



December, 2001
Volume 3, Issue 3

Understanding the Development of Major-Games Competitors' Explanations and Behaviors From a Contextual Viewpoint

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ABSTRACT

This article reports the findings of a preliminary study exploring the relationship between support-staff behavior and the explanatory and behavioral developments of major-games athletes from individual sports. The respondent group comprised eight purposefully selected athletes from four national teams. Using the principles of grounded theory to contextualize elite athletes' perceptions, explanations, behaviors and performances, the interviews were analyzed to form the basis of a stage-based conceptual model. The emergent conceptual model suggests three discrete stages of athlete development depicting specific linkages between learned explanatory patterns, outcome expectations, achievement-related behavioral developments and tournament results. The stages, in chronological order, are: "Naïve versus Guarded Optimism," "Awareness versus Skepticism," and "Resourcefulness versus Reliance." This paper, which solely describes the respondents' explanations of their tournament experiences, has implications for sport science researchers and practitioners interested in understanding and working with major-games athletes, coaches, and management.

Introduction

There have been many studies addressing athletic performance in major-games, including Pan-American Games, Olympics, and World Championships. Taking stock of

the sport science literature that has already been disseminated, we can be pleased with the vast array of major-games topics addressed. Researchers including Bloom (1985) and Salmela (1994) have provided elaborate explanations of how world-class athletes and teams, respectively, develop in stages based on a combination of personal attributes and social-support assistance. Others including Orlick and Partington (1986) and Jackson (1995) have considered the unique mental skills and tactical plans that successful Olympians employ within major-games tournaments. Botterill (1996) has provided suggestions regarding the link between major-games contexts, athlete adjustment and performance outcomes. Gould and colleagues (e.g., Gould, Hodge, Peterson and Giannini, 1989, Gould, Guinan, Greenleaf, Medbery & Peterson, 1999) addressed the important relationship between athletic self-efficacy, contextual factors and athletic performance. These are only a few of the many different facets considered by researchers interested in the many causes that seem to underlie major-games results.

Though all of the aforementioned topics provide unique aspects affecting athletic performance, they also acknowledge that the relationship between athlete performance, support-staff behaviors and major-games results is symbiotically linked. For instance, Orlick and Partington (1986) have noted that Olympic medallists rely on their support-staff members to ensure a full implementation of appropriate and timely selection procedures, which include objective selection criteria and sufficient preparatory time in advance of major-games respectively. According to Orlick and Partington, Support-staff members also helped facilitate optimized competition plans which included an understanding of each athlete's respective mental and physical preparation prior to performance. Also in terms of successful outcomes within challenging tournaments, Jackson (1995) noted that there is a strong positive relationship between constructive coaching, peer verbal support and athlete flow performance. Gould and colleagues (1999), considering factors that detract from major-games athlete and team belief, have noted that over training athletes, coaching staff inflexibility and weakened team cohesion, all facets in part resulting from poor coach - athlete communication, detract from tournament outcome expectations and eventual results. Taken together, what all of these sources share is an underlying message that athletes' hopes of favorable outcome expectations, and their likelihood of succeeding, transcend their belief in personal efforts and abilities.

Explaining the inherent link between social support, environmental constraints and human performance, Bandura (1997) has noted that people do not perform as social isolates; athletes included. According to Bandura (1990) elite athletes require persuasion and specific technical feedback from creditable coaches in order to transcend perceived limits on their way to higher levels of performance and subsequent confirming results.

Looking further into the relationship between support-staff behaviors and athletes' behaviors, some have questioned how, when and to what extent support-staff behavior influences performance-related belief systems and outcome expectations. Seligman (1991) has suggested that people's perceptions affect achievement motivation and performance outcomes over longer periods of time based on learned explanatory tendencies (see also Biddle, 1993; Brawley, 1984). According to Seligman, children seem

to learn their general life-related beliefs and perceptions from the views and explanations of their parents, and their educational expectations in part from their teachers. As Peterson (2000) has recently pointed out, learned variances in one's hopes and beliefs, regardless of age cohort, can be garnered or eroded within contexts just as they can be learned in a more pervasive manner. Hence, the optimistic person can learn situational despondence within athletics as easily as the pessimistic person can garner situational hope. What creditable others' explanatory patterns offer at the situational level, it would seem, is a learning opportunity for the athlete based in part through what is suggested within the immediate context and domain.

The aspects of what is learned by the aspiring athlete within the sport context include expectations regarding the likelihood of success, means of explaining variances in results, and the levels of motivation that eventually lead to confirming results (Peterson, 1980; Rettew & Reivich, 1995; Seligman, Nolen-Hoeksema, Thornton, & Thornton, 1988). Thus, it is plausible that what is learned within achievement based contexts serve as a double-edged sword depending on the norms and beliefs of support-staff members deemed creditable by the athletes. Considering the implications of such learned behaviors within major-games sport contexts, Schinke and da Costa (2000a) recently suggested that athletes garner their hopes and their long-term efforts from a variety of support-staff as they arrive in the increasingly complex training and tournament environments that couch major-games participation. The breadth and full implication of these sources of support has yet to be considered in terms of how they influence athletes' major-games behaviors and hopes reciprocally over multiple major-games.

To consider this topic, the first general question asked in this study is how various facets of support-staff influence the major-games athlete on perceptual and behavioral levels during short- and long-term developments? Based on the respondents' explanations, a second question was also considered; whether there appear to be long-term consequences to the types of support received by the athletes during earlier instances within their major-games experiences?

This paper describes elements of a study conducted to delineate the relationship between facets of athlete support-staff, athlete perception and explanatory pattern development and athlete behavioral output over the span of several major-games.

Respondent Group

The respondent group comprised 8 major-games Athletes, 6 male and 2 female, from individual sports. Two respondents were members of a national Shooting Team, three respondents were members of a national Boxing Team, two respondents were members of a national Badminton Team, and one respondent was a member of a national Equestrian Team. The mean age of the respondents averaged 33.75 years of age, and each member interviewed had attended a minimum of 2 major-games, which included Olympics, World Championships, Pan-American Games, and Commonwealth Games. Most athletes attended considerably more major-games than was deemed necessary for eligibility. There were numerous criteria taken into account when selecting the

respondent group. First, we were able to gain access to athletes across our country as a result of short-term professional and research opportunities. Second, all of the athletes selected were at arm's length from the researchers. Precisely, all of the respondents were athletes that we did not work with on more than a yearly basis during training camps. Third, from the available respondents, we selected those athletes most willing to explain their perceptions and experiences. These respondents, in essence, agreed to participate based on a keen interest and willingness to elaborate on their major-games experiences through the course of numerous interviews. It should also be acknowledged, however, that the explanations of the athletes herein might have differed from athletes less eager to participate. Fourth, we selected athletes who had more than two major-games experiences, with at least one recent (1995 onward) major-games experience to recall from.

Method

As researchers and practitioners, we wanted to understand where variances in major-games functioning began, and how respective athletes developed in perceptions, expectations, efforts and results from the outset of their major-games experiences onward. To glean an understanding of the athletes' experiential knowledge, we devised a flexible and open-ended semi-structured interview. Distilling this, we integrated Patton's (1987) suggestions regarding how to devise a flexible yet targeting interview. In addition, the interview was designed to reconcile the "situatedness," or respective biases, of both speaker and listener based on criteria provided by Schinke and da Costa (2000b). Finally, melding methods from Salmela's (1994) individual participant interviews and Gould, Guinan, Greenleaf, Medbery & Peterson's (1999) theory-driven questioning, the interview was designed to acquire data in as flexible, chronological, theoretical and detailed a process as possible. The intention was to develop a theory-extending study whereby Seligman's (1991) explanatory framework could be grounded in the respondents' actual self-perceived experiences of performance in lieu of their support-staff and their performance environments.

After informed consent was obtained, each of the eight respondents was initially interviewed for 90 to 150 minutes. As patterns emerged across respondents, each was returned to and interviewed at least a second time. It was via this reciprocal process between data collection, data analysis, and repeated data collection (see Strauss & Corbin, 1998), that we were provided with a stage-based and thick contextual explanation of how major-games perceptions developed, and in turn, how these perceptions affected outcome expectations and efforts. A total of 418 pages of double-spaced typed manuscript were employed to conduct the analysis and develop the forthcoming narrative description.

Throughout grounded procedures, interviews were segmented into "text units" based on Tesch's (1990) guidelines. Segments of text were provisionally "tagged," or labeled based on their topic matter as well as where they resided temporally within the respondents' experiences. This stage of analysis was termed "open coding" by Strauss and Corbin (1998). Labels for unique segments of text were compared among and across

respondent explanations until similarities and differences were developed into a representative - athlete classification framework and underlying sub-categories. As connections between categories and sub-categories emerged, and more data was accumulated, the text labels were refined until they reached their eventual state. The third step involved moving between axial coding and a final "selective" stage of refined coding adjustments and conceptual diagramming. From this bi-directional three-stage process, the relationships among the data evolved into a conceptual - stage-based model and narrative description much like Gould, Guinan, Greenleaf, Medbery and Peterson's (1999). The emphasis in our study, however, was solely to consider how major-games athletes develop their explanations, behaviors and tournament results over time in lieu of their support-staff.

Trustworthiness of the Results

After nearly six months of concurrent data collection and analysis, a tentative stage-based [chronological] explanation of perceptual and behavioral developments was developed. Within it, there were three discrete stages depicting steps in how and why the respondents approached their major-games with differences in hope. Based on Lincoln and Guba's (1985) criteria for trustworthiness, prior to reporting the findings, the respondents were sent our interpretive narrative description of how they developed major-games related perceptions and behaviors for authentication via a tentative stage-based model. The athletes were asked to respond to the findings in writing by regular mail, electronic mail, or by telephone. Next, an unfamiliar doctoral researcher, serving as an auditor, was provided with salient theoretical introductory literature, a description of the emergent stages of major-games competence, coded text, and two interview manuscripts to evaluate the results (see Lincoln & Guba, 1985 for a review of confirmability). Afterwards, we also elicited feedback from 10 certified major-games level coaches and one technical director of a successful Olympic Team regarding the transferability of the model to their own high-performance and professional athletes.

The classification scheme that differentiated the athletes in terms of their explanatory patterns emerged from the data based on variances in situational permanence, pervasiveness and personalization. The differences between the groups were initially delineated by the authors, and subsequently refined through a process of consensus with the research auditor and expert coaches and technical director. Based on the reconciled feedback from the athletes, the technical director, the external auditor, and the aforementioned sport professionals, the forthcoming conceptual model was refined to its current format.

Results

Three discrete stages of major-games development will be described below, though only in terms of their implications to the respondents' explanatory styles, achievement related perceptions and performance related behaviors. These stages were labeled chronologically from initial national team experiences onward: (a) "naïve versus guarded optimism," (b) "awareness versus skepticism," and (c) "resourcefulness versus reliance."

Within and across these stages, there were indications of unique reasons why the respondents developed variances in their perceptions, explanations and behaviors as major-games competitors (Figure 1).

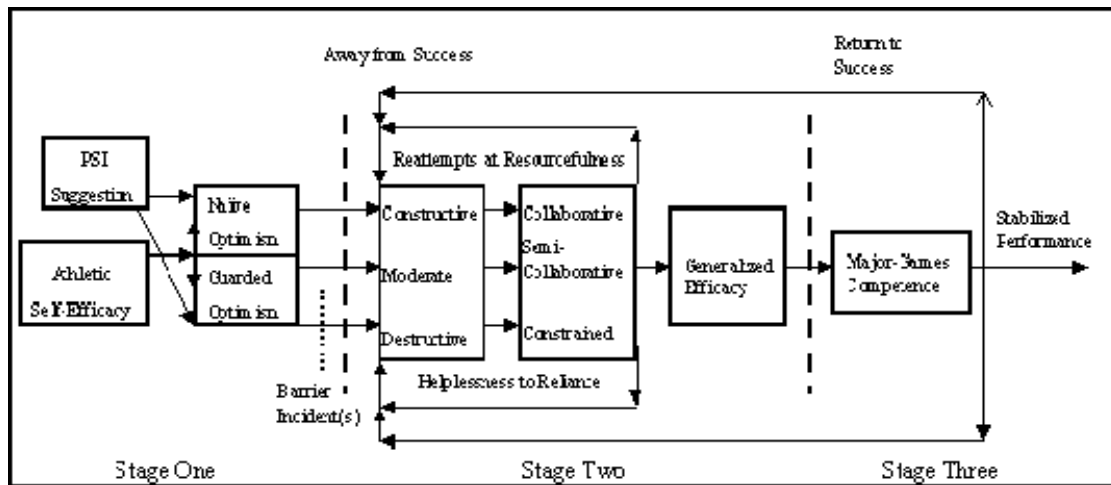


Figure 1 Athletic Competence Development - Synopsis

Stage-One: Naïve versus Guarded Athletes

When the respondents reminisced over initial selection into their respective national teams, they all suggested that they felt relatively confident of their personal athletic abilities. To reach their status as premier performers, the respondents already had some confirmatory sport experiences at less challenging domestic tournaments. Precursory, easier confirmatory results seemed to serve as information that the respondents initially drew on when approaching unfamiliar and increasingly daunting major-games tournaments.

Despite having positive self-beliefs, only some of the respondents indicated holding deeply rooted positive outcome expectations regarding what was to come in major-games. It was this discrepancy between self-confidence and bottom line "games expectations" that catalyzed a process differentiating athletes along the lines of perceptions, expectations, behaviors and performances. There was indication that the respondents learned to anticipate and frame the intentions and behaviors of support-staff based on the hopes and explanations of their mentors- in this case their personal coaches. So, the initial major-games perceptions of the respondents, which appeared to be situation specific, were learned from personal coaches. Such was the importance of personal coaches on the long-term maturation of the aspiring major-games athletes they attempted to develop.

With differences in the suggestions from their respective personal coaches, only one subset of their personal support, all of the respondents initially approached their national teams with some hope regarding their likelihood of success. Behaviors and explanatory

styles were not entrenched due to lacking personal experience . So, for athletes developed by concerned coaches, there remained some willingness to entertain the possibility that national team functioning could be a positive experience. The resilience of their hope regarding outcome expectations, however, was fragile when compared to the respondents developed by coaches with positive anticipatory major-games beliefs.

Stage-Two: Awareness versus Skepticism

It was inevitable that both subsets of athletes would eventually encounter setbacks due to athletic inexperience, a lack of competition strategy for tournaments of major-games magnitude, as well as the inexperience regarding how to appropriately resource both formal and personal subsets of their support-staff. The means of interpreting, explaining and handling these setbacks, however, varied from optimists to pessimists.

Optimist development. For the optimistic athletes, initial setbacks were described constructively. Previously encountered setbacks were described as impermanent, and thus they were viewed as potentially controllable in the future. Hopeful explanations, in turn, seemed to stem from the adaptive tertiary source of earlier efficacy information, verbal persuasion transmitted by hopeful personal coaches during the beginning of stage-one. With an inherited adaptive explanatory pattern, which transcended beyond their belief of "self," optimistic athletes described themselves within stage-two of development as able and willing to go about refining the requisite personal athletic skills for pending major-games competence. Hence, optimists did not employ typical ego-protective strategies, where explanations for setbacks would be assigned to external causes. Instead, the athletes in our study attributed their setbacks during stage-two. Instead, the optimistic athletes devoted little immediate time to destructive reflection, or "rumination." The inevitable result from a skill acquisition vantage-point was an expedited learning curve that lent itself to a highly concentrated form of training and progression.

The sole emphasis for such athletes, as well as their coaches, was the improvement of major-games related abilities via deliberately crafted tasks and strategies geared toward increasing complexity. It was through constructively focused pathways that optimists expedited stage-two, and achieved a return to major-games success within 12 to 18 months of stage-two commencement.

Pessimist development. The steps and duration of development for stage-two pessimistic respondents, based on their explanations, differed from that of optimists. The pessimists experienced setbacks equivalent to their optimistic counterparts. However, their parallel adversities were explained to the anticipated and eventually confirmed permanent efforts, abilities, and intentions of others in their support-staff. Such perceptual reference points, as in the case of the optimistic major-games athletes, seemed to originate with earlier sources of inefficacy information transmitted solely by personal coaches. A few of the earlier destructive predictions forecasted by personal coaches included executive politics, managerial sloppiness, and coaching staff inattentiveness. Because supplemental information was maladaptive for pessimists, it catalyzed a

pessimistic pattern of rumination that substituted for several years of exponential increases in skill and strategy acquisition.

The major-games related despondence that occurred for pessimists in stage-two of their development came via a belief of general hopelessness. Hopelessness for the athletes in our study was linked with externally assigned factors such as a lack of support-staff understanding or care. Tying general major-games hopelessness to the athletes' explanatory patterns, it was not the actual behaviors of support-staff members that impeded the progress of respondents. Instead, it was the inherited negative interpretations and explanations that were assigned to support-staff actions that slowed or halted the prerequisite physical and mental skills necessary for successful major-games expectations and effort exertion. Hence, the journey through stage-two for eventual stage-three pessimistic athletes spanned anywhere from 6 to 10 years.

For pessimists who were less persistent due to reasons that transcended the temporal boundaries of our study, the severity of accumulated maladaptive coaching information and personal experience challenged joint beliefs of self and others to the point of motivational paralysis. Hopelessness, coupled with well-entrenched ego-protective strategies and pessimistic rumination, materialized into behavioral stagnation. The eventual result of the perceived inability to move forward in terms of major-games success was a loss of motivation that resulted in despondence, additional marginal performance, and subsequent de-selection.

Stage-Three: Resourcefulness versus Reliance

Eventually, four of eight respondents became consistently successful major-games competitors. For optimists and pessimists alike, stage-three status was not possible without the development of a comprehensive self and other consolidated competition plan leading to ongoing major-games success. Hence, it seemed that stage-two struggles provided the informative suggestions, or "pathways," regarding how to resource oneself and others masterfully, though only when one was ready for such lessons. Herein was the difference between those left to cope with perceived forecasted tournament hardships versus those who eventually developed the prerequisite mastery skills that led to eventual major-games success in terms of medals.

Resourceful Athletes. For the respondents who eventually experienced major-games competence, there were differences regarding how consolidated plans reconciled the self-other relationship. Optimists achieved their competence via a broad support-infrastructure, which included multiple coaching staff and a wide number of sport-science resources. Receptive-collaborative actions were reasonable given the optimists' well-founded adaptive perceptions of others via primary, secondary and tertiary sources of previous generalized efficacy information. Hence, stage-three optimists resourced others as they needed them, and acknowledged such people as intermittent and supplemental sources of expertise to alleviate the environmental complexities that undermine athletic attributes in major-games contexts.

Just as the receptivity to a widened support-infrastructure expedited the competence development of optimists into stage-three, once they achieved such status, it eventually became a stumbling block to stabilized confirmatory experience. In essence, optimism that is not tempered with a realistic understanding of appropriate support-staff resources, can become an eventual barrier to stabilized confirmatory experience(s). The optimists herein remained open to plan and support-staff alterations even after experiencing major-games with the correct operative pathways. This was due to the overrating of self and all others' attributes over a more selective and appropriately suited allocation of assignment. Such seemed to be the overindulgent and unrealistic tendencies of stage-three optimists given the magnitude of their performance related task challenges. Hence, it took stage-three optimists anywhere from 2 major-games to the remaining portions of their amateur athletic careers to comprehend that they, much like pessimists, had to temper the delicate balance between self and other-related optimism with deliberate and consistent regulatory behaviors. So, for optimistic stage-three athletes, it was only via the eventual development of a realistic understanding of necessitating factors to generalized efficacy that confirmatory major-games experiences could be achieved time and again.

Reliant athletes. The reliant pessimists who achieved stage-three status did so as a result of divergent behaviors to those of optimists. Due to a heightened level of distrust caused by initial tertiary sources of coach transmitted debilitating information, pessimists selected a tighter group of support-staff members to assist in major-games endeavors. Support-systems were selected as much for their trust as the quality of their skill - related expertise. Once support members were selected, they were viewed as necessary resources to guard against environmental constraints at the national team and major-games levels, either separately or concurrently. Hence, pessimistic athletes engaged in a symbiotic relationship with their support-staff, which was based on long-term reliance or co-dependence, as opposed to intermittent resourcefulness. Such behaviors depicted a version of proximal control that arguably could lead to the eventual diminishment of self-efficacy, and thus, personal resourcefulness.

Contrary to such concerns, however, in major-games contexts, this second type of proximal control assisted pessimistic stage-three athletes in overcoming the well entrenched contextual barriers that separated them earlier from generative behaviors and subsequent confirmatory major-games experiences. When support-staff lacked the appropriate skill sets to assist pessimistic stage-three athletes, they were educated regarding how and when to provide their assistance. Hence, so long as these stabilized operative resources were available to the pessimistic respondents, they believed that they had well-suited regulatory capacities for the magnitude of task challenge encountered in major-games contexts. Deviations from diligent and adaptive regulatory behaviors were few and far between for stage-three pessimists due to a realistic and acute hyper-vigilance instilled via earlier debilitating experiences. So, it seemed that unlike optimists, earlier hardships, once overcome, provided pessimists with directives regarding the necessary and sufficient influences on stabilized major-games competence. With such information, and thus a realistic understanding of the imperative collaborative efforts and abilities residing in the self-other relationship, stage-three pessimists eventually became the most

consistent of competent major-games performers as assessed by their stage-three accomplishments.

Discussion

Reconciling the present study with other major-games research, there are a number of areas where there are commonalties, a number of areas where there are extensions of previous work, and a number of areas where there are differences. Each of these aspects of the present descriptive paper will now be discussed in lieu of the respondents' major-games experiences and their resulting explanatory patterns, expectations, behaviors and results.

Athlete Development over Time

Bloom (1985) and Salmela (1994) have noted that world-class athletes and coaches, respectively, require inordinate amounts of support in order to persist and achieve their potential. Supportive assistance, in essence, seems to be a requirement for those committed to sustaining themselves and others in major-games sport contexts. In terms of athletes alone, Bloom's respondents emphasized why and how family and personal coaches are important to major-games persistence and eventual success. The types of support and follow through delineated by Bloom's respondents combined emotional support, financial support and underlying belief. With supportive assistance willing and able to buffer athletes from environmental constraints and hardships, more emphasis seems to have been placed on development, and less emphasis on environmental constraints.

Results from the present study also indicated the importance of support-staff on athlete development and persistence, identifying the same supportive behaviors and human sources as Bloom did. Because belief and persistence were only considered in terms of major-games contexts within our study, however, the support and information of personal coaches over family members was prioritized. Personal coaches were prioritized, as Bandura (1997) predicted, because of their understanding and credibility regarding what athletes could expect in terms of situational - tournament experiences, outcomes and barriers. With initial questions and concerns resulting from international inexperience, the respondents herein sought out the suggestions of their personal coaches regarding pathways to athletic success. The information they garnered, which varied in terms of efficacy expectations (see Bandura, 1990 for a review), provided the eventual differences in externally anticipated environmental constraints. Such began the patterns of outcome expectations and explanations that catalyzed paths of major-games athlete progression.

Athlete Efficacy, Supportive Mechanisms and Performance

When elite athlete belief has been considered in terms of major-games success, Bandura (1990, 1997) Orlick and Partington (1986) and Botterill (1996) alike have acknowledged that outcome expectations and eventual results are bound to the behaviors

of supportive assistance. The authors agree that athlete self-confidence is a necessary but insufficient causal link when the intended goal is major-games success [as opposed to success in easier tournaments]. The elevated importance of support-staff to athlete performance, according to the authors, is due to the level of combined task and environmental demands encountered prior to and within major-games contexts. As Gould and colleagues (Gould, Guinan, Greenleaf, Medbery & Peterson, 1999; Gould, Hodge, Peterson & Giannini, 1989) and Jackson (1995) recognized, athletes' flow experiences and results at major-games are as linked to team coordination, team harmony and the preparatory planning of national team support-staff as beliefs in personal efforts and abilities.

Supporting the necessity of appropriate staff assistance when the intention is major-games success, the respondents herein suggested that their results were either fostered or stymied by the quality and availability of proximal sources of support prior to and during tournaments (see Bandura, 1997 for a review of proxy control). Taking the link between outcome expectations, support-staff and eventual results one step further, those interviewed for the present study also suggested that their hopes were linked exceedingly closer to specific external sources of assistance once they developed appropriate competition and compensatory tournament strategies for major-games. Hence, the respondents from the present study indicated from their own experiences, that the favorable outcome expectations of aspiring major-games athletes might well be closely linked to unique and individualized balances of formal and personal support determined in part by the suggestions of personal coaches during initial high-performance experiences. In the immediate study, such seemed to be the strength of coaches as sources of verbal persuasion on the long-term beliefs of the athletes they developed despite amounts of amassed personal experience.

Athlete Optimism, Attributions and Performance

There has also been three decades of sport literature addressing the attributions / explanatory patterns of athletes, and how these influence sport-related achievement motivation. Biddle (1993) provided a detailed review of literature regarding how athletes explain their successful and less successful performances while also considering the influences on athletes' explanations including ego-protective strategies (also see Brawley, 1984). When considering athletes' explanations and explanatory styles for their sport performances outside of contrived laboratory settings, much of the research has been provided by Seligman and colleagues (Seligman, 1991; Seligman, Nolen-Hoeksema, Thornton, & Thornton, 1988), Peterson (1980) and Rettew and Reivich (1995). Within this latter grouping of researchers, much of the discussion confined to sport has emphasized how Olympic and Professional athletes explain their performances in the moment and throughout seasons. From the results of explanatory research, sport scientists have been provided with some clear indications and methods of how to accurately predict athletes' and teams' performances given increases in levels of challenge throughout seasons, while also predicting result-related progressions into a subsequent season. The predictive capacity of Seligman's (1991), Peterson's (1980) and Rettew and Reivich's

(1995) work has been based on the explanatory [optimistic and pessimistic] patterns of the athletes and teams they assessed.

The present study supported previous research on explanatory patterns to an extent. Precisely, interviews from the respondents herein indicated that situational - little optimists (see Peterson, 2000) do progress to the point of major-games success on a consistent basis as a result of little or no rumination regarding support-staff wrong doing.

There is further support within the immediate study that long-term athletic progress is related to the respective quantities of rumination inherent in the athletes' respective explanatory patterns. In addition, the present study also supported Seligman's (1991) finding that explanatory patterns can be inherited from significant others within specific contexts. Given these findings, the present study supports the importance of explanatory assessments when the emphasis is predicting the results and progressions of high-performance and professional athletes. Hence, as Seligman (1991) noted earlier, the predictive value of explanatory assessments to high-performance athletes and their teams provides some indication regarding whom to select for optimized short-term major-games results given forthcoming task challenges.

The present study also extends previous research on explanatory patterns conducted by Seligman (1991) and Rettew and Reivich (1995). One area where our study has raised some questions is in regards to the long-term implications of explanatory patterns on persistence and success. Based on the small group of respondents elicited in the present study, it seems that earlier optimistic and pessimistic learned perceptions of support-staff provide advantages and disadvantages. As mentioned already, the present study, in line with previous research, suggests that optimism is conducive to short-term results and major-games progression. However, it also seems that stage-two challenges provide a necessary opportunity for athletes to fully learn [or not fully learn] the appropriate coping mechanisms to maintain consistent performances regardless of the environmental constraints that Gould and colleagues (1999) outlined. Though situational optimistic athletes acquire mastery skills in an expedited manner in comparison to their pessimistic counterparts, they eventually become short-changed through less evolved coping mechanisms suffered from a lack of reflection and rumination.

Hence, the present study suggests that rumination might well have short-term drawbacks and long-term benefits.

Recommendations

The major-games developments of high-performance athletes seem linked to their learned perceptions, performance behaviors and eventual results in lieu of support-staff mechanisms. Hence, it seems logical that we provide some final recommendations for sport practitioners and researchers interested in understanding how national team athletes can best function in major-games settings. For high-performance coaches, we suggest that formal educational seminars, or "tasks," be provided. The tasks can be designed to encourage coaches to introspect regarding how they influence and can better influence

the athletes they mentor in terms of the likelihood of success and inherent barriers. For national sport federations and major-games associations, we suggest that mission staff be educated how to promote adaptive experiences for developing and established major-games athletes given variances in each athlete's optimism. Supportive pedagogical approaches can be taught regarding the types of athletes that managerial staff might encounter, and thus, how best to work with each subset, prior to and during major-games. Finally, for sport psychology and sport pedagogy researchers, we suggest further explorations into the factors that influence athletic optimism, persistence and results within high-performance sport. Pursuits might commence with context specific testing of the model proposed herein, or by considering the correlation and directional relationship between explanatory pattern and self and other related efficacy. Explorations of elite athlete progression might also come through retrospective explorations that begin earlier in novice sport experiences to better discern reasons for variances in major-games persistence, beliefs and results.

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