Chapter - II

Review of Literature

Aggression and Sports Performance

The social learning theorists provided a conceptual framework explaining the relationship between performance and aggression. If an aggressive performance is successful, then the performer is likely to be more aggressive in similar situations. The initial aggressive behavior may have been taught directly or learned through modeling. Seeing other players use aggressive behavior or aggressive tactics being taught by coaches, who increase the probability of success, can influence an athlete to think that aggressive acts are appropriate in competitive sports situations.

The frustration-aggression hypothesis explains how performance can influence aggression. In sports situations when the team or individual is unable to attain its goal, frustration leads to aggression.

Sports psychologists have investigated along these two lines and have empirically tested it. The investigations conducted by Johnson, Hutton and Johnson (1954), Ogilvie and Tutko (1965), Kane (1966) and Singer (1969) suggest that the trait of aggressiveness is more prevalent in successful athletes than in less successful athletes. Studies by Volkaner (1971), McCarthy and Kelly (1978) support such view. Researchers have attempted to find out the exact mechanism through which aggression enhances performance.

Steiner (1972) was of the opinion that the performance outcome of an individual or a team in a competitive situation depends on their opponents. Aggression could have positive influence on the performance of an individual or a team if the
aggressive behavior harms the opposition either physically or psychologically thereby weakening the resources of the opponent.

Analyzing the aggression performance relationship Faulkner (1974) supports the notion that violation strengthens existing bonds and establishes new ones among players as they deal with their adversaries. Moreover, Faulkner suggests that aggressive behavior can improve performance of a group by weakening the opposite unity bonds or collective strength.

Kule, Branko, (1982) studied the correlation between basic aggression and success in full contact Karate. His results showed that there is a multiple correlation of .75 of isolated factor of basic aggression and success in Karate. The determination coefficient of .56 confirmed the hypothesis that there is significant effect of basic aggression on the success in Karate.

Megawan, R. W. and MJ Miller (1989) reported that more successful Karate athletes scored higher on anger than their less successful colleagues. Daniels and Thornton (1990) found a negative relationship between assaulting hostility and length of training in Karate. Garland D J and J R Berry (1990) found that personality traits like aggressiveness along with extraversion are predictive of performance in collegiate footballers.

Widmeyer, W. N. And J. S. Birch (1979) did not support the leaner relationship between aggression and performance in sports. From their study, they discovered a curvilinear relationship between individual aggression and success in sports. Similar findings have been reported by Wankel L. M. (1973), Le Febyre and Passer (1974), Birch (1980), Sachs (1978), Underwood and Whitewood (1980) and Birch (1980).
However, Sachs (1978), Widmeyer and Birch (1979), and Underwood and Whitewood (1980) found no difference in aggressive behavior between the winning and losing teams.

Silva (1984) suggested two reasons for the apparently inconsistent findings regarding aggressive performance relationship and assertive behaviour. Researchers have failed to differentiate between assertive and aggressive behavior. Secondly, the lack of precise conceptualizing of performance has resulted in the interchangeable use of the team’s success, performance and performance outcome.

Alderman’s (1974) review of literature in sport psychology showed that dominance and competitive aggressiveness were significantly and consistently found with athletes compared to non-athletes. These studies have found that athletes are characterized by dominance in their life situations and further they exhibit dominance in competitive sports. According to Alderman (1974) dominance is defined as self-assertiveness, self-assurance, toughness, hardness, unconventionality, and competitive aggressiveness. Dominance is strongly linked to need for power which is characterized by the desire to influence or control of other people. Dominance in athletes is also characterized by self-confidence, boasting, conceit, vigor, egoism, and a tendency to extra-punitiveness. According to Cratty (1975) in many sports, particularly those that condone contact, various forms of control, physical aggression are primary requisites. Studies by Kane (1970), Bird (1970), Mushier (1970), Hardman (1973), and Sack (1975) have reported that athletes could be differentiated from non-athletes with respect to their dominance and competitive aggressiveness. Studies of Slepicka (1975), William (1978), Dowd and Innes (1982), Ammodt et al. (1982), Keules (1983), Kollarick (1988), Dodge and Coie (1987), Toddy and Cosmides

Thakur and Thakur (1980) studied personality characteristics of athlete and non-athletes Indian College males using projective method of personality assessment and found that characteristics significantly associated with the athletes were dominance and superior organization capacity along with other factors. Studies by Thakur and Ojha (1981) and Sharma and Shukla (1986) support that Indian athletes do exhibit more aggression as compared to non-athletes.


Stephen J. Zaccaro et. al.,(2001) Despite the ubiquity of leadership influences on organizational team performance and the large literatures on leadership and team/group dynamics, we know surprisingly little about how leaders create and handle effective teams. In this article, we focus on leader–team dynamics through the lens of “functional leadership.” This approach essentially asserts that the leader’s main job is to do, or get done, whatever functions are not being handled adequately in terms of group needs. We explicate this functional leadership approach in terms of 4
superordinate and 13 subordinate leadership dimensions and relate these to team effectiveness and a range of team processes. We also develop a number of guiding propositions. A key point in considering such relationships is the reciprocal influence, whereby both leadership and team processes influence each other.

Teams are increasingly required to perform in complex and dynamic environments. This characteristic applies particularly to organizational teams, and especially to top management teams. The operating environment for today’s organizational teams features multiple stakeholders with sometimes clashing agendas, high information load, dynamic situational contingencies, and increased tempo of change. Advances in communication technology have made the use of virtual teams (i.e., teams whose members are not physically colocated) more practical and prominent in industry. These performance requirements heighten the need for member coordination. Further, because of the greater rate of change in today’s environment, team members need to operate more adaptively when coordinating their actions.

Team leadership represents a third characteristic of effective team performance. Most teams contain certain individuals who are primarily responsible for defining team goals and for developing and structuring the team to accomplish these missions. These roles exist even in self-managing teams (Nygren & Levine, 1996), although the conduct of leadership roles in such teams varies considerably from similar roles in more traditional teams. However, the success of the leader in defining team directions and organizing the team to maximize progress along such directions contributes significantly to team effectiveness. Indeed, we would argue that effective leadership processes represent perhaps the most critical factor in the success of organizational teams.
Despite the ubiquity of leadership influences on organizational team performance, and despite large literatures on both leadership (Bass, 1990; Yukl, 2002) and team/group dynamics (Forsyth, 1999; McGrath, 1984), we know surprisingly little about how leaders create and manage effective teams. Previous leadership theories have tended to focus on how leaders influence collections of subordinates, without attending to how leadership fosters the integration of subordinate actions (i.e., how leaders promoted team processes). Path-goal theory, for example, represents an excellent example of leadership influences on subordinate outcomes. However, it specifies the leader’s role in creating performance expectancies and valences for individual subordinates (House & Mitchell, 1974), not in developing and maintaining effective team interaction and integration.

Most leadership theories that mention team processes treat them as moderators that indicate what leadership behaviors are most appropriate or effective in particular circumstances (e.g., Fiedler, 1964; Kerr & Jermier, 1978; Kerr, Schriesheim, Murphy, & Stogdill, 1974). Accordingly, Hackman and Walton (1986) noted, “we have not found among existing leadership theories one that deals to our satisfaction with the leadership of task-performing groups in organizations” (p. 73). Kozlowski, Gully, Salas, and Cannon-Bowers (1996) also stated, “Although there are substantial literatures in both [the team development and leadership] areas (e.g., Levine & Moreland, 1990; Yukl & Van Fleet, 1992), existing models are limited in their ability to provide prescriptions to guide team leadership and to enhance team development.

Alternatively, few team performance models specify leadership processes as central drivers of team processes (e.g., Hirokawa, 1980; McGrath, 1991). Thus, in summarizing future research needs on team performance, McIntyre and Salas (1995) raised some critical questions related to the behaviors that define effective team
leadership and the corresponding knowledge, skills, abilities, and other characteristics that enable such behaviors. These observations point to the need for conceptual models of collective performance that integrate both leadership influences and team dynamics.

We argue that leadership processes influence team effectiveness by their effects on four sets of team processes: cognitive, motivational, affective, and coordination. We would argue further that a number of environmental, organizational, and team characteristics moderate the magnitude of these effects. In the next section, we present a functional model of leadership processes. We then examine how leaders influence the four aforementioned team processes. Our examination of leader–team dynamics in this article rests on some central assumptions.

First, we clearly presuppose hierarchical teams, having a defined leadership role, with a specified role incumbent. Most organizational teams have such structures. As noted, even most self-managing teams have supervisors who are held accountable by “higher-ups” for team outcomes, and who are likely responsible for selecting team personnel, providing the team with resources and establishing the normative basis for team functioning (Nygren & Levine, 1996; Sundstrom, 1999). Second, our examination in this article tends to focus on action, performing, and production work teams. Sundstrom (1999) cites these teams, as well as service teams, management teams, project teams, and parallel teams, as indicative of the kinds of team forms that operate in organizations. We have developed our conceptual ideas around action teams, but we believe that the propositions offered here extend to other kinds of teams. The difference among team forms probably alters the specific display of particular leadership activities, but we believe that generic leadership functions apply across different kinds of teams. Third, in a related point, we have not qualified our
propositions according to the types of tasks being completed by the team. For example, McGrath (1984) offers a typology of eight different types of group tasks. Our examination of leader-team dynamics reflects primarily research using performance/psychomotor tasks, competitive tasks, and perhaps decision making and intellectual tasks. However, most work teams engage in other kinds of tasks as well (e.g., creativity tasks, planning tasks). Again, we would argue that our generic leadership functions and our propositions apply generally across different team tasks. Task characteristics probably moderate the specific application of these generic functions.

Previous definitions have included the concepts of instrumental and hostile (or reactive) aggression and these concepts have endured in sport psychology publications and sport aggression research (e.g., Coulomb & Pfister, 1998; Husman & Silva, 1984; Kirker et al., 2000; Tenenbaum et al., 1997). Instrumental aggression is premeditated, planned behavior that is motivated by a desire to achieve some goal other than harming the recipient, while hostile aggression is impulsive angry behavior, motivated by a desire to hurt an individual (Bushman & Anderson, 2001; Buss, 1961). In spite of concern about their usefulness and relevance both to human behavior in general (e.g., Bushman & Anderson, 2001), and to behavior in the sports context (e.g., Kerr, 2005; Russell, 2008; Smith, 1983), sport psychology appears reluctant to abandon the instrumental versus hostile aggression dichotomy. More recently, Bushman and Anderson (2001), in considering instrumental and hostile aggression, discussed the possibility of multiple motives for a single aggressive act and argued strongly that it is time to find alternative conceptual explanations, “‘pull the plug’” and allow the hostile instrumental aggression dichotomy a dignified death”
Athletes engage in play aggression when they take part in team contact sports such as Australian football. Play aggression is sanctioned in the special context of sport where athletes feel safe and secure and acts of aggression take place within the written rules or laws of sports and any unwritten rules or informal player norms. Power aggression in sport is a form of aggression aimed at dominating and subjugating a rival player or opposing team. Acts of thrill aggression usually occur only when the perpetrators have the confidence to engage in the acts and the feeling that they will go undetected. These forms of aggression are not mutually exclusive and, depending on the circumstances, one form may develop into another (see below).

Intent to injure per se is not a key concept in Kerr’s (2005) four different types of aggression. This is because an athlete may commit an act of unsanctioned aggression (power, anger, or thrill aggression) without necessarily intending to injure an opponent. Conversely, a player may engage in an act of sanctioned aggression (e.g., a legitimate tackle within the laws of rugby union) with the intention of hurting an opponent.

There may appear to be some similarity in the descriptions of the concepts of “power aggression” (Apter, 1997; Kerr, 2005) and “instrumental aggression” (Buss, 1961), and “anger aggression” (Apter, 1997; Kerr, 2005) and “hostile aggression” (Buss, 1961). Reversal theory concepts of aggression have the advantage of being part of a broader theoretical structure which can explain aggressive acts in terms of an athlete’s motivation and emotion and how changes in motivational states can change the nature of the aggressive behavior.

Allison A. Bailey, Peter L. Hurd (March 2005) We found no correlation between finger length ratio and any form of aggression in females. These results are
consistent with the hypothesis that testosterone has an organizational effect on adult physical aggression in men.

Angela S. Book, Katherine B. Starzyk, Vernon L. Quinsey (November-December 2001) The relationship between testosterone and aggression: a meta-analysis. In non-human animals, the relationship between testosterone and aggression is well established.

Ann S. Clark, Diana M. Barber (November 1994) Anabolic-androgenic steroids and aggression in castrated male rats. The resident-intruder paradigm of aggression was utilized to evaluate the aggression-inducing properties of two anabolic-androgenic steroid (AAS) compounds, methyltestosterone and stanozolol, in castrated male rats. Three weekly tests were conducted. On test week three, castrated males treated with methyl testosterone displayed levels of aggression equivalent to the levels displayed by castrated males treated with testosterone propionate on most of the behavioral indices assessed. In contrast, treatment with stanozolol at the dose used in this study was completely ineffective in eliciting aggressive behavior. AAS effects on aggression were mirrored by their ability to stimulate seminal vesicle growth. There were no effects of AAS treatments on the levels of locomotor activity. These findings highlight the heterogeneity of AAS effects on the nervous system and behavior and indicate that the psychological effects reported by human AAS abusers may depend upon the distinct chemical structures of the abused steroids.

Loehr (2005) stressed that the common theme of effective leadership is the “positive impact that individuals can have on group dynamics relative to a team objective” (p.155). The theory of transformational leadership was developed by Bass (1985) and has attracted considerable attention since then (Bass, 1998). Also, they inspire
their followers by formulating a vision and setting challenging goals, and stimulating them intellectually to think about old problems in innovative ways. Research has demonstrated that perceived transformational leadership is associated with increased performance in various work settings, such as the Navy Steyrer, 1998; Howell & Avolio, 1993), teams of Air Force officer cadets (Clover, 1990), and blue-collar maintenance workers (Barling, Moutinho, & Kelloway, 1998). However, this has been descriptive only and limited to charisma and the importance of having a vision (Yukelson, 1997). Chelladurai and Saleh (1980) showed that coaches’ social support aimed at promoting the welfare of athletes (which parallels individualized consideration) predicted performance. Just how transformational leadership affects performance only recently has begun to attract empirical scrutiny. Early indications suggest that transformational leadership affects performance indirectly via several mediating mechanisms. First, Kirkpatrick and Locke’s (1996) experimental study pointed to the mediating role of self-efficacy beliefs. Second, survey research using longitudinal data points to the mediating effects of affective commitment (Barling et al., 1996, 1998) and trust in management (Barling et al., 1998). The concept of intrinsic motivation, which reflects individuals choosing to engage in activities for the pleasure that they bring, is by no means new (e.g., Deci & Ryan, 1985). There are several reasons for postulating a link between transformational leadership and intrinsic motivation. Ryan, Mims, and Koestner (1983) suggested that the controlling aspect of rewards decreases intrinsic motivation (see Rummel & Feinberg, 1988, for a discussion of cognitive evaluation theory). However, transformational leaders are known to empower rather than control their followers (Kanungo & Mendonca, 1998). This is supported to some extent by data showing that a leadership style that is supportive and promotes autonomy, which would be consistent with transformational
leadership, enhances intrinsic motivation (Richer & Vallerand, 1995). This empowering process is thought to increase followers’ self-efficacy and capacity for selfdetermination (Kanungo & Mendonca, 1998). One objective of the present study is to verify the self-determination claim. Indeed, self-determination, or the experience of choice, is an essential component of intrinsic motivation (Deci & Ryan, 1985). Pelletier, Fortier, Vallerand, Tuson, and Briere (1995) applied intrinsic motivation to the sports context. Similarly, charisma raises individuals’ and groups’ expectations about what they can achieve and is likely to increase the accomplishment and taskorientation component of intrinsic motivation. In turn, we predict that it is intrinsic motivation that will result in enhanced sports performance. Generally, motivation has been found to be a weak predictor of performance. However, there is some evidence linking intrinsic motivation to some aspects of performance, such as effort and persistence in school (Vallerand & Senecal, 1992) and on a competitive swimming team (Pelletier & Tuson, 1992), as well as academic performance in high school (Vallerand & Bissonnette, 1992). Additional evidence supporting a link between intrinsic motivation and performance comes from the literature on goal orientation.

**Boldness and Sports Performance**

Pellis SM, and McKenna MM. (1992) attempted to identify some of the factors involved in producing this individual variability. The major influence over an individual's frequency of play as a juvenile was found to be the frequency of play by the partner. That is, play appears to be contagious, in that a high playing animal stimulates its partner to play frequently as well. In male juveniles, but seemingly not in female juveniles, the subsequent adult status of one partner as dominant influences the subordinate-to-be to initiate more playful contacts. In addition to these extrinsic
influences, however, there appear to be intrinsic factors that influence whether an individual is a high or low playing animal. One intrinsic factor appears to be 'boldness', so that bolder animals tend to initiate more playful contacts. Higher players tend to be more susceptible to the stereotypy-inducing effects of the dopamine agonist, apomorphine, and tend to be more dependent upon the playful activity of the partner to maintain their own high levels of play. Both of these characteristics are consistent with other studies comparing bold and timid rats. Boldness, however, only seems to influence how much play a rat will exhibit, not how much play it is capable of exhibiting. Neonatal testosterone augmentation increases juvenile play fighting but not apomorphine susceptibility, suggesting that a high player need not be a bold animal. The total frequency of play an individual is capable of initiating appears to depend upon perinatal exposure to androgens. Boldness and the playfulness of the partner appear to modulate the expression of this hormonally set value.

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In research relating to the latter issue, cooperation has been shown to be clearly superior to competition in terms of such factors as increased communication and attentiveness, increased friendliness and friendship development, enhanced favorable perceptions of the group and its product or output, and improved cohesiveness and feelings of closeness. When the focus is on achievement (performance effectiveness, productivity, group output), the picture has not been as clear. Johnson, Maruyama, Johnson, Nelson, and Skow (1981) noted that previous reviews of research studies have created three major controversies. “One controversy is over whether cooperation promotes higher achievement than does competition or vice versa. A second controversy is over whether cooperation promotes higher achievement than does individualistic efforts or vice versa. A third controversy surrounds the issue of whether or not intergroup competition is necessary for cooperation to be effective” (Johnson et al., 1981)

In an attempt to resolve these controversies, Johnson et al. carried out a meta-analysis of 122 previously published studies. They found that cooperation (either as a solitary condition or in an intergroup competition situation) is much more effective for achievement outcomes than interpersonal competition or individualistic efforts.
The latter two processes were not found to differ from each other in their effectiveness.

Also, Johnson et. al. (1981) identified some mediating variables. For example, the superiority of cooperation over competition was most enhanced when the task demands required cooperation on the part of group (task-interdependence). Further with smaller groups, the superiority of cooperation was even greater. Finally, the younger the subjects, the greater the superiority of a cooperative mode over a competitive mode. As Johnson et. al. pointed out in a summarizing statement:

The overall effects stand as strong evidence for the superiority of cooperation in promoting achievement and productivity. Currently interpersonal competition and individualistic work are commonly found in education in the United States (Johnson & Johnson, 1979). Given the general dissatisfaction with the level of competence achieved by students in the public school system, educators may wish to increase considerably the use of cooperative learning procedures in order to promote higher student achievement.

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Sjogren et al. (2006) examined the effects of a workplace physical exercise intervention on subjective physical well-being, psychosocial functioning and general
well-being. The study was a cluster randomized-controlled trial with the department (n=4) as the unit of randomization. The subjects (n=90) were office workers [mean age 45.7 (SD 8.5) years]. Psychosocial functioning and well-being variables were measured by descriptive visual rating scales. The cross-over design consisted of one 15-week intervention period of light resistance training and guidance and another 15-week period of no training and no guidance. The statistical analysis was based on linear mixed models. The active component of the intervention, light resistance training, resulted in a slight, but statistically significant, increase in subjective physical well-being (P=0.015). At the average training time of 5 min/working day (25 min/week) the average increase during the 15-week period was 4 units (95% confidence interval (CI) 1-7) and 5% (95% CI 1-9). The physical exercise intervention had no effect on somatic symptoms, anxiety, self-confidence, mood, mental stress at work, working atmosphere, life satisfaction or meaning of life. Daily light resistance training, conducted during the working day, had a positive direction on subjective physical well-being among office workers.