because of selection. I would say the coach probably had an impact in structure rather than motivation or anything. Ollie’s very motivated. He sees the game very well.
Ollie and John believed that his line coach, Parko, had influenced his performances, however, they had different opinions about the level of guidance that Parko had provided Ollie. Ollie believed Parko motivated him to perform well, however, John reported that Ollie did not need motivating. John felt that Parko influenced Ollie’s performance only through structural changes within the team. Throughout the study, Ollie and John continued to share similar opinions about Parko’s influence over his performances. Athletes and coaches often differ in their understanding of coaches’ influence over athletes’ performances (Brawley, 1984). Feasibly, the mismatch between perceptions of coaches’ involvements in performance outcomes could be a consequence of athletes’ lacking a deep understanding about the coach’s role on game day. John and Ollie, however, had consistent perceptions about coaches’ influences over his performances. Ollie had a relative who was a well-known figure at the professional level in AFL football. Ollie’s relative was renowned for his ‘footy smarts’ and Ollie’s knowledge of football somewhat reflected his relative’s expertise. Ollie clearly had a deep appreciation for coaches’ roles on game day. Possibly, Ollie’s extensive knowledge of football and the mentality behind performance was linked to the family history in football.

Despite the similarities in Ollie and John’s causal ascriptions for Ollie’s performances, there were some subtle attribution differences between the two. John referred to Ollie’s dispositional traits when reviewing his performances. Ollie generally used internal and controllable attributions for performance outcomes, however, he preferred not to discuss his performance strengths and used the coaches’ perceptions of him to support his attributions to dispositional traits:

A: What went particularly well during the game?
O: I think my decision-making and body positioning. They were the two things that I focused on heading into the game. It’s something that I have been focused on all season but this week I had a little bit more freedom.

A: Is decision-making usually a strength of yours?

O: Yeah, I would have thought so. The coaches have always told me that is a strength of mine.

Ollie’s references to coaches’ perceptions of his abilities were consistent with John’s impression of him:

A: What aspects of his game wet well on the weekend?

J: It’s standard Ollie. He just reads the game so well. I thought it was back to his best on the weekend, and he got back to what I would consider normal Ollie. It has been missing, so it was an improvement.

John used past interactions and observations to contrive his attributions for Ollie’s performances. John also formulated ideas about Ollie and used his prior behaviours to determine his character (e.g., reference to footy smarts, reading the game well).

Researchers contended that actors (athletes) tended to attribute performances to situational factors and observers (coaches) to dispositional characteristics (e.g., Jones & Nisbett, 1972; Miller & Norman, 1975). John and Ollie, however, generally attributed his performances to dispositional (internal) factors.

John and Ollie provided several reasons, rather than a singular cause, for Ollie’s performance outcomes. They generally used dispositional attributions to provide causal ascription, however, there were a few instances where Ollie and John used situational factors to attribute performance outcomes. After the third game for instance, Ollie was satisfied with his performance, however, he augmented his attributions and also referred to the wind and the conditions on the ground:

A: Rate yourself out of ten on the team rule kick long to advantage.

O: I think with the wind. Oh overall I’d say about a six or a seven. Probably with the wind I just tried to kick it as long as possible and just keep it out of my area but against the wind I just tried to chip it around and gain ground.
Ollie’s causal ascriptions to external, unstable, uncontrollable factors were interesting considering the context of an overall positive performance outcome. Weiner (1985, 2014) suggested that attributions assigned to the locus of causality relate to self-directed emotions (i.e., pride, self-esteem). For example, athletes are likely to experience lowered or stable self-esteem if success is related to situational (external) causes. Possibly, Ollie did not want to credit himself for the team’s performance outcome due to social-cultural expectations of humility and modesty. John also referred to situational factors twice during Ollie’s performances. He discussed task difficulty and “the situation of the game” in his analysis of Ollie’s second performance. He reported that Ollie had made a few decisional errors that would not have occurred if the team had not been comfortably ahead. John was evidently using attribution bias for Ollie’s mistakes when he attributed Ollie’s poor decisions to external, unstable, uncontrollable factors (e.g., situation of the game).

Ollie appreciated having freedom in his game preparation and of playing higher on the ground. This was evident because John and Parko trusted Ollie to make good decisions and feasibly, Ollie gained confidence from the trust that John and Parko afforded him. They did not dictate strategy to Ollie rather they gave him control over his preparation. This trust in Ollie was evident in comments about his preparation for the final game:

A: Do you think the coach influenced your performance?
O: Oh yeah definitely. He [Parko] told me I had a role so if I could just play that role, he'd be pretty pleased with me. And not only my line coach but the actual senior coach, John, he told me on Thursday that I was going to be playing on one of their key forwards, so I guess both telling me that I had a role they definitely prepared me for the game a little bit more.

A: When did they tell you about your role, what happened exactly?
O: Thursday night heading into the game, I got a little bit of footage of him [opponent] and sort of the way he played. I saw his movement and leading patterns and the way that he plays.
John was more descriptive than Ollie about the freedom that he and Parko had given Ollie in the lead up to the game:

A: Do you think that you directly influenced his performance?
J: This week probably a little bit. He and I actually spent a little bit of time talking about how we could potentially counteract the opponent and you know it was him that came up with the strategy. I mean it was the strategy that I wanted him to come up with but he came up with it and then I literally gave him the confidence to execute it.

Ollie reported that his last game was his strongest during the three game study, and in his analysis of the final game, he openly expressed pride and satisfaction in his performance. He had dedicated considerable time to his preparation for the final game, and his commitment had paid off. Ollie’s story partially supports Allen et al.’s (2005a) proposition that pride is linked to an internal locus of causality following successful outcomes. Ollie reported that he beat his opponent (i.e., internal) and had controlled (e.g., preparation and strategy) his performance.

Ollie found it difficult to adopt a flexible approach to his performances and found it difficult to stray from his preparation. This was evident in Ollie’s frustration at playing in different roles for the team throughout the study:

A: What improvements could you have made on your performance?
O: When I found out I was going to be playing deep back just really seeing it as another opportunity to beat my man and do what the coach asked me to do. Instead of just, not really put my head down, but sort of just keep working hard I guess when I'm thrown in a position I'm not really comfortable with or not prepared for.
A: Being able to get your head in the right frame of mind for a position is that something that you've been working on in the past or is it unique to the game?
O: You normally get told what position you are going to be playing on Thursday night and you really prepare for that, who you are going to be playing on, their strengths and weaknesses and you get a little bit of vision. I probably focused a lot on playing half back when I probably should have just said you know there is every opportunity to play deep back.
Ollie was somewhat frustrated and embarrassed by his inflexibility during the game. John also suggested that Ollie needed to adopt a flexible and balanced approach if he wanted progress to the senior AFL competition:

A: What improvements could he have made on his performance?
J: If you want him to round out his performance perfectly then you'd like some more offensive rebound out of him. I didn't think he was quite as good as the week before where he had those opportunities. He just didn't get on the end of it [marking ball]. It's stuff that we've been talking to Ollie about all year.

John was matter of fact when he discussed Ollie's need to adopt a more flexible approach to his performances than he currently had. Unlike Ollie, John had provided not only areas for improvement, but also highlighted his strengths.

The factors in Kelley's (1972) co-variation principle were evident when John discussed Ollie's performances in comparison to teammates in the back line:

A: What aspects of his game went well?
J: When I talk about decision making it wasn't just to win the ball. Once he got the ball in his hands he was exceptionally well composed and that's one of Ollie's strengths. He sees the game of football very well but on the weekend it was a highlight.

After the final game, John referred to Ollie's composure and used comparative analyses to determine consensus information. He also used Ollie's composure in the back line to determine consistency information (e.g., he usually sees the game very well). John did not appear to use distinctiveness information when analysing Ollie's performances, possibly because he was not asked about other situations when Ollie demonstrated composure. Ollie and John had a mutual respect for each other as was evident in their attribution convergence. John appreciated Ollie's football intelligence, his knowledge of the game, and valued Ollie's direct approach to his performances. Ollie enjoyed receiving critical but constructive feedback and believed that the feedback was beneficial to his performances.
Attribution biases. Attribution biases are another key antecedent factor in causal ascription. Ollie did not demonstrate attribution biases until the final game. Ollie’s reluctance to use attribution biases was intriguing as attribution biases are considered to be relatively common occurrence in social and sport psychology (Allen, 2011; Carron, Burke, & Prapavessis, 2004; Martin & Carron, 2012; Gill, 1980; Weiner, 1985). It appears that Ollie’s use of internal attributions was consistent with the published researchers’ (e.g., Grove et al., 1991; Grove and Prapavessis, 1995) findings that athletes make internal attributions regardless of performance outcomes.

Ollie, however, used team-serving biases after the third game despite his initial reluctance to use attribution biases. Unlike researchers’ traditional understanding of team-serving bias, that proposes individuals in teams collectively attribute successful performances to internal, stable, controllable factors (e.g., Carron, & Colleagues, 2004, 2012), Ollie demonstrated team-bias to the back line:

A: Why do you think you were slow with it today?
O: Oh just, our midfielders weren't, they were just stagnant. When I had the ball or when one of our back six had the ball they were just sort of saying "kick it to me, kick it to me" but they weren't really moving.
A: And how do you think the rest of the back line performed today?
O: I think at times we overused it like in that second quarter. But I think overall I thought we did pretty well. I think the goals that they [opponent] scored were due to our midfielders not pushing back.

Apparently, Ollie protected his self-esteem, and his teammates in the back line, through assigning blame to the midfielders for opponents’ goal scoring during the game through the use of an intragroup bias. Ollie’s use of an intragroup attribution supported researchers’ findings that some individuals accept a greater personal responsibility for team success than team failure (Allen, 2010; Bird & Brame, 1978). In this case, Ollie assigned blame to teammates not within his performance line. Duval and Silvia (2002) suggested that highly self-focused people who experience failure will make internal
attributions for failure to self, when the likelihood of improvement seems low, however, failure will be attributed externally. Feasibly, Ollie believed that the backline’s ability to work together cohesively may not be easily rectified, therefore, he attributed performances outcomes externally, to the midfield.

Causal ascription and positional changes. Ollie provided several reasons for his performance outcomes, however, he consistently referred to his position on the ground having a key influence over his performances:

A: How do you think you performed today?
O: Alright. It was a bit of a different position for me. I sort of played the rebound tall back role I guess. It probably wasn’t as pivotal a role [as I have played recently] so I thought I got the ball a little bit more this week and just used it more efficiently I think.
A: What aspects of your game went well today?
O: I don’t know. I think maybe, oh a couple of times this season there’s more of a role placed on me because I am normally playing as a key position defender. This week I was in more of a downgraded role so I took it upon myself to try a few different things and it came off.

Ollie played as key backman (e.g., Full Back) for most of the season however, in the first game of the study, John asked Ollie to play further up the ground (e.g., Half Back Flank). Ollie reverted back to his usual role (e.g., Full Back) as the weeks’ progressed and found the adjustment difficult. Consequently, he did not have the same influence on the game from a possession perspective. Again, Ollie’s inflexibility was evident in his frustration at his lower number of possessions in the final two games. Ollie consistently referred to his game statistics (see Appendix C) and was frustrated that they do not include ‘corralling’ opponents:

G1: A: Rate yourself on the team rule, “tackle and pressure with intent”.  
O: I don't think I had that many tackles today, but I think just corralling people to the boundary side. I think I probably did have a couple of tackles, um so I'd probably give myself about a five yeah probably. I probably didn't have the highest amount of stats for the tackles so that's probably why.
G2: O: I would have said a six I think. I don't think I had many tackles today so um when the ball was there, I thought I corralled ‘em [sic] to the boundary line and put enough pressure on it to cause a turnover.

G3: O: Tackle and pressure with intent? I think a five I think. I Probably didn’t have the amount of tackles as I had the last couple of weeks. It’s something that I’ve probably been good at so I think one the stats that didn’t probably get noted down though was my corralling.

A: Yeah they can’t really do that on the stats can they?

O: Yeah I know, its pretty crap.

In Australian Football, there are some positions that are not well represented statistically, and full back is one of these positions. Ollie used his statistics, rather than goal attainment, as the primary indicator of his performance outcomes. Not only did Ollie place a strong emphasis on the number of statistics that he received each game, he also focused on an aspect of his game (e.g., corralling) that is not measured through statistics. He, therefore, focused on external, unstable, uncontrollable factors that influenced his emotional responses to his performances. AFL coaches and athletes spend substantial time revising the statistics for performances outcomes, however, statistics are not necessarily a definitive indicator of performance quality. Ollie reported feeling dejected and disappointed in the lack of acknowledgement for his effort in the back line.

**Attribution Change and the Coach-Athlete Dyad**

In Australian Football, athletes and coaches review performance outcomes following each game. This post-game feedback from coaches and review process can influence subsequent psychological and behavioural outcomes. Review processes require athletes and coaches to critically examine all aspects of performance to determine causal ascription. Weiner (1985, 2014) suggested that there may be emotional changes once causal ascription is made. I interviewed Ollie after his post-game feedback and reviews to understand the behavioural and psychological influences that
performance reviews have on attribution change and the coach-athlete dyad. There was evidence of attribution change across all three games. Apparently, Ollie respected his coaches’ feedback as evidenced in his change in causal ascriptions after he had received feedback. Ollie spoke about the different role he played in the first post-game interview and referred to playing in a “downgraded role” after he was asked about strengths in his performance (see page 98). After he received his feedback, however, he spoke about the freedom he was afforded through playing in a new role:

Post Review:  
A: What aspects of your game went particularly well on Sunday?  
O: I think my decision making and body positioning. I sort of focused on those two things heading into the game as well. Yeah it's something I've been focused on all season but this week as I said with a little bit more freedom I just tried to take it on board.

Ollie’s perception shift from playing in a different, “downgraded” role, to having more freedom to perform during the game, reflected John’s perceptions of his performance. John suggested that Ollie had more freedom to push up the ground and use decision-making skills than if he was in his usual role.

Ollie was generally consistent with his casual ascriptions related to his performance strengths in his post-game and post-review interviews after game three. Initially, Ollie spoke about his inconsistent effort and unwillingness to stick with his opponent:

O: When he [opponent] was trying to lead, I just stayed in front of him [opponent], just tried to block his run and then when the ball was in the air. I just tried to get to the right side of him and spoil the ball to the boundary line.

Similarly, after Ollie had received his feedback he spoke his dispositional traits, however, he spoke about them in more detail than he had in the post-game interview. It appeared that there was not a specific attribution change; rather a stronger focus on
dispositional traits. He also added causal factors for his performance and discussed the behviours needed during training to maintain his skills in future performances:

O: I knew from vision that he [opponent] didn’t like being in the contest so I tried to get goal side of the contest, and when he was on the lead I tried to spoil him. I think another thing was my kicking. I had 100% kicking efficiency and it’s been around 60 or 70 [%] in the last couple of weeks. I will keep working on it [kicking efficiency] before and after training in kicking drills to learn to keep my composure and I think it will definitely translate into games.

Ollie spent more time than most of his teammates reviewing his performances and speaking with his coaches. He pinpointed areas for improvement and discussed the strategies he would implement in the forthcoming games to make these required changes. Heider (1958) suggested that there are several underlying concepts (e.g., perceptions of the social environment, being affected by others in the social environment, wanting to make changes, belonging) that influence peoples’ interpretations of events in their environments. Ollie used several of these factors (e.g., being affected by the social environment, wanting to make changes) when he analysed his past performances and prepared for forthcoming games. Ollie made conclusions based on the existing frameworks in his environment (i.e., the coach-athlete relationship and coach as the expert), and was affected by the feedback provided by his coaches.

Ollie demonstrated attribution change in his casual ascriptions when he compared his performance to his teammates’ performances:

Post Game  A: Do you think they have similar strengths to you?  
O: Definitely. Some, like Ben, he’s got good awareness and good body on body positioning skills and he’s really smart around the footy so definitely.

Post Review: O: Ah yeah I think so. Well I’ve always been told that I’m a smart footballer so I think we were all really smart on the weekend. We moved the footy well, talked to each other and we were all leaders out there.
Initially, Ollie provided evidence of global (Rees, et al, 2005a) attributions when he compared his performance to that of his teammates and believed they all had the same strengths and areas for improvements. His use of global attributions was consistent with his pre-game interviews and he demonstrated humility and played down his achievements in a socially acceptable way. After his review, however, Ollie referred to his personal attributes and used them as a marker to measure his teammates against. Throughout our interviews, Ollie avoided singling himself out and used his teammates and coaches to express his feelings about his performances. He would not overtly express his self-belief, rather used his teammates and coaches perceptions and comments related to his performances to communicate self-confidence and pride in successful outcomes.

Researchers suggested that attribution dependent emotions becomes less intense over time, however, Ollie’s attribution change did not fully fall in line with previous findings (e.g., Allen et al., 2009). As mentioned earlier, Ollie reported feeling frustrated at his statistics and absence of a record of his corralling, however, he did not mention his frustration at the statistics in his post-feedback interview. Apparently, Ollie’s frustration had subsided in the days following his performances, as evidenced by his lack of discussion of corralling in his post-feedback interview. Ollie’s story supports Allen et al.’s (2009) findings that the intensity of emotions subside in the days after performance.

**Ollie and I: Reflections on the Research Process**

Ollie was mature and appeared to enjoy discussing his attributions for performances. As a relatively inexperienced qualitative researcher, I was often too quick to move through questions and did not always follow the participants closely enough.
Ollie’s relaxed approach to the interviews, however, meant that I was able to listen without feeling pressure to rush our interviews. When I reflected on our interviews, it was apparent that Ollie was engaged as he predicted the line of questioning and articulated his responses well. Also, I believe that Ollie has the qualities to be a coach, or perhaps an opposition analyst as a potential career. From my perspective, he had a passion for football more so than playing per se and he had several frustrations with the game and the way results were measured. After each interview, I felt a little disappointed in not being able to pursue those lines of enquiry for ethical reasons I should follow the research focused questions.
CHAPTER 6: CASE STUDY 3

Lucas’ Story

Introduction

My impressions of Lucas were of a reserved and intense person, with a cautious manner. Lucas was somewhat uncomfortable and guarded during our interviews, as was evident in his body positioning. He generally sat at a distance from me during the interviews and rarely made eye contact. He looked at the ground when he spoke and his responses were concise and lacked elaboration. Lucas was clearly on edge and struggled to remain focused on my questions during interviews. He regularly looked over my shoulder and was anxious about his performances. Possibly, Lucas was experiencing pressure to perform. At one stage of our final interview, Lucas spontaneously walked away to get his drink bottle before coming back to finish our discussion. I had hoped that Lucas would begin to feel comfortable as the interviews progressed, however, he continued to demonstrate caution and restraint in his responses.

Despite being a senior leader in his team, Lucas’ future as a professional Australian Football player was uncertain at the time of the study. Lucas was 18 years old, and like Sam and Ollie, had ambitions to be drafted in the upcoming National Draft. As with Ollie, however, Lucas had not been selected to play in the State side in the recent U18 National Championships. John (head coach) suggested that Lucas remained disappointed at not being selected in the State side. The team were successful in all three games.

Pre-Game Mental State

Before the first game, Lucas reported that he was angry and used his anger as motivation for the forthcoming game. He also reported feeling confident about his role
in the team and used internal predictive attributions. Later, before the third game, Lucas shifted from an individual to a team focus and used predicative attributions that reflected team goals (i.e., team cohesion).

**Pre-game emotions.** Lucas demonstrated several pre-game emotions. Before the first game, he was intense and focused, in the second he was dejected, and in the final interview he was positive and excited:

G1: A: So what emotions are you feeling going into today’s game?
L: Sorta [sic] pumped up, angry, yeah just that sort of thing.
A: Why are you feeling angry?
L: Oh I just use it as motivation for my game.

G2: L: I’m sorta [sic] pumped (draws breath). You know, I’m ready to prove people wrong. I’ve got to lead from the front and get the job done. [I’ve] got a pretty important job this week so I am also feeling mainly that sorta [sic] excitement to lead from the front.

G3: L: Yeah good. I’ve got a positive feeling about it. We’ve worked hard and we know what we’ve gotta [sic] do. So I am feeling pretty good about today. I’m feeling pretty fired up and I know that there is a job to do so I am feeling pretty focused.

At the time of our first pre-game interview, I was unsure why Lucas was angry but chose not to use follow-up questions to determine the cause. In the week following our first week of interviews, I learned that Lucas had not received an invite to the national or state screening week for the upcoming National Draft before our first interview. It was unlikely that Lucas would be drafted at the end of the season without an invite to the screening weeks. It was likely that Lucas was feeling angry at the possible loss of his dream goal (e.g., playing in the national professional competition).

During the study, Lucas was possibly experiencing some of the classic Kübler-Ross (1969) stages. That is, he had ‘lost’ his chance to play AF at the professional level. For example, before the first game, Lucas reported feeling “angry” and used his anger as motivation. Before the second game, he was somewhat resentful, possibly because he
could feel his dream of playing AF at the elite senior level slipping away. He wanted to ‘prove’ recruiters (scouts) wrong and demonstrate his skills and ability. At this stage, Lucas was possibly in the denial and bargaining stages. Like many elite junior AF players, Lucas was dedicated to football and before our first interview he believed he was talented enough to be drafted to the AFL. Many young elite AF players set their primary goal to be drafted, however, only a few are actually recruited to AFL clubs. Lucas remained hopeful after not being selected to play in the State side, however, it became apparent that AFL scouts did not believe Lucas had the attributes to be successful at the senior elite competition. Lucas’ pre-game attitude shifted again before the last game when he reported feeling excited about the upcoming performance and he smiled throughout the interview. Possibly, Lucas had reached the acceptance stage and was better able to remain focused on the forthcoming game and his performances rather than uncontrollable factors.

**Team cohesion.** Team cohesion has been linked to the use of attribution biases in teams (Taylor et al., 1983). Lucas’ focus on team cohesion fluctuated throughout our pre-game interviews:

G1:  
A: How are you feeling about the game today?  
L: Yeah good. Keen to get out there, keen to play as well as I can and keen to get the win.

G2:  
L: Yeah good. I’m ready to play a bit better now and feel like the team’s coming together a bit better now and we’ve got a really good opportunity to beat a pretty good team.

G3:  
L: Yeah good. I’ve got a positive feeling about today. We’ve worked hard and know what we’ve got to do so I am feeling pretty good about today.

Before the first game, Lucas did not mention the team in the interview. He was outcome focused and did not discuss the processes or behaviours needed to reach successful performance outcomes. Before the second and third games, Lucas began to refer more
frequently to team attributions in his interviews. He used inclusive language to describe the strengths of the team, challenges they would face in their forthcoming games, and differences in performances from week to week. Lucas’ shift to using inclusive language may reflect a team-serving bias. Martin and Carron (2012) suggested that athletes generally make internal attributions for team’s successful performances and downplayed internal factors of the team in unsuccessful outcomes. Initially, Lucas referred to his dispositional traits (i.e., ability) when he discussed the forthcoming performance, however, once the team became more successful he used team-serving biases (i.e., internal attributions for successful outcomes) to maintain his sense of belonging, self-esteem, and motivation. Possibly, Lucas’ shift in focus from individual to team challenges was due to the realisation that his own goal to be drafted to the AFL was highly unlikely to occur. His goals for the season were now more in tune with the team goals and becoming more affiliated with the team.

**Pre-game causal dimensions.** Lucas discussed several dispositional traits when predicting his capability to execute his skills in upcoming games. Before the first game, he conveyed both egotism and tenacity when he spoke about his role in the team, however, as the weeks progressed he was less assertive about his inclusion in the team:

G1:   A: Why do you think that you were selected to play for your team today?  
      L: I’m probably the best inside midfielder on the team. Simple as that.

G2:   L: Again, I’m probably the best midfielder we’ve got so that’s probably why.

G3:   L: To play as an inside midfielder and extract the ball from stoppages.

There are a few possible explanations for Lucas’ trend away from himself to the team. First, Lucas may have lost some confidence in his abilities after not being invited to attend the National or State Combines. Second, he perceived his playing position (i.e.,
inside midfielder) was unstable and he could not confidently execute his skills. Lucas’ coach John suggested that the coaching team had changed Lucas’ position on the ground to allow others a chance to play in the “extractor position”. Positional changes within the team meant that Lucas did not play his traditional role in the team, possibly adding to his uncertainty about his abilities.

Lucas changed his attribution style in the pre-game interviews as the weeks progressed. Before the first game, Lucas attributed his personal perceived strengths to internal, stable, controllable factors (i.e., ability). Before the last game, however, he began to attribute his perceived strengths to team factors reflecting internal (to the team) and unstable (i.e., positional changes) causes. In addition, Lucas hinted at several external, unstable, and uncontrollable (e.g., size of the ground) factors that may influence his performances:

G1: A: What about the challenges in today’s game?
   L: Mentally overcome my foot which I think should be right today. Covering the ground, um and maybe getting tagged if they put someone on me.

G2: L: Spreading in the heavier conditions maybe but its [heavier conditions] something I’m going to have to overcome. Handling the ball possibly. I don’t think it (ground condition) should be too much of an issue I think it should be fine.

G3: L: Defensive running, that’s something we’ve really got to work on today if we are going to beat this team um locating and numbering off (having a direct opponent) is going to be pretty important.

Lucas had sustained a minor foot injury four weeks before our first interview and he looked down at his foot with disappointment when he discussed this injury. The text above reflects his apparent uncertainty in the stability of his foot and he was possibly concerned about re-injury, however, he suggested that “it should be right today”. Before the second game, Lucas also spoke about the “heavier, slipperier conditions and
handling the ball”. The centre of the ground was wet and ‘boggy’ making it difficult for players to cleanly possesses the ball. He again reassured himself by suggesting that ‘it should not be too much of an issue’. Before the last game, he began to discuss the dispositional traits of the team (i.e., defensive running) and his opponents’ strengths. He also discussed the required team behaviours to produce a successful outcome.

**Summary of Pre-Game Mental State**

Lucas’ pre-game mental state changed throughout the study. Lucas was uncertain about his role in the team after our first week of interviews and I believed because Lucas was not invited to the National or State Combines had also influenced his self-belief. Before the first game, Lucas was angry, self-focused, and listed several uncontrollable challenges (i.e., foot injury, proving people wrong), however, as the study continued, he began to shift his focus to the requirements of the team (i.e., defensive running, team cohesion) and reported feeling excited about the forthcoming performances.

**Post-Game Mental State**

Lucas’ post-game mental state changed throughout the study and his post-game emotions influenced his perceptions of his performances. After the first game, Lucas was dejected and disappointed, and his demeanour was in stark contrast to the majority of his teammates who were excited after the team’s win. When I interviewed Lucas, he was sitting alone going through a post-game stretching routine, and he was distant and distracted during the interview. After the second game, Lucas was satisfied with his performance and believed that he had positively influenced the game. In the final interview, however, Lucas was angry and frustrated, and felt that his opponents had
used illegal tactics. By the final interview, I realised that Lucas expected near perfection from not only his performances, but the performances of his teammates.

**Outcome-dependent affect.** Lucas also reported several emotions immediately following his performances:

A:  How do you feel you performed today?  
L:  Just average. I felt flat early and wasn’t spreading [running] well. It took me a while to feel good about my body. My foot was sore and I rushed through the game. I just didn’t run hard enough. I wasn’t winning enough inside ball.

Lucas was dejected after the first game, he segregated himself from his teammates and only spoke to me. Lucas was frustrated with his foot injury and believed that it had restricted his movement and therefore, his performance. Before the game, he seemed to be pre-preparing his causal ascriptions for an unsuccessful outcome due to his injury.

Lucas was despondent when I asked him to highlight positive aspects in his performance and suggested that there “wasn’t that much that was good about it”. Lucas was uncertain whether his foot was stable enough to avoid re-injury and perceived that it had affected his performance. He showed signs of self-pity, looked down as we spoke, and mumbled throughout the interview. Lucas’ outcome-dependent affect was consistent with researchers’ suggestions that athletes who attribute unsuccessful performances to uncontrollable factors are likely to experience anger and pity (e.g., Allen et al., 2011; Anderson & Riger, 1991).

Lucas’ outcome-dependent emotions also changed throughout the three game study, and he reported feeling happy and satisfied after the second game. He reported that he “played well” because he “played in tight, worked a lot harder on the inside game and just dominated the stoppages”. He had many possessions, had executed his skills and, therefore, performed well. He was, however, disappointed in his capacity to remain positive at all times:
A: Rate yourself out of ten on the team rule “positive at all times”.
L: I was fucken [sic] shit.
A: Why was that?
L: I played pretty average for the first three quarters so I don’t think I was positive because of that. The last quarter I was better but for most of the game I was probably not positive.

Lucas’ used strong emotive language to describe his positively during the game. The team prided themselves on being positive at all times and Lucas was probably feeling guilty for not meeting that expectation.

Lucas’ outcome-dependent emotions shifted again after the final game when he reported feeling frustrated and angry at his opponents’ tactics. Lucas used strong language to describe his opponents, was short in his responses, and clenched his teeth when he spoke about his opponent restricting his influence on the game:

A: How do you think you performed today?
L: I think just alright. I did my job for most of the game but I just found it hard in the last quarter to have an impact. I had a bloke sort of hanging off my arse, following my every move. Before that I wasn’t too bad but I think in the last quarter I just struggled to shake him off and I was a bit frustrated.
A: Yeah okay. Was it a bit of a tagging role without being a tagging role?
L: Oh no. He tagged me. That was the hardest tag I’ve had.
A: Do you feel you went okay though?
L: He beat me. In the last quarter he beat me so you know that hurts but we got the win.

A ‘tagger’ is a defensive player whose task is to prevent an opponent from having an influence on the game (AFL, 2014). Players assigned to a ‘tagging’ role use a range of tactics including blocking their opponents’ run at the ball, distraction, and subtle holds on jumpers (jerseys). In the open age professional national competition players can perform in ‘tagger’ roles; however, at the elite junior level of AF it is illegal. A player in the elite junior competition caught playing the role of a ‘tagger’ should be penalised by the umpire (referee) and a free kick awarded to their opponent. Lucas was angry that infringements had not been noticed and penalised. In addition, he was angry at his
inability to combat his opponent’s tactic. Lucas’ uncontrollable (i.e., opponent tactics, umpire decisions) causal ascriptions support Weiner’s (1985, 2014) suggestions that other-directed emotion (i.e., anger directed at opponent, umpires) is related to the dimension of uncontrollability.

**Causal antecedents.** People use causal antecedents to influence their attribution processes. For example, outcome history, social comparison and interactions, and effort expenditure influence causal ascription (Weiner, 1985). Lucas, however, did not refer to many specific causal antecedents when he discussed his performances. Lucas spoke about his foot injury throughout our first and second post-game interviews and suggested that this injury had hampered his performance after the first game. After the second game, however, he felt that he performed well because his “foot was a lot better” and he “wasn’t thinking about it (foot) for most of the game”.

I interviewed Lucas’ coach, John, to gain more detailed insights into attribution processes in coach-athlete dyads. John discussed the nickname coaches used for Lucas, “The Professor”, because Lucas demonstrated a tendency to over-think his performances. In addition, John alluded to Lucas’ disappointment at not receiving an invite to attend the state screening:

J: He was very disappointed that he didn’t get a State screening. In fact last Thursday night I had to take him aside and talk to him about potentially where his football career was headed. It certainly played on his mind early. The good news is he had the ability to block that out and go and execute when it counted but he is a very self-critical, self-analytical person.

John suggested that Lucas’ lack of invite to a state screening led to re-evaluation of his goals. In addition, John was concerned that Lucas’ internal critic may affect his future performances.
**Actor and observer differences.** Lucas and John differed in their causal ascriptions for Lucas’ performances across all three games. John provided an insight into Lucas’ mentality and his personality, however, Lucas remained coy and did not offer the same insights as John. Lucas and John differed significantly in their reflections on the coach’s influence over his performances. Lucas believed that he was self-driven and was not motivated by the coaches. John, however, felt the coaching staff had influenced Lucas’ performances in two of the three games:

G1:  
**A:** Do you feel like your coach (you) directly influenced your (Lucas’) performance today?  
**L:** Nah, I think I did what I had to for the team.  
**J:** Yeah look Smithy [line coach] gave him a licence to get a little bit wider and to come outside the very inner circle. We sort of talk about a 1 metre test where the ball is within a one metre radius of the contest and that’s where Lucas usually does his best work. We gave him a bit of freedom to get outside that and to make the decision to leave the contest fractionally earlier and therefore try and get on the end of some stuff [the ball] which he did.

G2:  
**L:** I don’t think so. I think it was just more myself.  
**J:** No look to be completely honest if you’d have asked me last Thursday night who was going to be best on ground I almost would have said Lucas. He is very determined. We jokingly call Lucas the professor, he over thinks everything, he over analyses an awful lot of things so he was very aware, of the importance of the outcome of the game in terms of our likelihood of playing finals.

G3:  
**L:** I think it was probably the opposition. They put a bit of work into me, credit to them. They stopped me from having an impact later in the game. I don’t think that was influenced by the coaches, I think that was just the opposition coaches, they did pretty well.  
**J:** We changed up the rotations a little bit to try and play a direct tactic against our opponent and that probably did have a little bit of an influence on Lucas because at times we had onballers on the ground for literally a minute and a half and then they rotated through the bench. Therefore, in the third and fourth quarter when he got frustrated, it was probably because his opponents had worked out what we were doing and, [they] were able to block his influence on the game.

A possible explanation for the differences between Lucas’ and John’s reflections on the influence of the coaching team may be Lucas’ limited understanding of the coaching
team’s role on game days. Athletes conceivably tend to focus on the behviours needed to execute a skill, whereas coaches generally consider the details in skill execution (i.e., structural changes, match ups, positioning of players on the field).

Generally, John and Lucas agreed that he beat his opponents in the first two games and was challenged in the third game. John was more vivid than Lucas when discussing his ability against his opponents:

G1: A: How do you think your (his) direct opponent played today?  
L: In the midfield you always have a different direct opponent. I thought we got the better of them. I think they were good but they were under a lot of pressure and they coughed the ball up a bit.  
J: He was all over them. He beat his opponents comfortably.

G2: L: I thought we dominated inside. Probably for the first three quarters they got lucky because we weren't clean, but I think we were pretty good.  
J: As the day went on he got better and better and he outperformed his opponent by more and more as the game went on.

G3 L: He did his job, to make sure I didn’t get the ball and he did that pretty well when he was on me.  
J: Lucas beat his opponents in the first half. But they (opponent) deliberately then sent number 25, Williams, to him in the second half and I would say Williams got him. Williams got inside his head and got him on the offensive spread. When the opposition had the ball Williams worked very hard to expose what everybody knows is Lucas’ deficiency.

Lucas discussed ‘the midfield’ in the first two games when asked about his opponents. In the final game, however, his frustration with his opponent led him to assign credit to external sources rather than to the team. John also focused on task difficulty and external sources after the final game and both were frustrated with opponents’ illegal tactics. John felt that umpires’ decisions had influenced Lucas’ frustration during the game and therefore, his performance:

J: He did get some very close attention and it is questionable whether that attention was legal or not but the umpires didn’t call it [free kicks] so on that day it was legal attention. He believed he should have been rewarded for getting in front whereas the umpires just saw it as natural body contact and he got very frustrated.
John consistently referred to Lucas’ dispositional traits throughout our interviews and used external, unstable, uncontrollable factors (i.e., umpiring decisions) to explain Lucas’ uncharacteristic frustration and “anger towards teammates” in the final game. Jones and Nisbett (1972) found that observers’ conceptualisation of actors’ dispositional traits are can predict how actors behave in the future. Possibly, Lucas’ behaviour in the final game was not consistent with John’s predictions about him and thus an external, unstable, and uncontrollable attribution was made. Kelley and Michela (1980) also suggested that behaviour that departs from what is expected is attributed to temporary causal factors (i.e., opponent’s, umpiring decisions). In addition, Lucas was named as captain for the remainder of the season and perhaps John was protecting his choice of captain through the use of external, unstable, uncontrollable causal ascriptions. Interestingly, Lucas did not mention his appointment to the captaincy as having an influential role over his performances.

John suggested that Lucas’ frustration in the final game was uncharacteristic of him. I was surprised by John’s assertion that it was “very unusual for Lucas to become frustrated and distracted” because Lucas had voiced his frustration at his teammates “fumbling of the ball” after the second game in the study. John’s use of situational variables as attributions for Lucas’ performance was in contrast with Rejeski et al’s. (1981) findings that coaches generally used dispositional causes to explain athletes’ performances. John had also suggested that Lucas needed to work on his body language after the second game:

J: A bit of feedback from the bench that was reported to me was that he very disappointed when we turned the ball over. If he was on the bench he was becoming a little agitated with his teammates, not aggressively but just you could see it in his body language Lucas’ desire to make sure that was perfect
sometimes can be seen as a criticism. I’m aware that he doesn’t mean it but sometimes other people don’t interpret it that way.

Stoeber and Becker (2008) suggested that negative reactions to imperfection were related to a fear of failure. Lucas was dealing with the reality that it was unlikely he would be drafted and could see his ‘dream’ slipping away. Lucas had also become angry and felt his teammates were not exerting enough effort. Again, his causal ascription to uncontrollable sources (i.e., teammates skill errors) is consistent with Allen et al. (2011) and Anderson and Riger’s (1991) findings that other-directed emotions are linked to the dimension of controllability. John, however, felt that Lucas’ teammates were performing well and that errors were inevitable. Rees et al. (2005a) suggested athletes may fail to perceive all of the information presented to them by their coaches or teammates, ignore some of the feedback, or distort the significance of the feedback provided to them by significant others. Possibly, Lucas used unrealistic perceptions of his teammates’ performances to protect his self-esteem, and self-belief.

**Attribution biases.** Lucas used attribution biases regularly throughout our interviews despite the team’s successful outcomes. For example, Lucas appeared to be making external/uncontrollable attributions for his poor performances. As mentioned earlier, Lucas referred to a foot injury and used it to explain his poor performance after the first game and after the final game, he spoke about a blister on his foot:

L: I had a blister on my right foot. I couldn’t run properly. I don’t think it really made that much difference it was more the mental side with having the attention that I had that sort of influenced my performance I think.

He did, however, appear to be embarrassed by his attribution to his blister and quickly suggested that it was his mentality that had influenced his performance outcome.

As the study continued, I believed that Lucas was somewhat unsure about football skills because he used self-serving biases to reassure himself of his ability. Feasibly, his
confidence was shaken because he had not received an invite to draft screening camps and he was motivated by external factors (i.e., proving others wrong). Lucas appeared to be reflecting on individual unsuccessful performances followed by individual successful performances rather than focusing on the team’s successful experiences.

Lucas also used internal attributions for success possibly to enhance personal self-esteem:

A: How do you think today’s game was different to games over the last month?
L: I think we brought a very impressive intensity from the first bounce to the last quarter. We were at them all day for four quarters and we beat a very good side by a very big margin ‘coz [sic] we just kept at ’em [sic] and kept at ’em [sic] and caused them to cough it [the ball] up and they looked like a pretty average team just because of the pressure we put on them. It was a really good performance.

Lucas was likely using the team-serving bias to protect his self-esteem after he performed poorly in the first game. Allen et al. (2012) suggested that group members use team-serving biases to build group morale, esteem, and establish a sense of belonging.

Causal ascription. Goal attainment influences emotional responses after performance outcomes. Peoples’ emotions fluctuate based on the stages of attribution review (Weiner, 1985, 2014). Lucas was initially unable to ascribe reasons for his poor performance beyond his foot injury. He openly discussed several areas for improvement but had difficulty explaining his poor skill execution:

G1: A: What improvements do you think you could have made on today’s performance.
L: Winning more [of the ball] in close, spreading, working harder for all of the game not just until half-time. Yeah that is pretty much it. Just winning, and getting my hands on the ball more. It is an asset of mine usually. But for some reason it didn’t work today.

G2: L: Ah probably some finishing. I probably could have hit the scoreboard [kicked some goals]. A couple of times just misused the ball but otherwise I was pretty solid.
G3: L: Just some finishing work really. I missed a goal that I should have kicked, just some dumb decisions. I got a bad push in the back fifty [gave away a free kick], ah some dumb handballs just some decision making really, and just running harder especially when you’ve got a tag, you’ve just gotta [sic] run and get to the ball and try and beat him at your own game so that’s, that’s something that I can improve.

Lucas was dejected and disappointed throughout our first post-game interview. Lucas consistently attributed his performance outcomes to factors within his control (i.e., finishing, kicking goals, decision-making). In the second and third post-game interviews he was more specific and descriptive about causal outcomes and areas for improvement.

After the final game, he was frustrated at his opponent’s tactics and attributed his performance to task difficulty (i.e., situational and external factors). Athletes who perceive performance outcomes as personally uncontrollable, and ascribe causality externally (e.g., to others within the team), may feel anger or pity towards others (Weiner, 1985, 2010). Lucas felt anger towards his opponent due to unsportsman like tactics, however, he took ownership for his decisions and provided strategies for improvement. Lucas highlighted several casual ascriptions after his performances and sometimes those causal ascriptions contrasted each other. For example, Lucas was frustrated at the illegal tactics used by his opponent (external and uncontrollable), however, he believed he should have worked harder and managed his cognitive responses to a difficult task (internal and controllable).

**Attribution Change and the Coach-Athlete Dyad**

Australian Football players and coaches review performances following each game and quite likely psychological and behavioural consequences of performance evaluations are affected by these post-game feedback and review processes. Review processes require athletes and coaches to critically examine all aspects of performance to determine causal ascription. Weiner (1985, 2014) suggested that there may be
emotional changes once causal ascription is made. I interviewed Lucas after his post-game feedback and reviews to understand the behavioural and psychological influences within the coach-athlete dyad has on attribution change. Generally, Lucas did not change his casual ascription after his post-game feedback, however, his emotions were less intense, and he was more considered in his responses, in the post-review interviews than he had been in the post-game interviews.

Immediately after each performance Lucas exhibited strong emotional responses to his performance outcomes. For example, after the first game Lucas was dejected and disappointed; he looked down when speaking and rarely made eye contact. In the post-feedback interviews his emotional responses changed and he made eye contact, sometimes smiled, and provided detailed reflections on his performances. The week following last game, his emotional responses did not change significantly and he remained frustrated at the illegal tactics of his opponent:

Post Review A: How do you think you went on the weekend and why?
L: At times I was dominant but [I] ebbed and flowed a bit and dropped off at times. I had a couple of blokes tagging me at points in the game and it slowed down my possession rate. In the last quarter it got in my head a bit and I probably didn’t work through that hard enough.

Lucas’ story partially supports Allen et al. (2009, 2010, 2011) findings that attribution-dependent emotions become less intense over time. In the first two games, his emotional responses to his performance outcomes became less intense. In the final game, however, his emotional response related to the illegal strategies of his opponents remained relatively stable. Lucas’ continued frustration was evident when he discussed his ability to remain positive at all times:

Post Review: A: Rate yourself out of ten on the team rule, “positive at all times”
L: Six. I got negative towards the end of the game with the attention I was given. I don’t think it harmed the team but it harmed my performance.

A: What happens when you get too much attention?

L: It is usually a good thing and I try to beat my opponent one on one but this week it was different. The guy [opponent] used a couple of illegal tactics and it got to me mentally. The fact I wasn’t getting free kicks just frustrated me and kept me from being positive.

He was still frustrated at his reluctance to work hard enough to beat his opponent and the umpires missing the illegal tactics. It is likely that Lucas continued to experience frustration and anger in the week following the game because he attributed his performance outcome to unstable factors (e.g., opponent, umpiring decisions). Contrary to the current findings, Allen et al. suggested that attributions made to controllable and stable can lead to feelings of dissatisfaction and immobilisation to improve future outcomes. Lucas had provided a combination of controllable, unstable (e.g., effort) attributions, and uncontrollable, unstable attributions (e.g., opponents’ tactics) prolonging his feelings of dissatisfaction.

Lucas demonstrated the globality (Allen et al., 2005) facet when he discussed the similarities between him and his teammates. Immediately after the first game, Lucas spoke about “everyone’s ability to tackle with pressure and intent”, however, he changed his opinion after he had received feedback:

L: There’s a lot more outside midfielders in the midfield and I think it was really good for their development to be able to win the ball in close and pressure like they did. It was really good.

Lucas was disappointed in his positional change immediately after the game and his causal ascription to global factors protected his self-esteem. John had suggested that Lucas’ positional change had allowed others in the team to learn to play in the inside
midfield role. Possibly, Lucas reflected on John’s review of his performance and accepted that the positional change was beneficial for the team.

Lucas’ story only partially supports previous researchers’ findings regarding attributions for performance outcomes (i.e., Allen et al., 2007). His attribution-dependent emotions became less intense in the week following the first two games. Lucas used his post-game interviews to explore his and his teammates’ performances and used post-feedback interviews to reflect on the performances of his opponents. Generally, Lucas was not influenced by his coach’s direct feedback. Although there was evidence of attribution change, the changes rarely reflected the beliefs of John.

Immediately after a performance, Lucas used his emotions to inform his causal ascriptions. After he received feedback, he used his game statistics to inform his casual ascriptions. His inclusion of game statistics to support his casual ascriptions was evident in the final game when he discussed the team rule “tackle and pressure with intent”:

**Post Game:**

A: Rate yourself out of ten on the team rule “tackle and pressure with intent”
L: A seven. It wasn’t bad today.

**Post Review**

L: A seven. I thought it was good at times, as it happens the numbers didn’t reflect it.
A: When you say numbers, you are talking about stats?
L: Yep.

He also referred to his game statistics when comparing his performances to his opponent’s performances after he received feedback for the last game:

**Post Game:**

A: How did your opponent play?
L: He did his job.

**Post Review:**

L: The guy who tagged me did his job in the last quarter. The other bloke probably didn’t do his job and allowed me to slap a pretty steady influence on the game, however, his number don’t match mine and I’d probably say I outperformed him.
Lucas’ story supports Försterling’s (1988) suggestion that people are motivated to use the information available to them for their causal attributions by weighing the information rationally before making decisions on the causes for performance outcomes. Similar to the suggestions of Weiner (2010) who suggested outcome dependent emotions affect performance appraisal, immediately after performances, Lucas used his emotional responses to games and his perceptions of his performances to determine casual ascription. After his feedback, however, Lucas used his game statistical information, and his perceptions of his performances, to provide causal ascription.

Lucas and I: Reflections on the Research Process

Of the three participants I was least comfortable with Lucas and although he had volunteered to participate in the study, I felt that I was infringing on his privacy and time. He was often short and abrupt in his responses and ‘rushed through’ the questions rather than considering his responses reflectively. At the end of my interviews with Lucas I was feeling flustered and disappointed because I believed that I had not ‘extracted’ enough information. I found Lucas’ story hard to write for fear of failure and I was worried that I would tell his story inaccurately.

Throughout my interviews with Lucas I felt guilty. For example, after a couple of our pre-game interviews I had felt guilty for taking up his preparation time and I was concerned that my interviews with Lucas may have interrupted his pre-game routine. My guilt was heightened when, in our final interview, Lucas insisted on conducting the interview while he went through his stretching routine so he would not get behind in training. There were, however, instances during our interviews where I relaxed and ‘allowed’ myself to ask follow-up questions. As a practitioner, I am aware of how my
insecurities and anxiety influence clients. On reflection of my interviews with Lucas, I felt I could have had a more relaxed demeanour and possibly used more small talk to build a strong rapport with him. In addition, Lucas had a few setbacks in the previous months (i.e., not making the national side, not being invited to the national or state screenings for the national draft, a foot injury) and thus I also felt guilty that I had not fully considered these extraneous factors. I felt guilty that I had ‘judged’ Lucas and not really understood his story and circumstances fully. Interestingly, I was overly thankful after our final interview, possibly due to my guilt. In hindsight, I had felt a blight on Lucas’ time and wanted him to know how much I had appreciated his participation.
CHAPTER 7: OVERALL DISCUSSION

The Research Questions

The purpose of this study was to explore the attribution processes of athletes by presenting in-depth representations of Australian Football (AF) players’ experiences. Specifically, the primary aim of the current research was to explore the attribution processes in coach-athlete dyads over several weeks of competition; four secondary aims were also explored; First, to explore attribution processes in applied settings using tenants of Kelley’s (1967) co-variation theory, Weiner’s (1985) attribution theory of motivation and emotions, and Rees’ et al.’s (2005a) re-conceptualisation of attribution theories, as research lenses. Second, explore the influence of player-participants attribution expectations regarding performance outcomes. Third, explore possible convergence and divergence between actors (players) and observer (coach) in casual ascription for players’ performances. Fourth, explore the influence of performance feedback on attribution change in the days following players’ performances. A discussion of the research process and how AF player-participants’ stories relate to attribution theories in the social and sport psychology literature is presented. In addition, explanations are presented for how the research findings relate to literature relative to outcome and attribution dependent emotions, coach-athlete relationships, and attribution change.

Theoretical Frameworks and Athlete Attributions

Athlete Attributions

Athlete attributions are often dynamic and complex with several factors (i.e., social contexts, prior performance standards, motives) influencing casual ascription. Several of the theoretical frameworks provided context to understand player-
participants attribution processes and findings both reflected and extended on previous research. In the following sections, a brief summary of how the current research findings contribute to the extant theoretical literature on attributions in sport is provided.

**Theoretical frameworks.** There were numerous examples of how AF player-participants attribution tendencies linked to established attribution theories (i.e., study aim 1). For example, participants’ stories reflected aspects of both antecedents (Heider, 1958; Kelley, 1967) and consequences (Rees’ et al., 2005a; Weiner, 1985) of attribution theoretical frameworks. The antecedents of causal attribution frameworks were useful in understanding the influence of social environments on participants’ attribution processes. Heider’s (1958) underlying theoretical concepts (e.g., belonging, wanting) relating to environments were evident, particularly for Sam and Ollie. Both Ollie and Sam felt a strong attachment to their social environment and were influenced by those around them. They engaged in a process of interpretation of the events in their environment based on existing social frameworks and were affected by it (i.e., coach feedback). They wanted to effect change in their performances and believed they could. They also had a strong sense of belonging and altered their behaviours to maintain a sense of cohesion with the group.

Kelley’s (1967) co-variation principle was useful in understanding John’s (the senior coach) attribution processes. John used consistency, distinctiveness, and consensus information when he discussed players’ performances. Similarly to the findings of Rees et al. (2005a), John acquired consistency and consensus information to provide casual ascription in Sam and Ollie’s stories. John consistently referred to Sam’s tackling ability and used consensus information when he compared Sam’s performances to other players in the team. In addition, John referred to Ollie’s ‘footy smarts’ to
determine consistency in his performances. Rees et al. (2005a) suggested that coaches who attribute athletes’ performance outcomes to stable causes are able to confidently predict their future performance outcomes (i.e., high effort in performances). Kelley and Michaela (1980) also suggested that if casual ascription is stable over time, its presumed affect should also remain stable, thus confident attributions can be made. John used consistency and consensus information to confidently predict Sam and Ollie’s effort in future games. He believed Sam and Ollie’s performance effort was stable and they would have success in the future. John did not refer to distinctiveness information in his casual ascriptions, possibly because he was not asked to discuss other situations where player-participants exhibited certain behavioural characteristics (e.g., composure, leadership).

Weiner’s (1985) attribution theory of motivation and emotion was a useful framework for understanding the attribution processes of all player-participants. Weiner’s theory is a holistic model (e.g., includes antecedent and causal influences) of attribution processes, thus it formed the basis for understanding of AF player-participants’ stories. For example, all participants referred to attribution biases, coach-athlete relationships, casual ascription and outcome- and attribution-dependent emotions as they told their stories. Abramson et al.’s (1978) globality dimension was included by Rees et al. (2005a) in their re-conceptualised model of attributions in sport. Rees et al’s. re-conceptualised model provided a framework for discussion of globality attributions in participants’ stories. Beyond the globality facet the re-conceptualised model was not especially helpful in understanding participants’ stories, possibly because of the apparent overlap between several facets (i.e., controllability and stability) in the original attribution theory of motivation and emotion, and the reconceptualised model. In
addition, because I used qualitative methods in the current study, it was difficult to measure interactive effects of controllability and generalisability (e.g., stability, globality, universality) as recommended by Rees’ et al. (2005a).

All theories were useful in understanding participants’ attribution processes and they contributed to my understanding of the participants’ experiences of performance outcomes and the post-game review processes. Weiner’s attribution theory of motivation and emotion was useful for exploring participants’ attribution processes because it included several influential factors (i.e., antecedents, emotions, causal ascription) in attribution processes. The findings from the current research support Martinko and Thomson’s (1998) assertion that both the antecedent models (i.e., Heider, 1958; Kelley, 1967) and consequence model (i.e., Weiner, 1985) do not necessarily represent fundamentally different processes. All of these models could be considered to account for the complexity of attributions in sport. For example, antecedent theories provide a framework for understanding social influences, motives of others, and predictions for future behaviours in attribution processes. The consequence of attributions theory provides a thorough framework for understanding behavioural outcomes, emotions, and causal ascriptions. The social environment is central to athletes’ performance outcomes, so too are emotions, behavioural outcomes, and causal ascriptions. Thus, both antecedent and consequences models could be considered.

**Research Findings**

Comparing the attribution research to the data from the current study, there appears to be many similarities and differences in the ways that attribution processes are experienced. Although each participant shared a unique tale, the information contained within their stories reflected common themes in the research literature. The following
section provides a brief summary of how the current research findings contribute to the applied literature on attributions in sport.

**Outcome-Dependent Affect**

Several researchers have discussed the relationship between outcome-dependent affect and casual ascriptions following performances, however, the current findings only partially support published research (e.g., Duda & Treasure, 2006; Rees et al., 2005a; Weiner et al., 1979; Weiner, 1985). First, Weiner et al. (1979) suggested, people evaluate their performance outcomes against their prior standards for, and consistencies between, current and past performances. In keeping with Weiner et al.’s (1979) findings, all three player-participants evaluated their outcomes against their own prior standards for performance and determined consistencies between current and past performances rather than focusing on just the outcomes of the team. Second, player-participants’ affective reactions immediately following performances were consistent with Weiner’s (2010) proposition that emotional responses following competition are attribution free because athletes have little time to reflect on the reasons for performance outcomes. Player-participants, therefore, used intuitive-appraisal immediately after their performances (Anderson & Lindsay, 1998; Vallerand, 1987). All three player-participants’ affective responses immediately following performances were related to their personal performances rather than team outcomes. For example, Lucas’ was often unable to describe or provide causal ascription for his performances immediately after a game, however, he demonstrated strong affective responses to his performance outcomes. Stories in the current thesis suggest that affective responses to, rather than casual ascriptions of, personal performance outcomes may be more prominent immediately after competitions.
Duda and Treasure (2006) suggested there are usually multiple reasons for
performance outcomes that produce affective reactions to an event, and Sam’s post-
performance affective reactions are in keeping with their findings. For example, Sam
often provided several causes (e.g., “teammates’ perfect delivery of the ball”, “team
travel”, “I did alright”) for his performance outcomes and experienced a range of
emotional responses following events. In addition, Rees et al. (2005a) suggested that
internalised performance outcomes were linked to self-directed emotion. Reflecting
Rees’ et al.’s (2005a) findings, Sam and Lucas both reported feeling guilty about their
low effort in performances. For example, Sam often reported that he was ‘lazy’ and did
not chase his opponents hard enough to the contest. Lucas spoke about his guilt at not
remaining positive at particular times. Player-participants experience of guilt support
Weiner’s (1985) model that demonstrated emotional responses following performance
outcomes influences attributions.

Graham et al. (2002) proposed that it is difficult to measure discrete emotions in
sport due to several influencing factors. For example, athletes within a team analyse
their performances based on multiple factors (e.g., team outcomes, individual outcomes,
proposition, Sam experienced mixed emotions following his final performance. For
example, he was happy for his teammates’ successful performance outcomes, however,
was disappointed in his own performance and skill deficits viewed by recruiters.

In contrast to researchers’ findings that athletes experience intense outcome-
dependent emotions following performances (e.g., Duda & Treasure, 2006; Weiner et
al., 1979; Weiner, 2010), Ollie rarely experienced intense outcome-dependent emotions.
He sometimes, however, reported feeling disappointed in his performances. Both Sam
and Ollie focused on the team’s successes in the post-game interviews to maintain socially acceptable behaviour rather than their disappointment. Festinger and Hutte (1954) suggested that people do not like uncertainty and inconsistencies in their thoughts, thus they are motivated to seek consistency. In addition, Cooper (2007) suggested that when people are unable to reach consistency in their thoughts they experience negative emotions. Feasibly, Sam and Ollie’s stories demonstrated a paradox between individual and team performance outcomes in their causal ascriptions, and thus they experienced dissonant cognitions related to performances. For example, their overriding individual goal of performing well in front of recruiters (scouts) led to disappointment, however, the team achieved their goal of successful outcomes and participating in the finals competition.

Causal Antecedents

The findings in the current study highlighted several causal antecedents in attribution processes. These antecedents include actor (player-participants) and observer (coach-participant) convergence and divergence for player-participants’ performances and the use of attribution biases. Previous findings on actor and observer differences and attribution bias are compared to data from the current study in the following section.

**Actor and observer differences.** There were mixed findings regarding actor and observer convergences and divergences related to the literature. There was evidence in player-participants’ stories of actor and observer convergence and divergence. For example, there was evidence of convergence in coach-athlete dyads when John and player-participants referred to factors that either enhanced (i.e., team effort) or challenged (i.e., opponent tactics, umpiring decisions) their causal ascriptions. Felson
(1981) found that actors exhibited a tendency to externalise their performances more than coaches. All participants, however, used external attributions for player-participants performances (i.e., ground conditions, team travel). John and AF players also accounted for performance outcomes using internal factors (i.e., effort, ability). Consequently, the findings of the current study contrast with Jones and Nisbett (1972) who found that actors (athletes) were more likely than observers (coaches) to account for their performances using internal perspectives. Generally, John used dispositional traits to provide casual ascription for AF player performances, however, when participants’ behaviour was inconsistent with his knowledge of them (i.e., Lucas exhibiting frustration at illegal tactics), John ascribed their performance outcomes to situational factors (i.e., umpiring decisions). John’s use of situational attributions for athletes’ performances were in contrast to the findings of Rejeski et al (1981) who found that coaches used dispositional causes for behavioural outcomes more than athletes. The inconsistencies between past researchers’ findings and the current findings may be due John’s history with player-participants. John had coached player-participants for a minimum of two years and knew their circumstances, histories, and motives for participation very well. Conceivably, his prior knowledge of player-participants led to dispositional attributions for performance outcomes.

Attribution divergence in coach-athlete dyads was evident when participants’ reflected on how the coach’s involvement affected their performance outcomes. Amrose and Weiss, (1998) suggested that coaches construct their own attributions for athletes performances, however, no published research has been conducted to determine coach perceptions of their influence over athletes’ performances. John generally suggested that he influenced the player-participants’ performances through pre-game motivation, team
structures, and conversations. The player-participants, however, generally felt they were self-motivated or were influenced by their line coaches rather than John. Evidence of attribution divergence may be due to close relationships formed between line coaches and player-participants. Head coaches in AF generally focus on more overall functioning of teams than the specifics of individual player performances. Line coaches, however, instruct AF players on individual strategy, areas for improvement, and specific performance feedback. When the player-participants in the study were asked to reflect on the coach’s influence on their performances they were more inclined to suggest that their line coach had affected their performance outcomes rather than John.

**Attribution bias.** Allen (2010) suggested that traditionally, individuals who used self-serving bias attributed successful outcomes to internal causes (e.g., I performed well) and unsuccessful outcomes to external factors (e.g., luck). Shapcott and Carron (2010) suggested that using of attribution biases maintains self-esteem and protects against negative emotions by attributing failure to external sources. Mark et al. (1984), however, reformulated the traditional understanding of attribution bias to apply to sport contexts because the situational norm in sport means requires personal acceptance of responsibility for performance outcomes. Several researchers, therefore, suggested that athletes make internal attributions regardless of the performance outcomes (e.g., Grove et al., 1991; Grove & Prapavessis, 1995), however, data from the current study provided an alternate finding and may support Allen’s (2010) proposition that there are two levels of attribution bias in team sports, intragroup bias (assigning blame to teammates for unsuccessful performances) and team-serving bias (assigning praise to team for successful performances). For example, Sam spoke about his teammates’ poor delivery of the ball into the forward line and his strong goal kicking
abilities. Lucas also used a traditional understanding self-serving bias in the first game to highlight his strong performance and referred to weaknesses in his opponent’s performance. Ollie’s story, however, was consistent with Mark et al.’s (1984) reformulated model. For example, Ollie deflected praise using his coaches to assign credit to himself for his performance outcomes rather than using self-serving bias (e.g., they say it is one of my strengths). In addition, Ollie’s use of attribution bias supported Carron et al.’s (2004) proposition that the team environment requires athletes to maintain modesty and humility. Conceivably, Ollie’s teammates and coaches tempered his use of egocentric bias. In addition, Ollie and Sam appeared to alter their attributions in keeping with social expectations and maintain belonging and group cohesion with the group. Similar to the findings of Grove et al. (1991), the player-participants generally made internal attributions regardless of their performance outcomes highlighting Mark et al.’s (1984) beliefs that social norms influence causal ascriptions. In addition, similarly to researchers’ suggestions, athletes’ public appraisal of their performance outcomes may not reflect their private perceptions of their performances (e.g., Rejeski & Brawley, 1983; Shapcott & Carron, 2010). The contrasting findings may be due to the successful outcomes in all three games with no unsuccessful performances explored in the current study.

Grove et al. (1991) suggested that coaches also experience attribution biases to the team. Consistent with Grove et al.’s (1991) findings, John, believed that he had influenced all participants’ performances, however, only Ollie consistently referred to the influence of coaches on his performances. Possibly, the differences found between John and player-participants are due to athletes’ limited understanding about the coach’s role on game day. As mentioned earlier, Ollie’s family member is a well-known figure
in the AFL and he likely had a deeper understanding of the coach’s role on game day. John also demonstrated evidence of attribution bias (Brawley, 1984) when he reflected on Lucas’ final performance and possibly used attribution bias to protect his choice of captain. By assigning blame to external sources (umpiring), John was able to maintain consistency in his beliefs about Lucas and protected his decisions about captaincy of the team demonstrating a use of attribution bias.

Martin and Carron (2012) found a general overall trend towards athletes’ use of team-serving bias in their meta-analysis. For example, athletes that use team-serving biases emphasised internal factors for successful outcomes and downplayed the role of internal factors in unsuccessful outcomes. Several researchers, however, found only partial support for the team-serving bias in sport (e.g., Gill, 1980; Green & Holman, 2004; Greenless et al., 2005). Gill (1980) found that athletes within a pair assign credit to their teammates for successful performances and assign blame to themselves for unsuccessful performance outcomes. Although AFL is not in pairs, it is likely similar use of the team-serving bias is used by AF players. For example, consistent with researchers’ (Gill, 1980; Green & Holman; Greenlees et al., 2005) findings regarding team-serving bias in pairs, player-participants sometimes credited their teammates for strengths in the team’s performance and blamed themselves for poor aspects of the team’s performance.

Interestingly, the current research demonstrated the team-serving and intragroup bias in Ollie and Sam’s stories as proposed by Bird and Brame (1978). Both participants used team-serving biases (i.e., attributions to the team overall) and intragroup bias (i.e., attributions to their sub-group). Australian Football players are assigned positions in three groupings; forward line, midfield, or back line during a performance. These lines
dictate co-dependent and symbiotic behaviours, including strategies and analysis with other players in their performance lines. Ollie and Sam made team-serving bias after the first and second games, however, after the final game they made intragroup bias (i.e., to their performance lines) and assigned blame to another performance line, usually the midfielders. Taylor and colleagues (e.g., Taylor & Doria, 1981; Taylor & Tyler, 1986) found a positive relationship between team-serving biases and team cohesion. In accord with previous findings, Sam and Ollie’s use of team-serving biases led to feelings of enhanced belonging and feelings of team-cohesion.

**Perfectionism.** Stoeber and Becker (2008) reported that perfectionism is related to affective responses in attribution processes. Stoeber and Becker (2008) suggested that negative reactions to imperfection relate to maladaptive characteristics (i.e., anger, frustration, hopelessness). They also found that negative reactions to imperfection related to a fear of failure. Player-participants’ in the current study exhibited perfectionistic traits, however, they exhibited their perfectionism in different ways. Ollie and Sam sought perfection in their performances, maintained their hope for future successful performance outcomes, and showed no signs of fear of failure. Lucas, however, became frustrated and exhibited anger towards his team-mates’ imperfections. Lucas was ‘shattered’ that he was unlikely to be drafted and interpreted this as failure.

There is relatively little research into athlete attributions and perfectionistic traits. The findings from the current study do, however, tentatively support previous findings (Stoeber & Becker, 2008) that perfectionism is linked to emotional responses following casual ascription.
**Performance Expectancy and Competition Importance**

Researchers have suggested that performance expectancy (Chow & Feltz, 2008) and competition importance (Greenlees et al., 2005) influences the formation of athlete attributions, however, only Ollie’s story supported previous findings. Chow and Feltz (2008) believed that expectations against opponents, rather than specific characteristics of opponents shape attributions before a performance. Ollie, however, referred to specific characteristics of his opponents in his predictive analyses (e.g., opponents’ state representation). The differences between Ollie’s attributions and the findings of Chow and Feltz (2008) may relate to Ollie’s dedicated approach to his preparation. Ollie likes control in his performances, thus he sought detailed information on his opponents performance characteristics to implement strategically. Greenlees et al. (2005) suggested that important competitions are more threatening to athlete self-esteem than unimportant competitions. Allen (2010), however, believe that over time competitions become less important and threatening to athletes, and thus, athletes focus on controllable attributions rather than internal attributions.

**Causal Ascriptions**

The current findings partially support researchers’ (i.e., Allen et al., 2011; Duda & Treasure, 2006; Robinson & Howe, 1989) conclusions that success linked to internal causes, results in feelings of pride and personal satisfaction. For example, player-participants experienced pride in the team’s successful performance outcomes and satisfaction in some of their performance outcomes (e.g., Sam’s goal kicking). The findings in the current study support Weiner’s (1985) model that suggested successful performance outcomes attributed in internal and stable causes will lead people to experience positive feelings such as pride. Conversely, the findings do not support
researchers’ (Bukowski & Moore, 1980; McAuley et al., 1983; Spink & Roberts, 1980) findings that athletes attribute successful performances to internal, stable, and controllable factors, and unsuccessful performances to external, unstable, and uncontrollable factors. Participants in the current study used a range of causal ascriptions for their performance outcomes that were classified along all attribution dimensions (e.g., locus of causality, stability, controllability). Nevertheless, the differences in findings could be related to the data collection method. That is, the majority of research to date has been quantitative, whereas the current study was qualitative in design. As such, the themes extracted were not pre-conceived or categorical.

The current results support Allen et al. (2011) and Anderson and Riger’s (1991) findings that the dimension of controllability related closely to feelings of anger and guilt. For example, Ollie spoke of personal control as an influential factor regarding expectancy of success. Weiner (2010), however, suggested that successful performance outcomes ascribed to internal factors relates to outcome expectancy. Feasibly, the differences are due to Ollie’s high level of perfectionism and organisational skills. Ollie was organised and focused intently on performance preparation. Ollie believed his preparation enhanced his control over performances and the stability of successful performances outcomes would ensue. The results of the current study were not conclusive regarding the influence of stability on emotional responses to performances outcomes.

Pederson and Manning (2004) suggested that people use mostly stable and controllable attributions. Participants in the current study, however, oscillated between unstable and uncontrollable factors in their performances. This was particularly evident
for Lucas when he discussed his opponent’s illegal tactics (unstable, uncontrollable), however, he also attributed his poor performance to his mental approach to the game (unstable, controllable). Player-participants used multidimensional, rather than, unidimensional casual ascriptions possibly representing the dynamic environment in team sports. Often, there are numerous causes for performance outcomes and selecting singular causes may not be evident of realistic attribution processes in sport. Again, the differences found may be related to data collection methods and the emphasis placed on in-depth exploration of performance outcomes in the current study rather than provision of a single cause.

There have been inconsistent findings regarding causal ascription in sport likely due to idiosyncratic factors (Le Foll et al., 2008). The sport environment is fluid and dynamic with numerous variables (i.e., environments, teammates, coaches, opposition, strategy, and rules). All participants referred to several causes for performance outcomes. In addition, they exhibited several emotions related to causal ascriptions in reference to the same performances.

**Attribution Change**

Player-participants also changed attributions depending on the stage of review. For example, immediately post-game player-participants’ were largely governed in attribution style by outcome-dependent emotions, and especially affective responses. Following feedback from the head coach, however, the attribution style was more cognitively based including, concise, rational, and more balanced reviews of their performances. Player-participants were also influenced by the type of feedback they received, including coach and teammate feedback, and game statistics. Shapcott et al. (2008) proposed that team meetings and coach authority may influence the attributions
of athletes. Sam and Lucas’ stories were in keeping with Shapcott et al. (2008) as both participants altered their casual ascriptions in line with coach feedback. To date, attribution change is relatively unexplored, however, the findings from the current study demonstrate attribution change at several time points. For example, immediately after performance, player-participants’ causal attributions were governed by their affective responses. To truly understand athletes’ attribution processes, researchers may need to consider attributions at several time points rather than just once post performance.

Reliance on Statistics

I collected game statistics to inform the research because performance statistics are heavily relied on in AF. Coaches and athletes use game statistics as an indicator of performance outcomes and hence this information can affect attributions. Hancock and Algozzine (2011), however, suggest that collection of multiple sources of evidence is central to presenting accurate case studies. Throughout the interviews, the AF player-participants referred to their statistics for each game as an indicator of successes or failures and were particularly mindful of the statistics. As Biddle et al. (2001) points out, the sport environment is dynamic with several sources of information (i.e., coach feedback, visual feedback, game statistics, and team meetings) contributing to athlete attributions post-performance. To accurately depict attribution relevant data in AF, the inclusion of multi-source data was advantageous.

Overall Analysis of the Research Findings

Although there were similarities in the context of participants’ stories, the case studies illustrated that each individual ‘attribution journey’ is different. At a broader level, the case study approach facilitated insight into the environmental context of participants. Taken together, the participants’ stories highlighted common patterns in
Attribution processes of young elite male AF players’ cognitive and affective responses following performance outcomes. For example, stories revealed the influence of affective responses on causal ascription at different stages throughout attribution processes, perceptions of self and team, outcome expectancy, and motivation for future performances (Weiner, 1985). This finding illustrates that causal ascriptions from post-feedback to next game are idiosyncratic, multidimensional, multilevel, and multifactorial in which social environments are contextually important (Carron et al., 2004; Heider, 1958; Kelley, 1967).

All player-participants experienced cognitive dissonance in their outcome-dependent emotions. The team had successful performance outcomes, however, player-participants did not always feel they had performed successfully. In reality, athletes within teams may experience sometimes conflicting attributions and all three player-participants had different ways of managing and dealing with their cognitive dissonance. For example, Sam and Ollie attributed poor aspects of the team’s performance to a different performance line (e.g., midfield) and Lucas altered his use of attribution bias between team-serving and self-serving depending on his perceptions of his own performance outcomes. In team sport, sometimes individuals’ performances are disappointing, however, the team goal may be realised. Athletes’ attributions are constantly challenged in team sports, and thus are predisposed to attribution change for maintenance of social expectations.

**The Researcher in the Process**

Overall, the information collected (i.e., game statistics) helped to better understand the complexities of attribution processes. I included my voice in the research process as my history as an early career sport psychologist and mental skills coach
positioned me as an active participant. For example, I formed perceptions of player-participants’ general affect (i.e., facial expressions, body language) and their performance outcomes through my observation of pre-game routines, performances, and post-game meetings. I also empathised with all player-participants when they perceived they had poor performances. I also used my prior knowledge of AFL environments to inform my follow up questions (i.e., probes).

My experiences also affected the way I chose to collect, interpret, and represent the data. For example, I chose to collect data pre-game, post-game, and post-performance because I had witnessed the complexities of attribution processes in AFL environments. I also chose to represent the data by integrating all three games for comparative analysis because I believed that consecutive performance outcomes influence future performances and cannot necessarily be considered as separate attribution occurrences. To accurately represent athletes’ stories, I therefore, reflected on several aspects of my involvement in the study, my reasons for conducting the research, and why I chose to include certain information in the stories.

**Limitations of the Current Research**

Despite the benefits of conducting a unique attribution study in AF Football, there were undoubtedly some limitations. First, as a novice qualitative researcher, my interview skills were relatively undeveloped and I was not fully prepared for the challenges of conducting research in an applied setting or the time constraints to collect the data before each game. I also had unrealistic expectations about the ‘ease’ of data collection within my time frames despite my experiences with football teams, therefore, I sometimes felt pressured and rushed through interviews. My experience of pressure, possibly affected the depth of information collected. Second, researchers rarely gain
access to athletes in the final hour prior to performances and although access to players within these times frames strengthened the possibility of gaining rich data and external validity (i.e., pre-game perceptions, emotions, intense outcome-dependent affect), it also limited the depth of exploration. For example, the pre-game interviews were necessarily short (e.g., 5 mins) and lacked depth to minimise disruption to pre-game routines, therefore, they may not have provided detailed representations of athletes mental states. Third, post-game interviews were conducted between 30 and 90 minutes after performances, however, they were after the coach’s post-game address. Even within this relatively short period, player-participants’ causal ascriptions may have been influenced by post-game meetings. Fourth, interviews were conducted with the head coach to explore attribution processes in coach-athlete dyads, however, player-participants often referred to their line coaches (assistance coaches) rather than the head coach in their post-game interviews. Researchers might consider interviewing line coaches (i.e., assistant coaches) rather than head coaches to more accurately explore coach-athlete dyads depending on how the coaching is organised. Fifth, due to time constraints, the narrative from meetings between coaches and players was not recorded. Dialogues between coaches and athletes in team meetings could further enhance the understanding of attribution feedback and accuracy of information collected. Coach-athlete meeting narratives would also allow for details regarding athletes’ perceptions of and affective responses to coach feedback. Sixth, player-participants in the current study were aiming to be drafted to the AFL in the coming months. Consequently, their attributions for performance outcomes may have been strongly linked to emotional responses due to pressure and expectations about performance outcomes. Investigation of attribution
processes in senior elite AF players may again provide a different perspective on Attribution experiences of AF athletes.

**Directions for Future Research**

To build on the current study, researchers may consider the following areas. First, more ‘real-world’ stories about attribution processes in sport could be used to better represent the complexities of attributions in field settings. Researchers could consider further case study research using longitudinal designs (i.e., over a season) to explore attribution processes and their influence on athlete performance expectancies, motivation for future performance, and possible learned helplessness factors. Second, attribution processes in coach-athlete dyads should be explored through recording coach-athlete meeting narratives. This may provide a more detailed insight into the influence of coach feedback on the attribution processes of athletes. Third, determining the most appropriate attribution retraining strategies and the timing of implementation may be considered. For example, attribution retraining may be beneficial in the week following performances once athletes’ initial automatic affective responses to performance outcomes have subsided and they are focused on implementing strategies for improved performances. Fourth, there was evident of both team-serving bias (i.e., attributions to the team overall) intragroup bias (i.e., attributions to athletes’ sub-group). The intragroup bias has only been explored in two studies (Allen, 2010; Bird & Brame, 1978), therefore further exploration is needed to determine whether the intragroup and team serving biases are evident in more sporting contexts. Fifth, participants’ in the current study were young, impressionable, and reliant on their coaches. Whether these findings hold true for more seasoned athletes is unclear. By exploring the attribution processes in coach-athlete dyads, and the possibility of attribution change post-
feedback, future researchers may extend from the preliminary findings reported in the current study.

**Implications for Applied Practice**

It appears that there is a gap in the current literature with a clear discrepancy between how attributions are classified and described in sport psychology research and real world attribution processes of athletes and coaches. The gap between research and real world contexts is important to consider for applied work. For example, to my knowledge, this is the first study conducted using qualitative methods to explore attribution processes of athletes and coaches in vivo (see Faulkner & Findlay, 2005). The findings highlighted interesting information regarding player-participants affective, cognitive, and behavioural responses following performances. Given that a primary purpose of sport psychology is to enhance and apply evidence-based strategies to enrich the wellbeing and performances of athletes, the current findings could inform attribution interventions by sport psychologists. To date, researchers have investigated attribution retraining strategies that include cognitive behavioural strategies, positive reinforcement, persuasion, and modelling (i.e., Försterling, 1988, 1990, 2001). Coaches use positive reinforcement, modelling, and persuasion in their interactions with athletes. Furthermore, current findings help to determine appropriate time-frames for attribution retraining strategies. For example, interventions may be best implemented once athletes have received feedback and made rational and informed causal ascriptions. Sport psychologists may also consider developing intervention strategies that address dissonant cognitions regarding performance outcomes as all player-participants demonstrated conflicting cognitions regarding both individual and team performance outcomes.
The findings also highlight the need to implement strategies that minimise the intragroup bias (e.g., other-directed emotions, frustration, arguments, blaming) during performance. For example, poor team performance may lead to a general tendency towards blaming others for performance outcomes. Coaches and sport psychologists may consider implementing team building with the entire team rather than performance lines. In addition, the current findings demonstrate differences between coaches and athletes in assigning causes for performance outcomes. Rejeski (1979) suggested that divergence between coach and athlete attributions can lead to conflict between coaches and athletes. Given the limited literature on Attribution conflict, and support for actor-observer differences found in the current study, further research is needed in the area of Attribution conflict to determine possible strategies to prevent the negative consequences of such conflict.

**Final Thoughts**

Sam, Ollie, and Lucas played together and they had similar elements to their stories. For example, all three experienced successful team outcomes and were hopeful of being drafted to the professional competition, however, their attribution processes were different. Team had successful outcomes, however, assumptions cannot be made that individual athletes within the team will also feel successful. For example, team cultural humility often dictates that excitement, elation, and pride should be exhibited after successful outcomes. All three participants, however, exhibited shame, personal disappointment, and dejection after some of their team’s successful performance outcomes. Sam, Ollie, and Lucas’ stories help to better understanding athletes’ experiences of attribution processes in the ‘cut and thrust’ of athletes first preparing for, and later appraising performances that are considered vital in terms of future prospects.
of playing professionally. The results from the case studies illustrated that attribution process in AF are multifaceted and idiosyncratic and are well suited to case-by-case analysis.

The current study was used to explore the attribution processes of AF players’ and coach-athlete dyads over several weeks of competition. In regards to the four sub-aims; First, both antecedent (i.e., Heider, 1958; Kelley, 1967) and consequence (e.g., Rees, et al., 2005a; Weiner, 1985) were appropriate and relevant frameworks for exploring attribution processes in AF; Second, player-participants attribution expectations regarding performance outcomes influenced their preparation and confidence before performances; Third, there was evidence of convergence and divergence between player-participants and the head coach in casual ascription for players’ performances; Fourth, performance feedback, appeared to influence attribution change in the days following players’ performances. Because attributions in sport are widely applicable to coaches, teams and individuals’ further research especially investigating interventions and in-vivo contexts in particular are recommended.
REFERENCES


0718111&site=eds-live

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reflective attributions upon subsequent self-efficacy. *European Journal of Sport Science, 9*(1), 41-52. doi: 10.1080/17461390802594227


Wann, D.L., Keenan, B.L., Burnett, S., Martin, J., Page, L., Smith, L., & Lantz, C.D. (2002). The impact of sport team identification and attributions of ability and


APPENDIX A: INTERVIEW GUIDE

Athlete Pre-Game Interview Guide
- How are you feeling about today’s game? Why?
- What emotions are you feeling going into the game?
- What do you feel your strengths will be?
- What do you think will be challenging today?
- How is today different from other games you have played in the last month?
- What do you know of your opposition?
- Why do you feel you were selected to be in the team this week?

Athlete Post-Game Interview Guide
- How do you feel you performed today? Why?
- How do you feel that your coach directly influenced your performance today? Why?
- What aspects of your game went well today? Why?
- Do you feel you could control your future performances to copy this aspect of your performance? How?
- Is this aspect of your game usually a strength of yours?
- What improvements could you have made on your performance today? Why?
- How have been working on beforetoday’s game?
- How can you control this area in the future?
- What was your role in today’s game? How did you perform your role?
- Rate yourself out of 10 on the team rule, “in front, first to move. Win your own ball”.
- Why have you rated yourself that way?
- Rate yourself out of 10 on the team rule, “bodyline the ball”
- Why have you rated yourself that way?
- Rate yourself out of 10 on the team rule, “Find your man if you cannot influence”.
- Why have you rated yourself that way?
- Rate yourself out of 10 on the team rule, “Play on quickly”.
- Why have you rated yourself that way?
- Rate yourself out of 10 on the team rule, “First give hands”
- Why have you rated yourself that way?
- Rate yourself out of 10 on the team rule, “Kick long to advantage”.
- Why have you rated yourself that way?
- Rate yourself out of 10 on the team rule, “Work front and square”.
- Why have you rated yourself that way?
- Rate yourself out of 10 on the team rule “Tackle and Pressure with intent”.
- Why have you rated yourself that way?
- Rate yourself out of 10 on the team rule, “Positive at all times”.
- Why have you rated yourself that way?
- How did your opponents play?
- Do you have a preferred position on the field?
- Did you play in your regular position?
- How do you think the position you played influenced your performance?
- Is this a position you see yourself playing in the future?
- How do you feel your teammates in your line performed today?
- Did they have similar strengths to you?
- Did they have similar areas for improvement to you?
- How was today’s game different to games you have played in the last month?
- What other factors not yet discussed affected your performance today?
- Overall, how would you rate your game out of 10? Provide reasons why?

**Coach Interview Guide**

- How do you feel (name) performed today? Why?
- Do you think that you directly influenced (name’s) performance today? Why?
- What aspects of his game went well today? Why?
- Do you feel he could control his future performances to emulate this aspect of his game?
- Is this aspect of his game usually a strength of his when he plays at his local club?
- What improvements could (name) have made on his performance today? Why?
- Is this an area he has been working on before today’s game?
- Do you feel this is an area he can control in the future?
- How did his opponents play?
- Do you feel the position (name) played on the field may have affected his performance?
- Is this a position you will play him in the future? Why, why not?
- How do you feel (name’s) team-mates who play a similar position performed today? Why?
- Did they have similar strengths to him?
- Did they have similar areas for improvement to him?
- What other factors not yet discussed affected his performance today?
- Overall, how would you rate (name) game out of 10? Please provide reasons why?
### APPENDIX B: CHAMPION DATA STATISTICS

#### Statistics for Sam

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- Tigers: 4.32, 3.10, 3.10, 3.10

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### Notes
- **Kicks**: Total kicks. **1B**: One base. **2B**: Two bases. **3B**: Three bases. **4B**: Four bases. **Tot**: Total kicks per category. **Hits**: Total hits. **Hit 2B**: Hits with two bases. **Hit 3B**: Hits with three bases. **Hit 4B**: Hits with four bases. **Tot Hits**: Total hits. **G**: Games. **B**: Bats. **BB**: Bases on balls. **TB**: Total bases. **Hits**: Total hits. **HITs**: HITS score. **2B**: Two bases. **3B**: Three bases. **4B**: Four bases. **Tot 2B**: Total 2B hits. **Tot 3B**: Total 3B hits. **Tot 4B**: Total 4B hits. **Tot HITS 2B**: Total HITS with 2B. **Tot HITS 3B**: Total HITS with 3B. **Tot HITS 4B**: Total HITS with 4B. **Tot HITS 2B**: Total HITS with 2B. **Tot HITS 3B**: Total HITS with 3B. **Tot HITS 4B**: Total HITS with 4B.
### Attribution Case Studies

#### Table 1: Comparative Data

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<thead>
<tr>
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<th>Season 1</th>
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<th>Season 3</th>
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<td>3.45</td>
<td>6.78</td>
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<tr>
<td>Final</td>
<td>3.45</td>
<td>6.78</td>
<td>9.01</td>
<td>1.23</td>
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#### Table 2: Team Performance Analysis

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<th>Offense</th>
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#### Table 3: Game Statistics

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<td>200</td>
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<td>Game 2</td>
<td>200</td>
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<tr>
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<td>250</td>
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#### Table 4: Seasonal Trends

<table>
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<tr>
<th>Season</th>
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<tr>
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APPENDIX C: INFORMATION TO PARTICIPANTS

You are invited to participate

You are invited to participate in a research project entitled Attribution Style with Australian Football Players, and Coaches.

This project is being conducted by a student researcher Alyse Wilcox as part of a Doctorate in Applied Psychology (Sport) at Victoria University under the supervision of Dr. Daryl Marchant from the College of Social Sciences and Psychology / College of Sport and Exercise Science.

Project explanation

Attributions in sport are an important part of understanding individual perceptions about the causes of events such as performance in sport. Analyses of athlete attributions can provide a detailed understanding of an athlete’s perceptions of their successes or failures and how this influences feelings, expectations and motivation towards future events.

Attributions are defined as “explanations about why particular behaviours occurred and, explanations enhance people’s abilities to predict and control events in the future.”

Attributions may be positive or negative. No research to date has been conducted to determine whether the interaction between a coach and athlete during post-game reviews may alter an athlete’s attributions of their performances. With most athletes undergoing post-game or competition reviews with their coaches, this represents a useful avenue for further research. The research will determine the extent to which an attribution model can be applied to a post sport performance reviews; gain insight into changes and variations in attribution styles for elite U18 players and improve our
understanding of the influence of the coach on AFL football players’ attribution styles during the planned post-performance reviews.

What will I be asked to do?

Athletes

- Will be interviewed regarding your performance before and post-game review on three occasions.
- Agree to have your post-game review with your line coach recorded on the three occasions.
- Agree for a copy of your post-game analysis from to be provided to Alyse Wilcox

Coaches

- Will be interviewed regarding your players performance on three occasions.
- Agree to have your post-game review with your player recorded on three occasions.

What will I gain from participating?

The benefits for the participants include, assisting participants in gaining insight into the attribution process related to their performances. Evaluating their performance will assist the athletes and coaches understand how athletes assign explanations to the outcome of their performance. This will then enable participants to better understand the attribution process and how this relates to performance in sport.

How will the information I give be used?

The information from participation will analysed and used in a Doctorate of Applied Psychology project. All participants will remain anonymous to protect participant
confidentiality with only the principle investigator (Dr. Daryl Marchant) and Student Investigator (Alyse Wilcox) allowed access to any data obtained throughout the study. Interviews will be transcribed verbatim and the results analysed. Once the student investigator is finished with the data, it will be stored by the principle investigator in a locked filing cabinet in their office for five years. At the conclusion of the five year period all data will be discarded in an appropriate way to protect the confidentiality and anonymity of all participants.

**What are the potential risks of participating in this project?**

There are potential psychological risks to participants, such as becoming distressed. Also there are potentially some social risks to participants as the interview process will require coaches to answer questions regarding their athlete’s performance. Post-performance reviews occur for all football players and coaches, at semi-elite and elite levels, as part of the normal performance review process. The benefits for participants include, gaining insight into the attribution process related to their performances. Evaluating athlete performance will assist the athletes understanding how they assign explanations to the outcome of their sport performance.

If you feel you have suffered distress of any kind in relation to participation in the research project you are encouraged to contact psychologist Professor Mark Andersen mark.andersen@vu.edu.au who will provide free counselling to discuss in detail any area which may have negatively influenced your psychological and social wellbeing.

**How will this project be conducted?**

Step 1
Each footballer participant will be interviewed before each game (approx. 5 minutes) and after each game (approx. 15-30 mins) over three games. Football players will be interviewed regarding their perception of their own performances. They will also be interviewed on the following Tuesday at training. Coaches will be interviewed after each game regarding their players’ performances.

**Step 2**
Planned post-performance dialogues between the line coach and football player will be recorded. Planned post-performance reviews consist of pre-edited video footage of participants. This will take place for all three footballer participants on three occasions (after each game).

**Step 3**
Interviews and planned post-performance review dialogues will be transcribed verbatim and the results analysed.

**Step 4**
A short report will be given to the football players, parents and coaches as a form of feedback and education on the effects of attribution style on performance.

**Who is conducting the study?**

College of Social Sciences and Psychology/ College of Sport and Exercise Science, Victoria University
Principal Researcher: Dr. Daryl Marchant, 9919 9478
Student Researcher: Alyse Wilcox
Any queries about your participation in this project may be directed to the Principal Researcher listed above.

If you have any queries or complaints about the way you have been treated, you may contact the Secretary, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4781.
APPENDIX D: PARTICIPANT CONSENT FORM

Information to participants:

We invite you to participate in a study investigating athlete attributions. Attritions in
sport relate to individual perceptions about the causes of events that relate to
performance outcomes. Research into athlete attributions can provide a detailed
understanding of an athlete’s perceptions of their successes or failures and consequently
influence feelings, expectations and motivation towards future sport events.

This project consists of a survey and interviews for some participants. The survey
consists of 24 questions and will take approximately 15-20 minutes for participants to
complete. The interviews will take place post-performance over consecutive games.
Coach-athlete post-performance reviews (one-on-one discussions of athlete
performance) will be recorded with permission. Despite the research being carried out
by Alyse Wilcox, an employee of AFL Victoria, you are in no way required to
participate. It is not part of the AFL Victoria Academy program and only participants
who are interested and willing to participate should agree to participation.

There are potential psychological risks to athletes, such as becoming distressed.
Also there are potentially some social risks to athletes as the interview process will
require coaches to answer questions regarding an athlete’s performance. However, as
you would know, due to the nature of sport and particularly in AFL football contexts,
coaches and athletes have open and often very frank discussions with their athletes
regarding their performances generally discussing both positive and negative aspects of
their performance. Post-performance reviews occur for all football players and coaches,
at semi-elite and elite levels, as part of the normal performance review process. The
likelihood of athletes feeling as though they are being judged beyond normal level is
minimal; however, if the athlete is feeling uncomfortable, they will be reminded they can withdraw at any stage. The benefits for the athletes include, assisting them in gaining insight into the attribution process related to their performances. Evaluating athlete performance will assist the athletes understanding how they assign explanations to the outcome of their sport performance. If you feel you have suffered distress of any kind in relation to participation in the research project you are encouraged to contact psychologist Prof Mark Andersen, who will provide counselling free of charge to discuss in detail any area which may have negatively influenced your psychological and social wellbeing.

CERTIFICATION BY SUBJECT

I, ________________________________
of ________________________________ (suburb)
certify that I am at least 18 years old* and that I am voluntarily giving my consent to participate in the study:

“Attribution Style with Australian Football Players, and Their Coach” being conducted by Dr. Daryl Marchant and Alyse Wilcox

I certify that the objectives of the study, together with any risks and safeguards associated with the procedures listed hereunder to be carried out in the research, have been fully explained to me by:

Alyse Wilcox

and that I freely consent to participate involving the below mentioned procedures:

- Semi-structured interviews pre- and post-performance and at training
- For a copy of my written analysis my performance to be provided to Alyse Wilcox
I certify that they have had the opportunity to have any questions answered and that they understand that they can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

They have been informed that the information they provide will be kept confidential.

Signed:

Date:

Any queries about your participation in this project may be directed to the researcher Dr. Daryl Marchant 9919 9478. If you have any queries or complaints about the way you have been treated, you may contact the Secretary, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4781