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**Pre-competitive and competitive cognition and affect in
collegiate wrestlers**

Eklund, Robert Charles, Ph.D.

The University of North Carolina at Greensboro, 1991

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**PRE-COMPETITIVE AND COMPETITIVE COGNITION AND AFFECT IN
COLLEGIATE WRESTLERS**

by

Robert Charles Eklund

A Dissertation Submitted to
the faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

**Greensboro
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Approved by

Daniel R. Gould

Dissertation Advisor

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This investigation had two purposes. The first purpose was to partially replicate the Gould, Eklund and Jackson (1990) investigation of psychological factors associated with best and worst matches of 1988 U.S. Olympic wrestlers with a sample of collegiate wrestlers. The second purpose of this investigation was to extend these and other cross-sectional or episodic findings by following the collegiate wrestlers longitudinally to examine an array of performance levels.

Qualitative data were collected from seven NCAA Division I wrestlers via in-depth retrospective interviews concerning all-time best and worst performances as well as four to eight season performances. These data were analyzed according to the general recommendations of Scanlan, Ravizza and Stein (1989) and Gould et al. (1990) including the use of consensual validation. Five dimensions or general issues emerged in this data as salient. These included affect, focus, cognitive content, confidence issues, and sources of motivation.

Examination of the results of these analyses revealed that prior to and during all-time best and worst performances these collegiate wrestlers experienced very similar thoughts and feelings to 1988 U.S. Olympic wrestlers. The only exceptions were in regard to pre-competitive routines and competitive plans to which Olympians made salient references whereas collegiate

wrestlers did not.

To identify patterns across performance levels, longitudinal data were organized from best to worst performance and nomothetic analyses subsequent to idiographic analyses were conducted. High, moderate and low performance levels were observed in the data set. Across these performance levels, observable patterns of pre-competitive and competitive cognition and affect in the dimensions of affect, focus, cognitive content and confidence issues were identified. No such pattern emerged in the dimension of sources of motivation. Theoretical perspectives shedding light on these results included Bandura's (1977) self-efficacy theory, Kahneman's (1973) contentions on limited attentional capacity and Csikszentmihalyi's (1975, 1990) descriptions of the flow experience.

APPROVAL PAGE

This dissertation has been approved by the following committee of the Graduate School at The University of North Carolina at Greensboro.

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CHAPTER I
INTRODUCTION

One of the most fundamental assumptions in of sport psychology has been that there is a clear association between psychological factors and athletic performance. Further, it has been assumed that this pattern of association is, in some sense, symmetrical and hence, reasonable inferences about this association can be made across performance levels by identifying the psychological characteristics of excellent and poor performance or by comparing successful and less-successful performers.

Indeed, there has been a great deal of energy expended in this way to attempt to understand psychological parameters associated with performance and, in particular, those associated with peak or optimal performance. These efforts have ranged from the examination of a wide variety of personality characteristics (e.g., Morgan, 1968; Morgan & Johnson, 1977; Nagle, Morgan, Hellickson, Serfass, & Alexander, 1975; Silva, Shultz, Haslam, Martin, & Murray, 1985) and psychological states (e.g., Gould, Weiss, & Weinberg, 1981; Highlen & Bennett, 1979, 1983; Mahoney & Avenier, 1977; Meyers, Cooke, Cullen, & Liles, 1979) of more versus less successful athletes to qualitative descriptions of phenomenological experience of positive performance states (e.g., Csikszentmihalyi, 1975; Garfield & Bennett, 1984; Ravizza, 1973). Recently, qualitative approaches

utilizing retrospective comparisons of optimal and non-optimal performances on pre-competitive and competitive cognitive content (Gould, Eklund & Jackson, 1990; Orlick & Partington, 1988) have extended previous understandings of psychological variables associated with peak performance.

Our understanding of psychological aspects of performance has been advanced through this progression of studies, yet, it remains far from complete. As most previous investigations have focused on cross-sectional evaluations of particular athletic episodes, there has been a paucity of empirical evidence accumulated to establish the veracity of inferences about a pattern of association between cognitive events and level of performance. A need exists to gain a better understanding of possible causal links and associations between psychological factors and athletic performance by examining these relationships in a longitudinal fashion.

This study was designed to address this need by examining, over the course of a season, the association between wrestling performance level and psychological parameters. Elite amateur wrestling is a sport that has a pedigree of inquiry by researchers interested in psychological correlates of optimal performance. Given this rich empirical base, this sport provided a unique opportunity to extend research on psychological parameters associated with performance within a particular sporting subculture.

The remainder of Chapter 1 has been organized to provide a review of literature relevant to the issues at hand followed by statements of the problem, purposes and hypotheses. The literature review is organized under the following headings: (a) athletic performance, cognition and causation, (b) psychological differences between successful and less-successful athletes, (c) positive performance states for athletes, (d) mental links to athletic excellence, (e) the elite wrestling research pedigree, (f) summary.

Athletic Performance, Cognition and Causation

Nearly twenty years ago, B.F. Skinner noted that "our feelings, 'ideas', 'felt intentions' and so on, often overlap the behavior to which they seem related and they usually occur in just the place that would be occupied by a cause" (Skinner, 1972, p.19). However, Skinner flatly rejected the notion of cognitive mediation between stimulus and response as "apparent causality" and a "harmful explanatory fiction". Although philosophically tenable, this metaphysical position flies in the face of the phenomenological experience of humans and more recently psychology has increasingly turned to more cognitive approaches to explaining human behavior.

By contrast, the discipline of sport psychology has been strongly influenced by more cognitive approaches in its quest to examine psychological factors associated with sport performance. Indeed, there has been a great deal of

interest in understanding the impact of cognitive factors on performance and how these can be manipulated in the quest of performance enhancement and performance optimization. This position stands in stark relief to Skinner's contention that mental events are mere epiphenomena. For example, laboratory evidence has accumulated demonstrating the causal influence of psychological processes on subsequent physical performance (e.g., Gould, Weinberg, & Jackson, 1980; Shelton & Mahoney, 1978; Weinberg, Gould, & Jackson, 1980; Wilkes & Summers, 1984).

As a representative illustration, Gould, Weinberg and Jackson (1980) examined the effects of mental preparation or "psyching up" on the performance of a isokinetic leg exercise task on a cybex machine performed by male undergraduate students. Among a variety of psyching up routines such as attentional focus, self-efficacy statements and imagery as well as control conditions, it was found that preparatory arousal facilitated superior performance. The preparatory arousal condition involved instructions for the subject to "get mad" "charged-up", "excited", "pumped up" and the like. The finding that preparatory organization of cognitive content can influence subsequent performance is consistent with other experimental studies (Shelton & Mahoney, 1978; Weinberg, Gould & Jackson, 1980; Wilkes & Summers, 1984) on mental preparation. Because of the control involved in laboratory experimental designs, it is not unreasonable to infer

causation and hence, it seems reasonable to infer that mental preparation can influence subsequent performance.

Legitimate concerns can be raised about the ecological validity of such laboratory investigations with regard to both the sporting environment and the athletic population. However, there is evidence that can be considered more ecologically valid. More recently, Crews (1990b) discussed the role of preparation routines in golf performance based on a series of four studies (Boutcher & Crews, 1987; Crews, 1990a; Crews & Boutcher, 1986a, 1986b). The first study involved a descriptive behavioral assessment of Ladies Professional Golf Association players on their use of a consistent pre-shot routine (Crews & Boutcher, 1986a). It was found that the players who were performing better also displayed reduced variability in both their pre-shot behaviors and in the total time period of their preparatory routines. The second study assessed whether collegiate golfers who established a consistent putting routine would improve putting performance over a control group (Boutcher & Crews, 1987). While total routine time increased, there was a reduction in pre-performance behavioral variability in the experimental group. Further, females improved putting performance while males and control subjects suffered performance decrements. The third study involved an eight week training period for beginning golfers with experimental and control groups (Crews & Boutcher, 1986b). Males trained in the use of pre-performance routines

illustrated higher post-training performance scores than controls or trained women. Because the males displayed higher skill levels pre- and post-training, it was suggested that perhaps there is a threshold skill level necessary before the pre-shot routine can be beneficial. The final study of the series assessed psychophysiological indicators of attentional focus during the pre-shot routines of 34 elite golfers during monetary incentive and non-incentive conditions (Crews, 1990a). It was found that the best five putters were more consistent in respiration patterns than the worst five putters. Further, the best five putters exhibited a more consistent heart rate pattern during putting in the incentive condition although the worst five putters exhibited more consistent heart rate patterns in the non-incentive condition. On the basis of the four study series, Crews (1990b) concluded that pre-shot routines facilitate consistency in pre-performance behavioral patterns and possibly an improvement in performance for players who are beyond the beginning level of skill development.

In summary, given the metaphysical assumption of cognitive causality, there is some experimental evidence demonstrating that performance quality can be influenced by preparatory organization of cognitive content. Further, there is evidence on more ecologically valid tasks that substantiate these laboratory investigations although clearly factors such as skill level and situational

variables may influence this relationship.

Psychological Differences Between Successful and Less-Successful Athletes

A particular prototype for research on psychological characteristics associated with optimal performance has involved comparing groups of more versus less successful athletes on a variety of psychological parameters utilizing objective inventory instruments. The comparison of successful and unsuccessful athletes competing in a particular event has been one such manifestation of this prototype. Contrasting groups have been typically delineated by some means of objective success such as Mahoney and Avener's (1977) comparison of 1976 U.S. Olympic qualifiers and non-qualifiers in men's gymnastics.

Williams (1986) reviewed much of the research utilizing this design (e.g., Gould, Weiss, & Weinberg, 1981; Highlen & Bennett, 1979, 1983; Mahoney & Avener, 1977; Meyers, Cooke, Cullen, & Liles, 1979). Although the studies spanned a variety of sports including wrestling, gymnastics, racquetball, and diving, Williams (1986) found commonalities in the psychological characteristics of more successful athletes as compared to their less successful counterparts. The most consistent finding was that more successful athletes were characterized by higher levels of self-confidence. As well, these individuals reported better concentration. Specifically, successful athletes were better able to keep a task-oriented focus of concentration and less likely to get distracted. Further,

they were less likely to become occupied with outcome thoughts or failure thoughts. Generally, these successful individuals were more positively preoccupied with their sport and had more positive success thoughts, imagery, dreams and daydreams about their sport. Finally, in some studies there was a trend for the successful athletes to exhibit less anxiety immediately before and during competitions than their less-successful counterparts although this result was not as consistent across investigations.

In a recent manifestation of this research prototype, Mahoney, Gabriel and Perkins (1987) compared elite and less-elite athletes. The elite athletes were from 17 different sports and identified through United States Olympic Committee National Sport Governing Body records. The less elite athletes were collegiate and pre-elite athletes. It was found that the elite athletes experienced fewer problems with anxiety. They were better able to concentrate and, in general, they were more self-confident. These individuals also relied more on internal kinesthetic imagery; that is they would "feel" themselves performing from their own perspective (as opposed to the external perspective of an outsider). Further, these elite competitors focused more on their own performance rather than the performance of their opponent. Finally, they were more highly motivated.

There are striking similarities between the results of the Mahoney et al. (1987) study of elite and less-elite athletes and the conclusions of the Williams' (1986) review. Specifically, successful and more elite athletes are better able to concentrate, are more self-confident, exhibit different types of imagery and thought patterns, are more committed and motivated, and are better able to cope with their anxiety than their less-successful or less elite counterparts.

It would be remiss not to acknowledge that caution is warranted when considering the evidence amassed within this research prototype. As Heyman (1982) has cogently argued, there are threats to the internal validity of these studies that should not be ignored. As these studies do not employ experimental design nor control, it is inappropriate to accord causal status on the basis of the observed differences. Specifically, one should not forget that there are events preceding the psychological testing --- performance success or failure --- that may, in fact, account for the observed differences in both performance and psychological parameters.

In illustration of this contention Heyman (1982), utilizing wrestler performance histories, conducted a re-analysis of the data from the Gould et al. (1981) investigation. It was found that the re-analysis indicated such data as previous records were equally as powerful predictors of later performance as the psychological parameters evaluated. While this finding does not

necessarily invalidate assumptions concerning the effects of psychological states and cognitions on performance, it certainly provides a tenable alternative explanation. Clearly, one way to adjudicate between these competing explanations would be to longitudinally assess psychological states and cognitions intra-individually so that the individual could serve as their own control in evaluating causal associations.

Positive Performance States For Athletes

There have been a number of descriptive studies of positive states of functioning in the sport setting that have been guided by organismic, humanistic and phenomenological perspectives. Investigators guided by these traditions place an emphasis on adapting a view of people that is not at odds with their own experiences as humans and, hence, a premium is placed on the subjective experience of that individual. Further, a holistic, rather than a reductionist view, emphasizing the positive uplifting aspects of life are a hallmark. Studies within this perspective include investigations of peak performance, peak experience and flow across a wide variety of human endeavor including the particular instance of positive states during sport performance.

Peak performance. Privette (1981) has defined peak performance as "behavior that transcends or goes beyond predictable functioning to use a person's potentials more fully than could be reasonably expected" (p.58). Garfield

and Bennett (1984), after interviewing elite performers, have identified eight mental and physical conditions that elite athletes describe as being characteristic of the feelings associated with peak performance. These characteristics include being:

1. Mentally relaxed with a sense of inner calm and absorption where time is slowed;
2. Physically relaxed where muscles are loose, and movements are fluid, precise and sure;
3. Confident and optimistic even in the face of threatening challenge;
4. Focused on the present with a sense of mind-body integration featuring the suspension of logical and analytical processes so that action seems to occur automatically and effortlessly;
5. Highly energized with feelings such as joy, ecstasy, intensity and power;
6. Extraordinary awareness of their own body, and of athletes around them and an uncanny ability to anticipate and respond correctly;
7. In control without a deliberate effort to exert control;
8. In the "cocoon" or having a sense of being insulated from the anxiety or fear ordinarily associated with particularly challenging athletic situations.

Peak Experience. While Abraham Maslow is probably best known for his hierarchy of needs, Hall and Lindzey (1978) have suggested that his unique contribution to psychology lies in his focus on the positive aspects of human existence. One area of interest for Maslow (1968) was peak experience which he defined as "moments of highest happiness and fulfillment" (p.69). This experience is highly valued by the individual and unusual in its

intensity, meaning and richness (Privette, 1983).

Ravizza (1973) has investigated peak experiences in the sport setting. He interviewed 20 male and female athletes at varying competitive levels in 12 sports about these unique experiences. From these interviews he arrived at nine common characteristics of peak experience in sport and some commonality can be noted with the previously identified characteristics of peak performance. Specifically, the characteristics included a loss of fear with no fear of failure, a sensation of not thinking of the performance while being totally immersed in the activity and a narrow focus of attention. Further, the performance seemed effortless with no sensation of forcing it. There was a feeling of being in complete control while experiencing a time-space disorientation with time usually seeming to slow down. The athletes reported the perception of the universe being integrated and unified as if in some moment of special insight. Finally, the experiences were unique, temporary and, unfortunately, involuntary.

Flow. Csikszentmihalyi (1990) describes the autotelic state that he has called flow as:

...the state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it. (p.4)

Csikszentmihalyi (1975) interviewed numerous individuals about activities that they found enjoyable and absorbing. He found consistent characteristics in this

flow state across a wide variety of activities including athletic endeavors. In fact, Csikszentmihalyi suggests that play and game situations may be particularly amenable to creating the flow experience because of the structure and nature of these sorts of tasks. From the analysis of his extensive interview data, Csikszentmihalyi (1990) indicates that there are eight major components of the flow experience. These are:

1. Challenging activities that require skill are more likely to promote the flow experience. Flow is most likely to occur within sequences of activities that are goal-directed and bounded by rules, require the investment of psychic energy and that could not be done without the appropriate skills. Imbalances between challenges and skills can result in boredom or anxiety;
2. Merging of action and awareness. The individual is so involved in what they are doing that the activity becomes spontaneous, almost automatic. They cease being aware of themselves as separate from the actions they are performing.
3. Clear goals and unambiguous feedback. During the flow, one experiences non-contradictory demands for action and unambiguous feedback, that do not require analysis or reflection, only continuous involvement and action.
4. Concentration on the task at hand. The individual is totally absorbed in the activity with complete focusing of attention on the task at hand.
5. Paradox of control. What people enjoy is not the sense of being in control per se, but rather the sense of exercising control in difficult situations.
6. Loss of self-consciousness. There is a loss of ego that is sometimes accompanied by a feeling of union with the environment although this does not mean that they are unaware of what is going on in their mind or body. Rather, self-evaluative thoughts disappear while intense awareness of relevant feelings and thoughts remain.

7. Transformation of time. Objective measurement of time bears little resemblance to the experiential passage of time.
8. Autotelic experience. The key element of the flow experience is that it is an end in itself. There is no need for any goals or reward other than those obtained in the experience itself.

Peak performance, peak experience and flow. Privette (1983) has noted that the phenomenological experience of peak performance, peak experience and flow share important attributes such as absorption, valuing, joy, spontaneity, a sense of power, and personal identity and involvement. Clearly, these states can be experienced in a variety of combinations simultaneously, for example when a person is in flow while having a peak performance which is also a peak experience. However, she also notes that these states can be experienced independently of one another and subsequently despite commonalities, distinguishing characteristics mark these potentially overlapping constructs as distinct. For example, peak experience involves some sort of mystic, or transpersonal quality that is not necessarily inherent in peak performance or flow. Peak performance occurs in an active mode that has a clarity of focus, a strong sense of self and the awareness of a transaction with a valued object or goal. Flow is fun, enjoyment and absorption but not necessarily at a high level of performance or experience.

While these experiences are identifiably different, Jackson (1988) has argued and found evidence to suggest that flow underlies or potentially is some sort of

precursor to both peak performance and peak experience. In other words, it was advanced that being in flow creates a state where peak performance or peak experience may occur. Although her investigation was relational rather than causal, it does seem that the presence of flow makes it more likely that a good performance is going to occur.

Jackson (1988) has further enlisted Nicholls' (1984) notions of task-involved and ego-involved goal orientations as motivational orientations potentially mediating the experience of flow, peak experience and peak performance. In Nicholls' (1984) view, people in achievement situations are motivated to develop or demonstrate high ability or to avoid demonstrating low ability. With task-involved goals, one is motivated to demonstrate ability through self-referenced mastery efforts in the specific task. Alternatively, with ego-involved goals, one evaluates their ability in the context of effort expended and interpersonal comparisons. Jackson (1988) has argued that the notion of task focus inherent in flow, peak performance and peak experience seems to be analogous to Nicholls' contentions concerning the task-involved motivational orientation. Conversely the ego-involved motivational orientation seems antithetical to the experience of these optimal states. Support was found for these contentions with a complicating caveat that these motivational goal orientations are not mutually exclusive but rather orientations that may be simultaneously held in varying degrees.

In conclusion, the literature on positive performance states in sport suggests that there are common identifiable attributes such as absorption, valuing, joy, spontaneity, a sense of power, and personal identity and involvement. Further, Jackson (1988) has advanced the flow state as a potential precursor to peak states and that a particular motivational orientation featuring task-involved goals may be requisite. Finally, there is not incongruity but rather commonality between descriptions of positive states of functioning and the psychological states associated with successful athletes as compared to less successful athletes.

Mental Links to Athletic Excellence

One of the most interesting and extensive elite athlete studies on psychological factors associated with exceptional performance is Orlick and Partington's (1988) "Mental Links to Excellence" investigation of 1984 Canadian Olympians. There were a total of 235 Olympic athletes from 17 summer and winter sports involved in the study. Seventy-five athletes were individually interviewed and an additional 160 athletes were surveyed. The interviews and surveys focused on mental readiness for the Olympic Games and factors related to mental readiness. Conclusions were derived on the basis of comparing athletes that performed up to or exceeded their personal best with athletes that did not perform up to their personal best or had disappointing performances.

Orlick and Partington (1988) drew a number of conclusions on the basis of their interview and survey findings. Specifically, they found that mental readiness was an extremely important factor influencing athletic performance. In fact, it was found that among physical, technical and mental readiness ratings, mental readiness was the only statistically significant factor associated with Olympic ranking. Moreover, it was also found that many Olympic athletes did not perform to potential because they were not adequately prepared for the distractions and unforeseen events occurring at the Olympic competitions.

Common success elements that were found among the best athletes (i.e., Olympic medalists and world champions) and those who performed up to their potential as compared to less successful athletes across sports included a total commitment to pursuing excellence and quality training that included setting daily goals and engaging in regular competition simulation and imagery training. Further, these athletes evidenced quality mental preparation for competitions which included refined pre-competition plans, competitive focus and refocusing plans and ongoing post-competitive analyses. The athletes that performed up to their potential utilized and adhered to these plans to overcome adversity and distraction. Further, Olympians who achieved excellence were better able to focus their attention and better able to control performance imagery specifically with positive success related outcomes.

The Elite Wrestling Research Pedigree

As previously mentioned, there has been a considerable amount of research with elite wrestlers in an attempt to understand psychological factors contributing to wrestling success and peak performance. Dating as far back as the 1966 World Wrestling Championships, psychological characteristics of elite senior wrestlers have been a subject of investigation (Morgan, 1968). In fact, four of the last five US Olympic wrestling teams have been involved in some research endeavor to this end (Gould, Eklund & Jackson, 1990; Morgan & Johnson, 1977; Nagle, Morgan, Hellickson, Serfass, & Alexander, 1975; Silva, Shultz, Haslam, Martin, & Murray, 1985). Additionally, individuals attending the Canadian team trials for world competitions have been subject to scrutiny (Highlen & Bennett, 1979) and, further, elite collegiate wrestlers have not escaped examination by sport psychologists (Gould, Weiss & Weinberg, 1982; Gould & Weinberg, 1985). Indeed, over the last several decades there has been a considerable amount of attention focused upon psychological variables associated with elite wrestling success.

Morgan's (1968) early investigation of personality characteristics associated with success in wrestlers participating at the 1966 World Wrestling Championships was based on Eysenck's (1947) two dimensional conception of personality. On a sample of 23 English speaking wrestlers volunteering to participate, Morgan found that extroversion

as opposed to introversion was associated with success. Specifically, it was found that individuals scoring lower in extroversion were eliminated earlier in the tournament than those with higher scores on this dimension. On the dimension of neuroticism-stability, it was found that there was no evidence to suggest that wrestlers display a neurotic profile. While this effort is interesting as a historical artifact, extreme caution is warranted in interpretation because of the small self-selected sample of which not all spoke English as a first language.

In studies of elite wrestlers attempting to make the 1972, 1976, and 1980 US Olympic wrestling teams, Morgan and his colleagues (Morgan & Johnson, 1977; Nagle et al., 1975) and Silva and his colleagues (Silva et al., 1985) focused primarily on personality characteristics as well. Instruments such as the Profile of Mood States (POMS), the Minnesota Multiphasic Personality Index (MMPI), and the Institute for Personality and Ability Testing (IPAT) 16 Personality Factor Questionnaire (16 PF) were utilized in these efforts. In each of the Olympic qualifying trials, it was found that all significant differences between wrestlers successfully securing Olympic team berths and the non-qualifiers favored the qualifiers in terms of a positive mental health model. The results also revealed that the 1972, 1976, and 1980 Olympic team members exhibited the distinctive "iceberg profile" on the POMS and scored lower on tension, depression, fatigue and confusion, and higher on vigor than their counterparts that did not

qualify for their respective Olympic teams. The examination of mood states is interesting in that moods are considered to be more transitory than personality traits, and thus reveal more situationally specific information than the pure trait assessments.

However, it should be noted that, collectively, both qualifiers as well as non-qualifiers fell within the "normal" range on both the indices of personality and mood states. Clearly, on the basis of the aforementioned studies, it seems that positive mental health is associated with elite wrestler success. Parenthetically, it is comforting to know that success in elite senior wrestling is associated with positive mental health rather than some pathological profile.

As previously mentioned, the successful versus less-successful research prototype has been employed with wrestlers. Highlen and Bennett (1979) conducted a study on Canadian wrestlers attending the trials for the 1977 world championship teams with success operationalized as making a world team. A psychological skills inventory assessing a wide variety of variables such as self-confidence, concentration, ability to recover from mistakes, relaxation and attentional focus was utilized. Self-confidence and maximum potential were the greatest discriminating factors between the successful and unsuccessful athletes with the qualifiers indicating that they were more self-confident and closer to achieving their maximum potential. It was

also found that qualifiers rated themselves as lower in anxiety and better able to focus their attention when compared to their less successful counterparts.

In an attempt to replicate and extend Highlen and Bennett's (1979) findings, Gould et al. (1981) conducted a similar investigation on 49 collegiate wrestlers competing in the 1980 Big Ten conference championship tournament. In this investigation, success was operationalized as placing in the top four positions of the tournament and conversely those individuals not placing in the tournament were considered unsuccessful. Consistent with Highlen and Bennett (1979), it was found that successful wrestlers, as compared to their unsuccessful counterparts, were more self-confident, felt that they were closer to achieving their maximum potential and more frequently focused their attention only on wrestling related thoughts prior to competition. In contrast however, there were no observed differences between groups on the anxiety variable.

Gould and Weinberg (1985) examined sources and patterns of worry among 37 elite collegiate wrestlers at the USA Wrestling Hall-of-Fame Classic competition. Descriptive statistics revealed that "not wrestling well", "improving on my last performance", "what my coach will think or say", "losing", and "performing up to my ability" were the most frequently cited sources of worry by these collegiate wrestlers. Losing, as compared to winning, wrestlers more often worried about coach evaluation, losing and making mistakes. Further, concerns about the coach's

evaluation seemed to be an especially salient source of worry for the losing athletes, although it was noted that this source of worry may also be associated with and indicative of the structure of collegiate wrestling. It was concluded that some support was found for the predicted relationship between frequency of worry and wrestling performance.

Most recently, and most importantly from the perspective of this study, Gould, Eklund and Jackson (1990) conducted an extensive in-depth interview study similar to Orlick and Partington (1988) involving all 20 members of the 1988 US Olympic Wrestling team. This qualitative study was designed to further verify and extend previous research on the cognitive skill and strategy differences between more and less successful elite senior wrestlers. Further, this effort examined the mental preparations, readiness, psychological skills and strategies that characterized the US wrestlers in Seoul as well as attempting to identify roadblocks to optimal performance that were encountered by the wrestlers. This investigation was clearly the most comprehensive to date on psychological factors contributing to elite wrestler success. Because the investigation was extensive yet so pertinent to the present study, only selected relevant findings will be identified in the areas of: (a) readiness; (b) coping; (c) pre-competitive cognition and affect; and (d) competitive cognition and affect.

Readiness. Gould et al. (1990) found some interesting results when the Olympic wrestlers were asked to rate how ready they believed they were just before their most important match at the 1988 Olympic Games in the three areas of physical, technical and mental readiness. Specifically, a pattern of readiness ratings was found that was consistent across medalists, and non-medalists, as well as Greco Roman and Freestyle wrestlers with the mental readiness ratings consistently well below the physical and technical ratings.

Coping. Adversity was encountered by the wrestlers from a number of sources at the Olympic Games including unforeseen events, competitive stress, and injury. It was found that the coping strategies employed by the wrestlers to deal with this adversity could be characterized along four dimensions or categories. The four dimensions identified included thought control strategies, task focus strategies, emotional control strategies and behavioral based strategies. Thought control strategies included such tactics such as blocking or ignoring distractions, perspective taking and positive thinking. Task focus strategies involved the wrestler willfully turning his complete attention on to the demands of the task at hand. Emotional control strategies included activities such as relaxation. Finally, behavioral based strategies were those in which the wrestler attempted to exert control or change his environment.

While Gould et al. (1990) found some minor differences between medalists and non-medalists in coping strategies, the more salient differences in ability to cope with adversity between these groups was in the extent to which the strategies were well practiced and internalized. The medalists seemed to have their strategies internalized to such an extent that these strategies acted as automatized buffers to adversity that did not have to be consciously engaged. Conversely, non-medalist strategies were not as well developed, practiced or internalized and hence tended to have to be consciously engaged in response to perceptions of threat.

Pre-competitive cognition and affect. Mental preparation for competition encompasses those mental activities that a wrestler engages in prior to a match in an effort to maximize his readiness for the event. In an effort to identify important mental preparation skills and strategies, Gould et al. (1990) asked the 1988 Olympic wrestlers to relate what they were focused on, thinking about, saying to themselves and how they were feeling immediately prior to two specific matches. The first match that the wrestlers were asked to reflect upon was their all-time best international performance ever regardless of the outcome. As well, the wrestlers were asked to describe their thoughts and feelings prior to their worst performance at the 1988 Olympics; a match that they felt they wrestled below their potential or in which they should

have wrestled better.

Prior to best all-time international wrestling performances, wrestlers were found to experience what they considered optimal mental states and to employ constructive mental preparation strategies. The optimal mental state descriptions included themes of positive expectancies, heightened arousal and intensity, and heightened effort and commitment. Such themes can be identified in these illustrative comments from the interviews with several of the Olympic wrestlers:

I was going to win the match regardless of what happened so I just went out there with a real positive attitude mentally ... I knew I could push myself for the whole match ... I think the overall thing that separates it from some other matches is that the mental attitude was very strong, a positive mental attitude; (Gould et al., 1990, p.58)

and,

I had a little bit of nerves but I was just ready, I just wanted to get on the mat, I just wanted to wrestle. I really wanted to get out there and wrestle. I felt ready, I felt prepared ... My approach was basically win or take me off on my shield. I was either going to win the match or they were going to carry me off. So I was very positive. I wasn't going to hold back at all. (Gould et al., 1990, p.59)

As well, themes identified in pre-competitive cognitions included references to particular individualized mental preparation routines reflecting planned activity by the athletes for the purpose of arriving at an optimal mental and physical state for performance. Further, there was prominent mention of experiencing a tactical/strategy focus, not to mention certain personalized motivational

strategies. As one wrestler described his best match pre-performance thoughts:

I was focusing on his style, what he liked to do, the pace of his wrestling, what side he leads on, what he likes to do as far as inside position ... So I was focusing on what I could do, for me it was picking up the pace on him, staying inside, trying to push him harder than he wanted to be pushed but at the same time I wanted to be fairly under control and conservative with the idea that I would rather give up a takedown with caution than really make a big risk or do something where he would score big points on me. (Gould et al., 1990, p.61)

When asked about their cognition and affect prior to their worst match at the 1988 Olympic Games, wrestler responses were virtually the opposite to the best match scenario. Pre-match mental states included negative feelings, too many/few thoughts, task irrelevant thoughts, and negative thoughts. As two of the Olympic wrestlers described their negative feelings and thoughts prior to their worst Olympic performances:

I kind of fell apart mentally because I put that kind of pressure on myself ... You always have butterflies but these were bad. These were like you were sick and they weaken you. I think I was over psyched, you know how you kind of get over psyched and burn up all of your energy before the match. I think I just thought about it for too long; (Gould et al., 1990, p.63)

and,

I don't know if I could really see myself scoring against him or doing stuff. Actually I felt I almost lost the match before I stepped on the mat. I guess I was hoping things would fall into place but they really didn't. (Gould et al., 1990, p.63)

As well, there were marked pre-match preparation deficiencies with wrestlers reporting that they had not adhered to their usual mental preparation routines prior to the match. The pre-match preparation routine had either

been abandoned, truncated or in some way disrupted. One such example can be found in the following quotation of an Olympic wrestler:

I didn't think the West German was that tough ... I went into the stands and watched a tape and I shouldn't have. I just wasn't focused. I started getting away from my routine ... I dropped my guard and started walking around talking to people and then I went out and wrestled ... Mentally I wasn't prepared. (Gould et al., 1990, p.64)

It was found in comparing the medalists and non-medalists that the medalists were far more consistent and systematic in their application of their pre-match preparation routines. Non-medalists tended to vary their preparation more depending on the situation or opponent and seemed to generally consider that the more difficult the opponent, the more necessity to mentally prepare or "psych-up". Medalists appeared less likely to succumb to this reasoning.

Competitive cognition and affect. The wrestlers were asked to relate what they were paying attention to, thinking about and most aware of during two specific matches. Again, these queries were related to all-time best international performance ever regardless of the outcome and worst performance at the 1988 Olympics. As with the mental preparation, there were marked characteristics within these matches as well as stark contrasts between these matches.

Wrestler descriptions of their competitive cognition during their best match ever included descriptions of

optimal mental states that featured a total concentration that, paradoxically, was likened to an auto-pilot experience. As well, themes of particular intensity, and confidence. The cognitive content during the best match was interesting because, as previously mentioned, the heightened sense of concentration was often likened to a sort of "auto-pilot experience" characterized by an absence of thought. However, when there was awareness of particular cognitive content by the wrestlers, it was either a strategy focus (e.g., focused on hitting one move) or on focusing/refocusing techniques (e.g., focusing on strengths or using breathing to refocus). This type of total concentration can be observed in the following quotation of a wrestler discussing his best all-time match:

The match was good in the fact that I wasn't thinking about anything during the match. That was one of those matches when you are just in a mental state where you react during the match and you are not thinking about what is going on. I remember thinking a couple of times that he didn't like what I was doing or about trying to keep good pressure on him. But really there was nothing that I was paying attention to or aware of during the match ... I didn't really remember too much of what happened until I watched it on video tape. (Gould et al., 1990, p.67)

When the wrestlers were asked what they were thinking about, paying attention to and most aware of during their worst Olympic performance, the reports were in stark contrast to the best match descriptions. First, Gould et al. (1990) identified ineffective cognitive patterns as a common experience. These included such things as a lack of focus, task irrelevant thoughts, and negative thoughts. Such themes can be identified in the following comments by

wrestlers in discussing their worst Olympic match:

You kind of get into a place where you are just spinning your wheels and you are not going forward. I was trying do a lot of things and could not just concentrate and focus on doing one thing good and scoring one point at a time. I tried to do a lot of different things and it made it very difficult for me to catch up wrestling that way. I don't think I panicked but I don't think I was as focused as I should have been on scoring one point at a time. (Gould et al., 1990, p.71)

and

I didn't care about anything. I was just like totally out of it. I didn't care if I won or lost. It didn't matter to me anymore. (Gould et al., 1990, p.73)

As well, negative feeling states were identified such as "tired", "sluggish" or "struggling". Further, there were references to poor strategy selection such as "trying to be overly aggressive", "low intensity and restricted effort", and "lack of adherence to competitive plans".

It was noted that in comparing medalists and non-medalists that the medalists were far more tenacious in their adherence to competitive plans and strategies. Non-medalists reported spontaneously abandoning competitive plans in critical moments to ill effect, whereas medalists seemed to use their competitive plans as bedrock in crucial situations. An example of spontaneously abandoning competitive plans can be observed in this quotation of one of the non-medalists:

I knew he liked to throw an arm throw. So I was saying go out there and take a 2 on 1 or work for my drag. When I got in there, I changed my whole plan and I thought I would see how tough his arm throw

was. I gave him an arm throw but I had an inside lock on him so I figured he couldn't throw ... he got a one point throw out of it. (Gould et al., 1990, p.73)

The in-depth interview approach utilized by Gould et al. (1990) provides rich data that offers a great deal of insight into psychological states and experiences associated with wrestling performance. As identified, interesting findings were related to readiness, coping strategies, pre-competitive cognition and affect, and competitive cognition and affect. Particularly of note were the dramatic contrasts between optimal and non-optimal wrestling performance episodes.

Summary

Despite Skinner's (1972) assertions impugning the causal influence of cognition on behavior, sport psychologists have actively pursued the investigation of the relationship between psychological states and performance. Indeed, there has been a great deal of interest in understanding the impact of cognitive factors on performance and how these can be manipulated in the quest of performance enhancement and performance optimization. Experimental laboratory studies have revealed causal links between cognition and motor performance. Studies investigating the association between cognition and performance have been extended from assessment of personality factors through pre-performance inventory investigations to rich retrospective descriptions of subject experiences during preparation and actual performance. Clearly while the current status of our

knowledge in this area is less than complete, initial steps have been taken toward understanding the relationship between cognitive factors and athletic performance.

Taken collectively, there is convergent evidence among research approaches identified that suggest common psychological parameters associated with optimal performance states. Specifically, evidence from pre-competitive and competitive periods across investigations indicates that optimal performance states have a characteristic that is referred to, variously, as the ability to focus, concentration, a special state of involvement, awareness and/or absorption into the task at hand. Further, in optimal performance, there are consistent threads of positive sensations of self-confidence, readiness, approaching maximum potential, power, control, commitment and intensity among others. Conversely, in non-optimal performance, there is evidence suggesting the absence of or at least decreased levels of focus, concentration or other states of involvement, awareness or absorption. Rather, thought content has been found to be filled with irrelevant thoughts, negative thoughts or imagery, worry and ego concerns as well as the associated negative sensations of anxiety and/or fear.

On a more specific level, Orlick and Partington (1988) asked 1984 Canadian Olympians to discuss what they were thinking about, saying to themselves, and how they were feeling immediately prior to the start of two competitive

experiences and as further, what they were paying attention to and most aware of during those experiences. The two experiences that were queried concerned: (a) their best all-time international performance, and (b) their most crucial performance at the 1984 Olympic Games. Gould et al. (1990) asked similar questions of the 1988 US Olympic wrestling team concerning the same experiences but additionally inquired about the wrestlers' worst Olympic performance. These studies were revealing in terms identifying the utility of pre-performance plans, competitive plans, refocusing and coping strategies and the ability to focus attention both in between-group analyses (medalists/non-medalists, and performing up to or below potential) and in intra-individual analyses (best and worst performances). Further, these descriptive efforts have endorsed previous descriptions of optimal performance states.

Statement of the Problem

While the aforementioned efforts on the part of sport psychologists have been revealing, our understanding in this area is still tentative. On the whole, the approach to study in this area has been cross-sectional or episodic. It has been inferred on the basis of this research that there is an identifiable pattern of association between performance and psychological parameters across an array of performance quality levels. However, Heyman's (1982) admonitions regarding these assumptions based upon successful and unsuccessful

comparisons are particularly salient. Clearly, to arrive at better understanding of causal, associated and reciprocally related links between cognitions and athletic performance, one needs to make some effort to account for past performance. This study sought to extend the current status of knowledge in the area by undertaking the methodological extension of following particular athletes longitudinally. This undertaking afforded the opportunity to assess the veracity of assumptions regarding the association between performance and psychological parameters in the context of a particular individual's experiences over a variety of competitive situations and performance quality levels. Utilizing an individual as their own referent provides control over performance history that, over a series of episodes, allows for examination of performance and psychological parameters for association. This also made it possible to examine the cognition-performance relationship under varying environmental demands e.g., when the athletes are performing well, struggling, or injured etc.

Purpose

This investigation was designed to extend the Gould et al. (1990) investigation of mental strategies and skills associated with Olympic wrestling excellence by employing design changes that would ensure a better understanding of suggested causal links between cognitive factors and athletic performance. The first purpose of this

investigation was to attempt to replicate the findings generated concerning the best and worst performance with regard to pre-competitive cognition and affect as well as competitive cognition and affect. This replication was attempted with athletes competing in the same sport, wrestling, but at a different competitive level, collegiate. While this effort was in itself worthy, as previously discussed, it was considered more pressing to extend this analysis by taking multiple experience samples over time and differential performance levels with the same individuals. Hence, the second purpose of this investigation was to extend this analysis by following selected individuals over the course of a wrestling season to examine variables of interest as they related to differential performances. Specifically, it was considered important to examine a variety of performances, in addition to best and worst instances, for the purpose of testing the veracity of assumptions generated on cross-sectional or episodic analyses.

Hypotheses

Purpose 1

The first purpose of this investigation was to attempt to replicate the Gould et al. (1990) study concerning the best and worst performance with regard to pre-competitive and competitive cognition and affect. Hence it was hypothesized that wrestler descriptions of:

1. Best match pre-competitive cognition and affect would be characterized by optimal mental state descriptions including positive expectancies, heightened arousal and intensity, and heightened effort and commitment

as well as mental preparation strategies including a mental preparation routine, tactical/strategy focus and motivational strategies.

2. Worst match pre-competitive cognition and affect would be characterized by non-optimal mental state descriptions including negative feeling states, too many/few thoughts, task irrelevant thoughts and negative thoughts as well as pre-match preparation deficiencies featuring a lack of adherence to usual mental preparation routines.
3. Best match competitive cognition and affect would be characterized by optimal mental state descriptions including total concentration, intensity, and confidence, as well as constructive cognitive content including a tactical/strategy focus, and focusing/refocusing techniques.
4. Worst match competitive cognition and affect would be characterized by ineffective cognitive patterns including task irrelevant thoughts, lack of focus, and negative thoughts as well as negative feeling states and further, references to poor strategy selection including lack of adherence to competitive plans.

Purpose 2

The second purpose of this investigation was to extend previous analyses by following a number of individuals over the course of a wrestling season to examine variables of interest as they related to differential performances.

Hence, it was hypothesized that across analyses of performances organized from best to worst on subjective athlete performance rankings and ratings there would be:

1. A systematic identifiable decay of the characteristics associated with best match pre-competitive cognition and affect towards those associated with worst match pre-competitive cognition and affect.
2. A systematic identifiable decay of the characteristics associated with best match competitive cognition and affect towards those associated with worst match competitive cognition and affect.

CHAPTER II

METHOD

Subjects

Sample Characteristics

The subjects ($N=7$) participating in this study were NCAA Division I collegiate wrestlers representing a major eastern university with a nationally recognized wrestling program. Collegiate wrestling is a sport that has historically been almost the exclusive domain of males and hence, not surprisingly, the sample was composed solely of males. The subjects ranged in age from 19 to 22 years with the average age close to 21 years ($M=20.7$; $SD=1.1$). Among the subjects there were individuals in their freshman (2), sophomore (3) and senior (2) years of eligibility with no individuals in their junior year of eligibility.

The number of wrestlers included in the study was the result of a pragmatic analysis of sample size costs versus benefits judged relative to the purposes of the investigation. Specifically, while there may be considered to be limited generality attainable on the basis of such a small sample size, there were also limited resources in terms of time and energy on the part of the researcher. However as previously argued, the need exists to examine a sample of athletes, in this case wrestlers, in-depth and over time to extend previous cross sectional, episodic analyses of psychological parameters associated with performance. The small sample represents a compromise

struck to arrive at some generality while allowing the investigator to conduct in-depth interviews over the period of a season.

Subject Selection

The subjects invited to participate in the study were selected in consultation with their university wrestling coach. Gaining entry in field settings can be a delicate process and as Lincoln and Guba (1985) suggest, negotiating entry with gatekeepers is a critical phase. In this case subject selection was a significant point of negotiation and one resulting in a win/win situation. The coach's control over sample selection allowed him to manage some of his concerns regarding the potential costs of allowing such a study to be conducted with his team thus contributing to his positive response to the study. Equally, this approach to subject selection allowed the researcher to take advantage of the coach's knowledge of the team to ensure that the study participants: (a) had a strong possibility of routinely taking part in competition i.e., not B team wrestlers or scrimmage partners; (b) were sufficiently skilled and experienced in wrestling so as to be capable of achieving at least some degree of success in at least some performances; and (c) were familiar to the coach for the purpose of performance evaluation. The seven individuals identified were subsequently and appropriately introduced to the study and all volunteered to participate in accordance with human subjects guidelines.

Instruments

Demographic Questionnaire

A questionnaire soliciting standard demographic information as well as data concerning wrestling experience, and performance history was utilized (see Appendix A). This questionnaire was administered at the beginning of the first interview.

Interview Guides

Two interview guides were developed for the purpose of this investigation (see Appendix A). The interview guides were closely modeled on the instrument utilized in the Gould et al. (1990) study which in turn had been patterned after the guides developed by Orlick and Partington (1988) for their investigation with Canadian Olympians. In addition to these exemplars, pertinent literature on case study research was consulted (see Smith, 1988). A pilot test was conducted on these instruments (see Procedures).

As Patton (1987) indicates, a standardized interview guide serves a number of purposes. First, it helps to minimize interviewer effects by asking subjects the same questions, in the same words, and in the same order of presentation. Additionally, data analysis can be expedited by virtue of the organization of the responses. Further, the generation of a standardized guide allows for future replication of a study using the same interview instrument with different subjects.

The interview guides served the purpose of facilitating and standardizing the acquisition of

qualitative data not only across subjects but as well across interviews with the same subjects. The information solicited was regarding various aspects of the athlete's perceptions of specific competitive experiences. While all interviews progressed in accordance with the interview guides, the interviewer was free to probe responses so as to get unambiguous, complete and meaningful answers. However, as Backstrom and Hursch-Cesar (1981) admonish, the interviewer strove to adopt a neutral, impartial stance to avoid biasing the subject's responses while maintaining a posture of interest and enthusiasm for the topic.

Consistent with the interview guides developed by Orlick and Partington (1988) and Gould et al. (1990), there were Likert-type scales imbedded within the interview guides. The purpose of these scales was twofold. First, scale ratings of various topics (e.g., readiness, goal attainment, performance etc.) allowed for intra-subject comparative evaluations from interview to interview on specific topics. Second, these scales have been found useful in facilitating discussion during the interviews.

Interview guide I. This interview guide is the more extensive of the two guides and was used only in the initial interview. It effectively encompassed Interview Guide II twice (asking questions concerning both best and worst all-time matches) as well as soliciting additional background information to assist the researcher in subsequent interviews. The purpose of this instrument was

to assemble comprehensive information on the wrestlers' mental skills and strategies as well as pre-competitive and competitive cognitions and affect in the context of each individual's all-time best and worst performances. As can be observed in Appendix A, the guide is designed to solicit information regarding:

1. mental skills utilized to maximize wrestling performance;
2. perceptions of pre-competitive physical, technical and mental readiness prior to the particular matches;
3. athlete goals and goal attainment for the particular matches;
4. pre-competitive cognition and affect;
5. competitive cognition and affect;
6. match outcome and subjective performance evaluation;
7. special circumstances and additional athlete comments surrounding the particular match e.g. injury, match importance, travel etc.

Interview guide II. As can be observed in Appendix A and as previously mentioned, this interview guide is an abbreviated version of the previous guide and was utilized in all interviews conducted about specific matches during the season. It was tailored to solicit relevant information concerning only a specific match recently contested. The consistency between the guides was an important consideration to ensure uniformity of inquiry. Interview Guide II was designed to solicit information regarding:

1. perceptions of pre-competitive physical, technical and mental readiness prior to the particular match;
2. athlete goals and goal attainment for the particular match;
3. pre-competitive cognition and affect;
4. competitive cognition and affect;
5. match outcome and subjective performance evaluation;
6. special circumstances and additional athlete comments surrounding the particular match e.g., injury, match importance, travel etc.

Coach Evaluation Questionnaire

The performance evaluation questionnaire (Appendix A) was designed to solicit the coach's estimation of each wrestler's performance in a particular match relative to the wrestler's performance potential regardless of match outcome. The questionnaire solicited a rating of performance relative to the wrestlers' current ability level on a percentage basis for each subject concerning a specific match. This rating was used to cross reference the wrestlers' responses on the similar question posed during athlete interviews. Further, general comments are solicited regarding the particular match to provide additional contextual information.

Post-Season Ranking Questionnaire

Each of the wrestlers was mailed the post-season ranking questionnaire (see Appendix A) so they could rank order their performances on factors such as performance quality, satisfaction and opponent difficulty. Each questionnaire was personalized so that the only performances that the wrestler ranked were those on which interview data had been collected. These performances included all-time best and worst as well as season matches. The purpose of this questionnaire was to acquire data to assist in ordinally organizing the interview data to address the purposes of the study.

Recorder-Transcriber

A Sony recorder transcriber model BM-820 with telephone monitoring capabilities was used to record the interviews to ensure that verbatim transcriptions of all interviews could be secured. The telephone monitoring capability was important because all interviews were conducted via the telephone. Utilizing a telephone format allowed for greater flexibility in scheduling wrestler interviews by virtue of eliminating the necessity of considering such interacting factors as traveling time, interview sites and individual schedules and commitments. It could be argued that "in situ" interviews would have provided the opportunity to regard non-verbal behaviors unavailable over the telephone, however, just as the the investigator cannot observe the non-verbal communication of the subject during telephone interviews, neither does the investigator become the object of scrutiny in this regard. As a consequence, interaction can be focused on verbal contingencies while removing the subtle and not-so-subtle mutual contingencies associated with non-verbal behaviors.

The Investigator

Lincoln and Guba (1985) argue that instrument most central in any inquiry and, in their opinion, used to the greatest advantage in naturalistic inquiry is the human investigator. Just as one might report a variety of psychometrics on some standardized inventory or particular characteristics of other instruments of inquiry, so should

the characteristics of the human instrument be revealed in some degree. Such information of some assistance in contextualizing the research work within the subjective framework idiosyncratic to the researcher.

The researcher, a white male 32 years of age, has as a central interest the psychological aspects of elite athletic performance. This interest can be said to be focused in peak performance and performance enhancement, most particularly in the sport of wrestling. This interest can be traced to years spent as an elite wrestler representing Canada in international competition during which the psychological aspects of performance came to be recognized as salient factors. During the years intervening between retirement from competition and the initiation of this research study, the investigator acted as a wrestling coach at the university and national team levels in Canada, initiated graduate level study of the psychology of sport and was involved in a number of investigations with wrestlers. The most notable of these studies (and the study from which this was a logical extension) was the investigation of 1988 U.S. Olympic Wrestlers and the psychological aspects of the competitive experience in Seoul.

Procedures

Phase 1: Pilot testing and instrument evaluation. The interview guides were pilot tested on a single university wrestler not participating in the study to ensure clarity and comprehensiveness. Feedback was solicited from the

interviewee to this end. Subsequently in the context of the pilot data, the interview guides were examined and evaluated for appropriateness, comprehensiveness, clarity and procedural concerns. Although other potential pilot interviews were slated, the successful execution and a positive evaluation of the initial pilot interview led to the conclusion, in consultation with the dissertation advisor, that further piloting would not be necessary. Two additional important factors contributed to the decision to terminate the piloting process. First, the Gould et al. (1990) interview guide was based on the extensive interview study by Orlick and Partington (1988) and the piloted interview guides drew strongly on the guide used in the Gould et al. (1990) study of Olympic wrestlers (a relevant population). The vast majority of the questions had undergone extensive scrutiny in these previous studies and were selected for use in this study because of their utility. Second, the researcher acted as the interviewer in the Gould et al. (1990) study and hence was experienced not only as an interviewer but more particularly as an interviewer with the specific questions. Further, all interviews were conducted by this researcher.

Phase 2: Subject selection and solicitation. As previously discussed, the coach's input was solicited on subject selection. Specifically, the coach was advised that desirable subjects for inclusion in the study would be wrestlers that would likely be regularly representing the

team in competition and who had some potential to be successful in at least some of their matches to avoid a ceiling effect as a consequence of being routinely and unmercifully pummeled. Upon potential subject identification, individuals were introduced to the study, made aware of their rights as subjects and of how their individual confidentiality would be protected (see Appendix B). Finally, these individuals were invited to participate in the study. All seven potential subjects identified by the coach as suitable both with respect to his concerns and the priorities of the study agreed to contribute in the research effort. Arrangements were made to initiate Phase 3 on the basis of wrestler schedules and coach concerns regarding Fall 1990 semester final examinations. The subjects were supplied with copies of the interview guides for future reference.

Phase 3: Collection of Interview I data. According to the schedule established in Phase 2, subjects were contacted via telephone for the preliminary interview. All seven of these telephone interviews occurred between December 7 to 15, 1990 prior to departures to various parts of the nation for Christmas holidays. These interviews ranged in duration from 40 to 55 minutes.

The purposes of this interview were to: (a) acquire demographic information and background information, and (b) collect data on all-time best and worst performance. The purpose of collecting data on the all-time best and worst performances was twofold. First, the acquisition of

information concerning best and worst matches provided characteristics of polar performance representations for each individual. Second, it was considered desirable to familiarize the subjects with the interview process and demands. Familiarizing the subjects with the process of the interview on matches other than those of most direct interest (those occurring during the 1990-91 season), served to: (a) attenuate the "differentness" of the first post-performance interview, and (b) make salient the type of issues at stake for the subsequent post-performance interviews.

A further objective for Phase 3 was to establish a tentative list of matches with each subject for interviews for season match data collection. In retrospect this was an unrealistic objective as there are a multitude of overriding issues that can spontaneously negate such plans. Rather the selection of particular matches was conducted on an ad hoc basis that was dictated by pragmatic concerns such as the array and scheduling of potential matches, travel schedules, match participation, injury, and other constraining parameters. For example, during one seventeen day period the team participated in seven dual meets in five different locations. One factor that did not enter match selection was subject willingness to participate. The subjects willingly took every opportunity to discuss their performances that was not constrained by factors beyond their control.

The wrestlers were made aware that it was preferable for post performance interviews to be conducted within a 24 to 48 hour time period following the dual meet matches (where practicable). Dual meets were selected as opposed to tournament competition because of the diminished chance of recollection being confounded by additional matches.

Phase 4: Collection season post-performance data. The wrestlers were contacted prior to scheduled dual matches deemed to be potential opportunities for data collection and interview times were established. The wrestlers were then re-contacted at the established time and the interviews were conducted according the established protocol if the wrestler had competed in the particular dual meet. A wrestler's participation in any given meet could not be absolutely determined prior to the meet because of factors such as opponent availability, injury status and coaching decisions. Only six of the seven wrestlers initially agreeing to participate in the study were interviewed in this phase. The seventh wrestler became academically ineligible and hence was unavailable for consideration.

For both pragmatic and methodological reasons, not all dual meets were identified as feasible for data collection. As an a priori decision it had been determined that data collection on a particular match would occur prior to the next competitive endeavor and, where practicable, within 48 hours of the match in question.

When dual meet matches were scheduled on consecutive days it was logistically as well as ethically unrealistic to expect to be able to conduct interviews on the first match with all of the participants although some individuals were quite accommodating in this regard. Similarly, logistical considerations eliminated several matches when the team made road trips that involved wrestling in a number of locations over a short period of time. Nonetheless there were nine occasions when there was some potential for data collection.

Data were not collected from any of the six wrestlers on all of the potential occasions. The number of interviews conducted with the participants ranged from a low of four to a high of eight (4, 6, 7, 7, 7, 8). The number of interviews accomplished was not contingent upon subject willingness to participate as this was not a factor in any case. Rather the number of interviews conducted hinged on factors that were beyond the control of either the interviewer or the athlete. By far the largest single determinant was that of participation in the particular meet. Factors dictating meet participation included tactical decisions by the coach as to best team match-ups with opponents, other coaching considerations and injury. In few instances where logistically it was difficult to obtain interviews from all of the subjects, pragmatic decisions were made as to whom it would be most important to interview. The number of previous interviews and potential for future interviews were weighed in these

situations. For example, the athlete from whom only four interviews were obtained was considered a priority and indeed interviews were obtained concerning all of the matches in which he participated.

All of the post performance data collection occurred between the dates of January 6 and February 20, 1991. In all cases interviews were conducted following a dual meet performance and prior to a subsequent performance so that there was no opportunity for an intervening performance to confound match recall. On average the interviews occurred 1.8 days ($SD=1.6$) following the performance and ranged from same day interviews to as long as a week after the performance. Thirty of the 39 post-performance interviews were accomplished within the two day time period identified as most desirable. The first interview of the set conducted with all six of the subjects concerning a road trip match following the Christmas holidays was delayed from four to seven days because of logistics and with one case being further extended due to illness. The remaining three interviews were conducted on the third day after the performance.

Data obtained from one of the wrestlers concerning a particular match were removed from consideration in consultation with the study collaborator as well as the dissertation advisor. Although procedures were adhered to in conducting the interview and the wrestler willingly participated, as the interview progressed it became

apparent that the subject was in the midst of a pizza party celebrating a dual meet victory with the other wrestlers. Hence, the data were felt to be suspect as such an environment was unlikely to allow the wrestler the opportunity to concentrate or self-reflect.

The coach was contacted by telephone following each instance in which a study participant had completed a performance. The performance evaluation questionnaire (Appendix A) was used to solicit the coach's estimation of each wrestler's performance in the particular match.

Phase 5: Data reduction and participant check. A total of 46 interviews were conducted providing data for a total of 53 performances. All wrestler interviews were tape recorded in their entirety. These interview recordings were transcribed verbatim in preparation for data analysis. The transcription of the interview recordings resulted in a total of 484 pages of single spaced text with Interview I transcriptions ranging from 16 to 23 pages per subject ($\underline{M}=19.3$; $\underline{SD}=4.1$; $\underline{N}=7$) and post performance interviews ranging from 7 to 16 pages per interview ($\underline{M}=8.9$; $\underline{SD}=1.8$; $\underline{N}=39$).

As transcriptions were completed, copies were forwarded to the appropriate participants in the study for the purpose of evaluation, elaboration and comment. Lincoln and Guba (1985) have suggested that, as the credibility of findings can be at issue in qualitative research, a technique to establish trustworthiness is to return the data to study participants to allow them to

evaluate and react. Contrary to the author's initial expectation that the wrestlers would not be terribly interested nor diligent in examining the transcripts, these data were examined with a certain delight. Reactions to the transcriptions while being primarily of a confirmatory nature were encouraging as comments were encountered that could be paraphrased as "after the interview I thought of a few other things to tell you but I was surprised to see that I had said them in the interview but forgot" or "it is interesting to have my memory jogged on how I felt about that match". Finally the author was pleased to have one of the wrestlers indicate that he had been using his transcripts for self-evaluation and plan development.

Phase 6: Collection of post season ranking data. At the end of the season the wrestlers were mailed questionnaires listing the matches about which they had been interviewed (see Appendix A). The wrestlers were asked to rank order the matches according to performance, satisfaction and opponent difficulty. The all-time best and worst matches were included in the performance ranking process to ensure that these matches did indeed reflect polar ends of the performance spectrum for the study participants. Care was taken to provide the wrestlers with stimulus and opportunity to consider the rank ordering carefully. Specifically, the wrestlers were (a) advised prior to mailing about the questionnaires and their importance, (b) phoned after mailing to set-up an

appointment for telephone collection of the rank orders and (c) contacted to collect the actual data.

Data Analysis

Although it may appear from the following that the analysis occurred as a series of discrete events with each following the other while leaving the previous behind, this was certainly not the case. The notion of stages is useful to characterize the analytic process but the implied linear progression ignores the dialectic interaction and associated iterations among the stages. In reality, the qualitative analyses began with raw data theme identification, and progressed forward with each stage subject to evaluation and re-evaluation in the context of both preceding and succeeding stages. These continual efforts were made to ensure that the richness in individual meaning and context were preserved as much as possible while still pursuing the scholarly objective of making sense of the world in some abstract way. As Locke (1989) indicates, it is important to maintain a sense of the whole during the study because isolating "any subpart by stripping away its relationship to the larger unit is to lose what qualitative research does best --- capturing and unraveling complexity" (p.10). Equally, Miles and Huberman (1984) suggest that the maintenance of authenticity and meaning, ergo external validity, is critical for the qualitative analysis to live up to its potential.

As previously mentioned, credibility can be an issue plaguing the qualitative researcher and hence efforts must

be made to build a case for the trustworthiness of the data collection, analysis and conclusions (Lincoln & Guba, 1985). A common concern in the analysis of qualitative data centers on potential investigator biases (conscious or otherwise) that may, in effect, lead the researcher to deny or confirm their hypotheses in the face of contradictory but unacknowledged evidence. Campbell (1975) and Locke (1989) have stressed that to be as accurate as possible, one must search for both the affirming and the negative instance with equal fervor. A method employed by Gould et al. (1990), and Scanlan et al. (1989) to help minimize the influence of experimenter biases (conscious or otherwise) was that of collaborative analyses requiring consensual validation. Such an approach was utilized in this study where an interested collaborator was engaged to be an associate in the data analysis. The collaborator was knowledgeable in sport psychology (a masters student in a recognized sport psychology program) and had undertaken a guided independent study in qualitative analysis to prepare for his role. Care was taken to establish a working relationship between investigators based upon equal status and mutual respect. Continual efforts were made to ensure that analytic process was not marred by a reticence to examine and accommodate ideas or disagreements.

The data analysis will be presented in the following three sections: (a) raw data theme identification, (b) Purpose 1 analyses, and (c) Purpose 2 analyses.

Raw Data Theme Identification

All interview transcripts were extensively and independently examined by both collaborators. During the critical examination of the transcripts every effort was made to identify all of the salient themes. Any issues that the investigators independently considered to emerge from the transcripts as conspicuous and compelling in the context of the particular interview were considered to be candidates for consideration. Subsequent to these individual efforts, the collaborators met to compile a set of raw data themes. In this meeting themes not jointly identified were closely examined in the context of the appropriate interview text and in most cases consensus was reached. In the very few instances where consensus was not achieved, the theme was tentatively retained. The decision to err on the side of over-inclusion was based on several considerations. First, the notion of resolving theme identification disputes by establishing a power prerogative criteria (e.g., principal investigator adjudicates) undermines the validity as well as the utility of having an associate actively involved. Further as Lincoln and Guba (1985) note, over-inclusion can easily be a lesser sin than under-inclusion at this level of analysis because as the analysis progresses seemingly irrelevant data can become significant as patterns are identified in the data. Conversely if the disputed theme does not take on significance as the analysis progresses, the analytic

process itself takes on the role of adjudicator.

As an a priori decision it had been determined that identified raw data themes from each interview transcript would be reflected through the use of quotations from that text in all subsequent analyses. The use of direct quotations was one way of ensuring that the analyses remained firmly grounded in the data. Hence representative quotations were extracted in an ecological structure for the purpose of further analysis. These quotations were further examined and discussed by the research associates to ensure that they were reflective of the raw data themes identified. The anonymous compiled raw data theme quotations can be observed in Appendix C. It can be noted that these quotations range from brilliantly eloquent and descriptive to mundane and, in the absence of context, relatively unimportant. Nonetheless adherence to the a priori decision to work directly from the words of the participants was a primary consideration.

Idiographic profiles of each of the interviews were constructed. This was an important step in the data analysis and reflected the continual effort made to ensure that the richness in individual meaning and context were not lost in the data analysis. The idiographic profiles were useful as succinct yet exacting points of reference to maintain contextual meanings and richness. Useful as these profiles were, troublesome points of interpretation ultimately led the researchers back to the particular full

transcripts to garner the full context in which the particular comment was embedded.

Data Analysis: Purpose 1

Purpose 1 postulated that certain characteristics would be associated with all-time best and worst performances with regard to pre-competitive cognition and affect as well as competitive cognition and affect. The data collected in Interview I concerning all-time best and worst performances were inductively analyzed in accordance with the types of analyses performed by Gould et al. (1990) and Scanlan, Ravizza and Stein (1989) to address these contentions. There were four separate inductive analyses conducted in this effort. Specifically, these analyses were (a) all-time best performance pre-competitive cognition and affect, (b) all-time best performance competitive cognition and affect, (c) all-time worst performance pre-competitive cognition and affect, and (d) all-time worst performance competitive cognition and affect.

Each of these analyses involved the compilation of all relevant themes across subjects within the subsection of the interview guide. From this list, an inductive analysis was conducted to identify common themes of greater generality through a process of collecting raw data themes together that were jointly perceived by the collaborators to speak to similar issues. The higher order themes were in this way defined by their constituent raw data themes. Subsequently these higher order themes were inductively

analyzed to produce third level themes of yet greater generality referred to as dimensions.

It was a challenging process, for lack of a better description, to allow the data to speak for itself. The risk was grave to intuitively fall into deductive thinking patterns in categorizing data as there are a number of relevant and readily amenable theoretical perspectives which could have done justice to the data. In keeping with the priori decision to, in some sense, allow the data to speak, the investigators asked of themselves these questions: (a) which of these raw data themes are unambiguously associated or express the exact same sentiments, and (b) which raw (or unambiguously associated) data themes speak to the same issues? The first question easily provided numerous but highly specific clumps of themes. The second question proved a much more challenging task and yet provided the impetus to coalesce these clumps into meaningful higher order themes. It must be confessed that the particular higher order themes established were not the only possibilities as numerous other potential organizations of the data were discussed and discarded. Ultimately these higher order themes were settled upon on the basis of a multi-layered criteria. First, the higher order themes had to accurately characterize the data within the particular analysis. Further, it was considered desirable that each individual analysis in the context of related analyses contribute to the understanding of the

data set as a whole. Hence a variety of iterations occurred not only within each analysis but across and in concert with associated analyses. A similar process was adhered to in arriving at dimensions. The entirety of the raw data theme set for each analysis organized by higher order theme and dimension can be observed in Appendix C although for reasons of confidentiality these have been rendered anonymous.

The number of wrestlers and citations for each higher order data theme and the subsequent elaborations was maintained through out the analytic process. This tally allowed for the characterization of each subsection of the interview guide in pattern and frequency among the wrestlers.

Data Analysis: Purpose 2

Purpose 2 postulated that data collected from performances over the course of a wrestling season when organized from best to worst performance and interpreted in the context of results of the analyses of the all-time best and worst matches would produce a particular identifiable pattern of correspondence between performance level and psychological parameters. Hence, Purpose 2 was concerned with the same variety of psychological parameters as Purpose 1, however, the data analysis presented a different problem. The a priori decision regarding data analysis dictated idiographic and subsequent nomothetic analyses. Silverstein (1988) characterizes the strategy of in-depth idiographic analyses with subsequent nomothetic analyses as

the "Aristotelian Resolution" wherein attempts are made to both understand universal psychological principals and to describe unique particulars within a single focus. Again separate analyses were conducted on the data from the competitive and pre-competitive periods. The specifics of analytic process are discussed in the following subsections: (a) season theme categorization and confirmation, (b) idiographic analyses, and (c) nomothetic analyses.

Season theme categorization and confirmation. Each of the raw data themes extracted from the post performance interviews was carefully examined and, if possible, categorized according to the higher order themes inductively produced in the analysis of all-time best and worst performances. A great many of the raw data themes were characterized in this manner. However, some were more problematic. There were a number of raw data themes that were clearly related to one another and consistent with but not specifically related to established higher order themes. Alternatively some raw data themes could be seen to be subsumed within general categories such as "irrelevant thoughts" in the Purpose 1 analyses because of a lack of sufficient quantities of the particular theme to merit a distinct category. The problem of placing these raw data themes was resolved by developing new higher order themes.

There was some concern between the investigators as to the potential for error or deficits in consistency of the deductive categorization of raw data themes. Whereas the Purpose 1 inductive analysis resulted in higher order themes that were defined by their constituent raw data themes, the deductive categorization in Purpose 2 required that pre-determined higher order themes define individual raw data themes. To ensure that the deductive categorization process had been consistent across instances, compiled lists were made of all of the raw data theme quotations according to their deductive categorization. By bringing all of the themes together and regarding them as a cohort it was possible to confirm the category appropriateness. This evaluation resulted in some re-evaluation and re-classification. An additional consequence of this process was the introduction of super-ordinate level themes to organize higher order themes within the dimension of cognitive content. The proliferation of distinct but related higher order themes within this dimension mandated this aggregation for the purpose of conceptual clarity.

Idiographic analyses. It was considered appropriate to conduct case study analyses so that, in the examination of wrestler cognition and affect across ordinally arranged performance levels, the individual could serve as their own control for the purpose of examining these associations. The intra-individual examination of subject data addresses the concerns of Heyman (1982) while making idiosyncratic

characteristics explicit.

Each individual's reduced data were arranged ordinally from best to worst match to produce arrays of data so that psychological parameters could be examined for trends associated with subjective evaluations of performance in the context of polar ends of the performance spectrum. A number of sources of performance information had been acquired that could be utilized to produce ordinal arrays. These sources included the interview question requesting the athlete to rate their performance in the context of all-time best and worst performance, post-season performance rankings and coach performance ratings.

It was found that wrestler and coach ratings of performance were highly correlated ($r=.80$). More moderate correlations were found between wrestler performance rankings with wrestler performance ratings ($r=-.60$) and coach performance ratings ($r=-.53$). Closer examination of wrestler performance rankings and ratings as well as scatterplots with these variables revealed that the error variance was inflated in good part (but not wholly) due to the effects of superimposing ordinal and interval data on the assumption that a linear relationship should exist. Specifically, the imposition of ranking upon the substantial number of matches receiving the same performance or very similar ratings along with other outlying ratings resulted in increased linear correlational error variance that has little practical significance from

the standpoint of creating a data array. By utilizing the wrestler ranking orders of performance to create an ordinal array of performances for analysis while maintaining wrestler performance rankings within the array, this was not a particularly troubling situation. Rather, within the ordinal array of performances, those receiving the same performance ratings become particularly interesting for cross comparison. Hence it was determined that the matches should be ordinally arrayed according to wrestler performance rankings and that these arrays should be scrutinized in the context of wrestler ratings of performance.

Bearing these arguments in mind, there was substantial agreement among these performance information sources thus improving the credibility of ordinal arrays via what Lincoln and Guba (1985) have referred to as triangulation. In this case both method triangulation (different measurement processes) and source triangulation (different sources of measurement) within the analysis operate to promote the notion of trustworthiness in the analytic procedures.

The data arrays for the individual wrestlers were scrutinized both across performance rankings as well as within any matches which shared common performance rates. This multi-layered examination of the data allowed the researcher to look for patterns (or the absence thereof) of cognition and affect across performance levels while simultaneously examining similar performance levels for

consistency of cognition and affect (or lack thereof).

Nomothetic Analyses. Subsequent to idiographic analyses, nomothetic analyses were conducted using the results of the idiographic pre-competitive and competitive analyses. More specifically, the results of the idiographic analyses were examined as a set for the purpose of identifying common patterns across the performance arrays. It is Silverstein's (1988) contention in advocating the analytic strategy which he refers to as the "Aristotelian Resolution" that such an approach allows the researcher to attempt to identify or formulate general principles while retaining the ability to designate idiosyncratic uniqueness within the results rather than merely relegating it to error. Such was the purpose of this analysis.

CHAPTER III

RESULTS

As discussed in Chapter II, there were a number of identifiable stages in the analysis of the qualitative data collected in this investigation. However the analysis can more properly be understood as multi-layered and interactive. Specifically, each stage of the subanalyses was evaluated not only on the criterion of accurately characterizing the data within the particular analysis but further evaluated in the context of related analyses on the criterion of making the data set understandable as a whole. Hence, while the notion of stages is useful in characterizing the analytic process, the dialectic interaction and associated iterations among the stages should not be ignored.

Ultimately five issues or dimensions became salient from the analyses of the data set. These dimensions rose from the Purpose 1 inductive analyses and withstood subsequent testing against Purpose 2 data and hence are prominent throughout the results section. The dimensions included affect, focus, cognitive content, confidence issues and sources of motivation. Although each will be elaborated upon in the detailed reporting of the individual analyses, a preliminary characterization of the dimensions may be useful.

The **affect** dimension rose from themes acquired from the interview transcripts dealing with particular feelings, moods and emotions the wrestlers identified in their pre-competitive or competitive experience associated with particular performances. The second dimension of **focus** reflects comments associated with the wrestler's perception of the quality or acuity of their mental processing relative to the situation. The **cognitive content** dimension rose from thoughts identified by the wrestlers as associated with their preparation or participation in the particular match. The dimension of **confidence issues** arose from comments dealing with the thoughts and feelings associated with this particular topic. Finally, the dimension of **sources of motivation** related to issues providing direction and intensity to competitive efforts.

Each of these dimensions was seen as a significant issue emerging from the analyses but clearly they are not independent of one another. Further examination of the results will reveal that a number of the higher order themes contained within the dimension of cognitive content are explicitly associated with affect because particular thoughts often had an associated evaluative component. For that matter, confidence can be seen to have constituent affective and cognitive components. Equally, it would be hard to argue that themes in the dimension of sources of motivation are not associated with both cognition and affect. Further, the dimension of focus can be seen to be

highly related to the varieties of cognitive content observed. Although these dimensions can be seen to be highly interrelated, they were deemed to have emerged from the data as significant issues.

The reporting of results is done in two major sections corresponding to Purpose 1 and Purpose 2. Each of the sections will be composed of pre-competitive and competitive subsections further subdivided by dimension with corresponding summaries. In each case the order of presentation of dimensions will be: (a) affect, (b) focus, (c) cognitive content, (d) confidence issues, and finally, (e) sources of motivation. For the purpose of convention and clarity in the text of the results, dimensions will be identified in bold face type, super-ordinate themes will be underlined and higher order themes will be printed in italics.

Purpose 1 Results

To address Purpose 1 contentions, in the first interview of the study the participants were asked to relate what they were focused on, thinking about, saying to themselves and how they were feeling immediately prior to two specific matches in their performance history as well as what they were paying attention to, thinking about and most aware of during these same matches. The first match queried was a match the wrestlers were willing to characterize as their all-time best wrestling performance; the match in which they wrestled the best ever regardless of the outcome. Conversely, the second match queried was a

match that the wrestlers were willing to characterize as their all-time worst wrestling performance; the match in which they wrestled the worst ever regardless of the outcome. Although the qualifier of "regardless of outcome" was attached to the descriptors for all-time best and worst matches, perhaps not surprisingly, all of the best matches were wins while all but one of the worst matches were losses.

As the objective of Purpose 1 was to attempt to replicate the findings generated by Gould et al. (1990) concerning the best and worst performance pre-competitive and competitive cognition and affect, it was considered appropriate to include all relevant available Interview I data in these analyses. Hence data from all of the seven wrestlers participating in Interview I were utilized in Purpose 1 analyses whereas data were available from only six of the athletes for Purpose 2 analyses. The inclusion of all available interview data in the Purpose 1 analyses provided additional evidence to evaluate Purpose 1 contentions against.

As previously discussed, the data collected in Interview I concerning all-time best and worst performances were inductively analyzed in accordance with the types of analyses performed by Gould et al. (1990) and Scanlan, Ravizza, and Stein (1989). There were four separate inductive analyses conducted on a total of 182 raw data themes. Within each analysis the number of wrestlers cited

in each higher order data theme and dimension was maintained to allow for the characterization of the analysis in pattern and frequency among the wrestlers. Specifically, the analyses performed concerned: (a) all-time best performance pre-competitive cognition and affect, (b) all-time worst performance pre-competitive cognition and affect, (c) all-time best performance competitive cognition and affect, and (d) all-time worst performance competitive cognition and affect.

The results pertaining to Purpose 1 are presented in two sections corresponding to the pre-competitive and competitive time periods each containing subsections relating to all-time best and worst matches. While illustrative representative quotations will be interspersed in the results text, the complete raw data theme set for each analyses can be examined in Appendix C. Although the themes lack context and have been rendered anonymous for the purpose of protecting confidentiality, some additional insight into the analytic process may be gained upon examination. These quotations are organized by analysis, dimension and higher order theme.

Purpose 1: Pre-competitive Inductive Analysis Results

As previously mentioned, data to evaluate Purpose 1 contentions concerning pre-competitive cognition and affect were obtained by asking the wrestlers to relate what they were focused on, thinking about, saying to themselves and how they were feeling immediately prior to matches they considered to be their all-time best and worst

performances. Separate analyses of data relating to each of these matches were conducted and hence the results of these analyses are presented separately. Figure 1 reveals the higher order themes associated with each of the dimensions arrived at in the all-time best match pre-competitive inductive analyses while Figure 2 reveals the higher order themes associated with each of the dimensions arrived at in the all-time worst match pre-competitive inductive analysis. The presentation within each analysis proceeds by dimension with each of the subsumed higher order themes being revealed and discussed.

Figure 1 - All-Time Best Performance Pre-Competitive Higher Order Themes Organized By Dimension

<u>HIGHER ORDER THEMES</u>	}	_____	<u>DIMENSIONS</u>
EMOTIONAL ACTIVATION FEELINGS OF READINESS	}	_____	PRE-COMPETITIVE AFFECT
TOTAL FOCUS	}	_____	FOCUS
TECHNICAL/TACTICAL THOUGHTS PERFORMANCE PROCESS CONFIDENCE BUILDING THOUGHTS	}	_____	PRE-COMPETITIVE COGNITIVE CONTENT
CONFIDENCE DOUBTS	}	_____	CONFIDENCE ISSUES
COMMITMENT TO WINNING OTHER SOURCES OF MOTIVATION	}	_____	SOURCES OF MOTIVATION

Pre-competitive Inductive Analysis - All-Time Best Match

All-time best match pre-competitive affect. The dimension of **pre-competitive affect** rose from 20 raw data themes which were inductively organized into two higher

order themes. As can be observed in Figure 1, the dimension of *pre-competitive affect* was composed of the higher order themes of *activation* and *feelings of readiness*.

Raw data themes emerged from transcripts of five of the seven wrestlers that were conceptualized under the rubric of *emotional activation*. All but one of these references were to intense emotional activation experienced prior to all-time best performances. These comments included:

I wanted to get out there so bad that I was almost crying I wanted to get out there and wrestle, which made it, made the nervousness, it was between 0 and nil, I wanted to go out and I was ready to go out and wrestle.

Right before the match I remember saying to myself, how can my coach not believe that I was going to win ... I felt really mad, like really angry and I was real pissed off. I was kind of talking to myself, swearing "how can he freekin think I am going to [lose]".

A single wrestler's comment conceptualized within the higher order theme of *emotional activation* referred to "butterfly nervousness" that he experiences prior to every match.

The higher order theme of *feelings of readiness* emerged from all seven wrestler transcripts. Raw data themes conceptualized as *feelings of readiness* were all self-referenced commentary reflecting positive but nebulous sensations of "feeling good" and being "ready" to compete. As these assessments were nebulous and lacking specificity, the interviewer had probed each of these responses for

further explanation during the interview. Upon further interview probing, more specific issues surrounding *feelings of readiness* themes often emerged. These more specific issues were subsequently conceptualized in other higher order themes, however, the global assessment represented in the *feelings of readiness* themes remained salient, and hence were maintained throughout the analyses.

All-time best match pre-competitive focus. A single wrestler made reference to the quality of his mental state in preparation for his all-time best match. This theme, conceptualized as *total focus*, reflected a high degree of concentration of thought. As the wrestler reported:

I was totally focused into the match. There was people that were coming up talking to me, and saying things to me that I don't even remember. They were coming up and talking to me, people said they were saying things to me and I was just so focused that I didn't even pay attention. All I could think about was the match. So I was just really in tune and just really just more psyched up thinking about what was going to go on; going out there and taking it to him.

This theme stands as distinct from the other themes within this particular analysis although through examination of cognitive content themes it may be inferred that this level of pre-competitive concentration on task relevant issues was not completely unique.

All-time best match pre-competitive cognitive content. The dimension *pre-competitive cognitive content* is composed of 14 raw data themes emerging from the interview data of six of the seven wrestlers. These raw data themes were inductively organized into the higher

order themes of *technical/tactical thoughts*, *performance process thoughts* and *confidence building thoughts*.

The higher order themes of *technical/tactical thoughts* and *performance process thoughts* each were reflected in comments of four of the seven wrestlers. While both of these higher order themes can be seen to be task relevant thoughts, they were considered to be different in degree of specificity. *Technical/tactical thoughts* evidenced a high degree of specificity to technical or tactical issues relevant to the upcoming performance. As can be observed in the following quotations, thoughts or visualization of specific performance issues were salient:

I kept thinking about what his move was that he was going to try and hit, about this duck under. I wrestled him a long time ago, I mean I know what he looked like. I just kept picturing me wrestling him out on the mat, cause I saw him over on the other side of the mat.

I was just thinking about every step of the match, everything that was going to go on, everything I was going to do. Like I was saying before, all of the moves that were going through my head.

By contrast, comments that were classified as relating to *performance process* reflected thoughts about more general process concerns such as "going hard" or "wrestling physically" rather than specific techniques or tactics. The following quotations were among those conceptualized within this higher order theme:

Just thinking what I had to do, I had to keep the pressure on and stay focused and not relax and tell myself I could do, I was going to do it.

I was thinking that if someone was going to beat me that I really wanted them to know who they had wrestled. So I was thinking if he is going to beat me, man I am going to try and get into a real fight with him kind of thing. That's what I was thinking.

The final higher order theme contained within the dimension of **pre-competitive cognitive content** was that of *confidence building thoughts* and was composed of raw data themes emerging from the transcripts of three of the seven wrestlers. These thoughts were positive self statements aimed at building the wrestler's confidence for the upcoming performance. The following wrestler quotation provides an example of the themes conceptualized within this dimension:

Constantly pounding into my head, thinking about how much physically, how much better shape I was in; that I was doing and sacrificing more than this person and there is no way that he could or should be able to compete with me.

All-time best match pre-competitive confidence

issues. The dimension of **confidence issues** is composed two higher order themes inductively organized from a total of 12 raw data themes. The higher order themes from which this dimension arose included *confidence*, and *doubts*.

Five of the seven wrestlers made comments conceptualized within the higher order theme of *confidence*. These comments reflected feelings of confidence and positive expectancies about match outcome. One particularly strong comment in this regard was:

Mentally, I knew it, I knew that I was going to go out and win that match. And I knew that he knew that I was going to beat him. I mean I didn't talk to him or say anything to him. I just knew it. I knew that there was nothing that he could do to beat me and I

knew that I was going to beat him and he knew that he was going to lose that match. It was just something I knew. I mean, no matter, anyone could have said anything, he could have said "I am going to kill you, I am going to kick your butt", but I knew inside of him that he knew he was going to lose that match.

Not all of the wrestlers expressed such strong sentiments of confidence prior to their all-time best performance. Indeed four of the seven wrestlers made reference to having at least some small doubts about their ability to be successful in the upcoming contest including some of the wrestlers expressing confidence as to their ability to win the match. Comments conceptualized in the higher order theme of *doubts* included quotations such as:

This guy had beat me before in a close match and he had been like undefeated that year, had pinned everybody he wrestled and was just like tearing everybody up. I mean I was very ready for the match but there might have been just a little bit of doubt. Just because of what he had been doing.

All-time best match pre-competitive sources of motivation. The dimension referred to as *sources of motivation* is composed two higher order themes inductively organized from a total of 11 raw data themes which emerged from the transcripts of five of the seven wrestlers. The higher order themes from which this dimension arose were labeled *commitment to winning*, and *other sources*.

The *commitment to winning* higher order theme within this dimension was evident in the comments of four of the seven wrestlers. The raw data themes from which this higher order theme was conceptualized reveal a commitment and determination focused toward a winning outcome. Quotations representative of a *commitment to winning*

included:

My goal for the whole year was to win nationals and to do that I had to beat him. So I figured I might as well beat him in the semi's, I am going to have to beat him if I wanted to win this, so it didn't matter if I wrestled him in the semi's or the finals.

I was thinking to myself just it was my turn [to win] ... because he had beat me in the previous match and then I was thinking that this was the sole purpose, this was my sole reason for coming down here was to wrestle this one match.

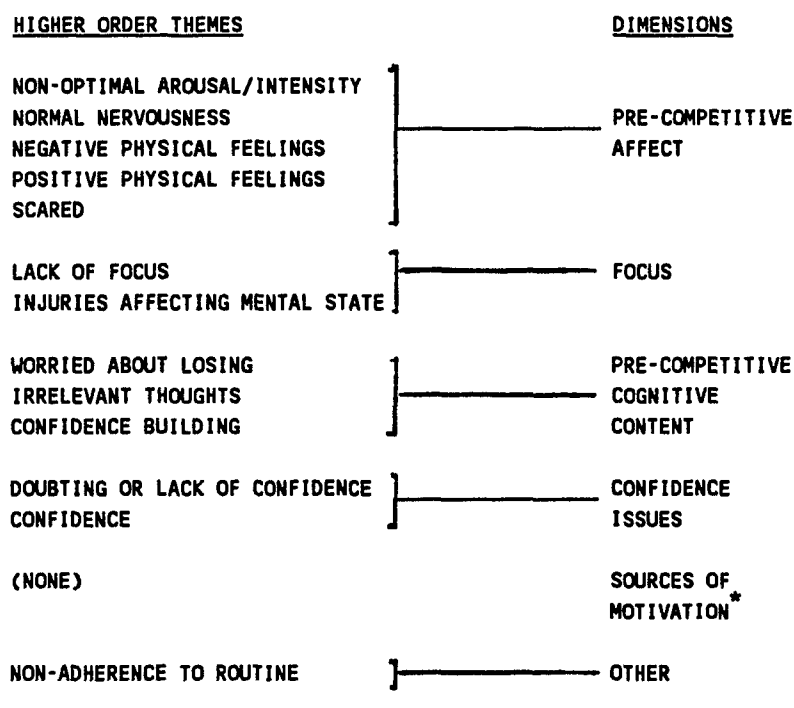
The higher order theme of *other* included a variety of **sources of motivation** that were identified by wrestlers as being important and salient in their all-time best match. Four of the seven wrestlers made reference to such *other* sources of motivation and these included the presence of college recruiters, to prove that a previous championship was not a "fluke", to prove that people were wrong in expecting him to lose, to avenge a previous loss and to establish himself nationally._

All-Time Worst Match - Pre-competitive Inductive Analysis

The data on which this analysis was based is particularly interesting and instructive as a reminder that a number of performance preparation issues in addition to psychological factors merit consideration. More precisely, two of the seven all-time worst performances were associated with the effects of dietary indiscretions such as dehydrating 14 pounds to make weight the night before the match and eating copious quantities of "the worst foods possible --- cookies, pop tarts, cupcakes"

All-time worst match pre-competitive affect. The dimension concerning **pre-competitive affect** rose from 19 raw data themes which were inductively organized into five higher order themes. As can be seen in Figure 2, the dimension of **affect** was composed of the higher order themes of *non-optimal arousal/intensity, negative physical feelings, scared, positive physical feelings* and *normal nervousness*.

Figure 2 - All-Time Worst Performance Pre-Competitive Higher Order Themes Organized By Dimension



*Although there were no raw data themes conceptualized within the dimension of Sources of Motivation, this dimension was identified in Figure 2 to emphasize the absence of these themes despite their salience in other analyses.

Nine raw data themes obtained from the transcripts of five of the seven wrestlers were conceptualized under the rubric of *non-optimal arousal/intensity*. These themes referred to a notable negative activation or intensity level experienced by the athletes prior to their all time worst performance. It is not entirely clear in some cases if these feelings were in reference to being over-aroused or under-aroused although the net effect in each instance referred to feelings associated with a lack of intensity. The following quotations of two different wrestlers eloquently illustrate this higher order theme:

I was kind of just there, you know, I wasn't aroused, I wasn't excited, didn't have any butterflies, no jump, no life, no life to me, no jump about me. I probably did have a few butterflies, just a nervous tendency but nothing really major ... it was a different relaxed, I mean it wasn't a wrestling relaxed, it was a laying in the stands relaxed, I was still kind of asleep it seemed like.

I was nervous for it but it was like, kind of hard to explain you know. It was a dulling feeling almost ... flat, I was like ho-hum ... It was like I was nervous but it wasn't like, I don't know it was hard to explain. You know it was a weird feeling.

The higher order theme of *negative physical feelings* included comments from three of the seven wrestlers. Raw data themes included references to the sensation of being burnt-out, physical tiredness, numbness in legs and not really feeling warm. As one wrestler described his feelings:

I remember I was thinking how tired I felt before the match even started. That is one thing, I was thinking "I feel like shit, I can't believe how tired I feel, I haven't even wrestled yet". I felt like I had already wrestled a couple of matches. And I felt so weak that

I was thinking "man there is just no way I'll last a whole match". I felt so tired, mentally and physically.

The higher order theme of *scared* contained four raw data themes from two of the seven wrestlers. Sentiments that were expressed included "nervous scared feeling" and "I was trying to pretend that I'm not scared but I know I am".

Finally, two raw data themes, conceptualized as themes of *normal nervousness* and *positive physical feelings*, emerged from the transcripts of a wrestler that attributed his poor performance, in part, to his efforts to make weight the night before by dehydrating. As previously indicated, these themes highlight the notion that physical as well as psychological parameters merit consideration in examining pre-performance issues. As he commented about his physical feelings:

I felt pretty good physically, you know, I couldn't tell that I was affected a lot by cutting weight. I really got winded early and just really looked out of shape. But I didn't expect that to happen so I felt pretty good physically. I thought everything would be OK that way.

All-time worst match pre-competitive focus. The dimension concerning *pre-competitive focus* rose from seven raw data themes extracted from the transcripts of three of the seven wrestlers. These raw data themes were inductively organized into the higher order themes of *lack of focus* and *injuries affecting mental state*. The higher order theme of *lack of focus* rising from the comments of two of the wrestlers is self explanatory in that these

wrestlers indicated that they were not concentrated on the task at hand. As one wrestler commented: "I wasn't focused at all ... you can't do anything without your mind". The related higher order theme of *injuries affecting mental state* commented upon by two wrestlers also reflected *lack of focus* concerns but specifically related to injuries. This higher order theme can be best expressed in one of the wrestler's own words without further elaboration:

My back was hurt ... it was just hurting really bad over Christmas. And it was giving me a lot of problems and I've got bad feet, my feet were killing me you know, and I was thinking about it all, I didn't block it out.

All-time worst match pre-competitive cognitive content. The dimension concerning pre-competitive cognitive content rose from 13 raw data themes emerging from six wrestler transcripts which were inductively organized into the three higher order themes. As can be seen in Figure 2, the dimension of cognitive content was composed of the higher order themes of *worried about losing*, *confidence building* and a grab bag of themes characterized as *irrelevant thoughts*.

Four raw data themes obtained from the transcripts of two of the seven wrestlers were conceptualized under the rubric of *worried about losing*. These themes revealed a preoccupation with losing prior to the all-time worst performance and included references to "being more worried about losing than I was about winning", and "being concerned about not going out there and messing up". Although related to themes identified within the dimension

of **confidence**, these raw data themes were considered distinct because they were frequently linked to the implications of a performance loss such as the consequences for the team score, or the coach's reaction.

The higher order theme of *irrelevant thoughts* was coalesced from a variety of task irrelevant thoughts and concerns identified by five of the seven wrestlers. Included were themes about thinking ahead to the next round of competition, ruminating on a previous loss, thinking of the opponent's accomplishments and reputation, concerns about what people would think of him, focusing on the team score, concerns wrestling up a weight class, a desire to hurt the opponent, and pressures placed upon the wrestler by the coach. The assortment of themes conceptualized as *irrelevant thoughts* took on additional significance in the Purpose 2 analysis where the number and salience of such themes resulted in the ad hoc establishment of relevant higher order themes. As can be observed in the following wrestler quotation, themes conceptualized within the *irrelevant thoughts* were often quite consuming:

I can't say I wasn't out of it, I wanted to win but I was just, it was like a dulling. I had lost the week before and I was just like the whole world was still coming down around me. It was still like I was in a burning house and I was like "shit, even if I win this I still can't get out of this place alive". It was just kind of like aaaaah. No matter what I did, even if I pinned [opponent], it wasn't going to matter because I had lost the week before. It was just like it's pathetic, I can't change that one loss. I'm still going to have 1 on the end of my record ... Somewhere in the back of my mind, that was still eating me, eating away at me that I had lost ... I was

flat because I was just so stressed, it was just like, "aaaah I've lost". And that was still just bothering me.

A single wrestler indicated that he remembered making self statements to build his confidence for the upcoming performance. The single raw data theme that composed this higher order theme of confidence building was:

I was just saying to myself, "you worked hard all preseason, you are ready to go, just go out and hit your moves and I should be fine, there is no way that I should not win this match". I felt pretty good.

All-time worst match pre-competitive confidence issues. The dimension concerning pre-competitive confidence issues rose from six raw data themes emerging from five wrestler transcripts which were inductively organized into the two higher order themes. As can be seen in Figure 2, the dimension of confidence issues was composed of the higher order themes of *doubting or lack of confidence* and *confidence*.

Four raw data themes obtained from the transcripts of three of the seven wrestlers were conceptualized under into the higher order theme of *doubting or lack of confidence*. These themes expressed wrestler misgivings about their ability to rise to the occasion and can be seen in the following wrestler quotations:

I didn't think I was going to win in the final. That is like one of the only matches that I ever thought that.

I think one of my problems going into it was everything was real vague, like "man can I do it with this, am I going to be able to win even though this and that". And I think that is probably why I got into the biggest problem, biggest trouble ... I think I had a lot of uncertainty.

Raw data themes reflecting positive outcome expectancies identified in the transcripts of two of the wrestlers were conceptualized into the higher order theme of *confidence*. The previously mentioned wrestler suffered the consequences of gorging on cookies had badly beaten his opponent a number of times previously and hence this sense of confidence was reasonably grounded in past performance while the other was the only wrestler to identify a winning effort as his worst all-time match. As these wrestlers commented:

It's a weird feeling but I knew I was going to win but I knew I was going to wrestle shitty. I just knew I was going to win ... Mentally, it was weird, I knew I was going to win. I knew I could beat him but ... it was like, "oh shit I am going to have to be pushed here".

The matches before that, I wrestled well, I mean I pinned one guy and I think I teched another guy so I felt good. All preseason I worked hard, you know I felt I was ready to go but after weigh-ins I just ate so many like cookies and junk foods that they caught up to me in the overtime.

All-time worst match pre-competitive sources of motivation. In notable contrast to all of the other analyses in this investigation, no themes emerged from the all-time worst match pre-competitive data that inductively yielded higher order themes in the dimension of **sources of motivation**. The absence of such themes is noteworthy and interesting.

All-time worst match pre-competitive other. A single raw data theme emerged from one wrestler transcript that was unrelated to any of the other data themes. It is

however salient and related to previous investigations and hence reported. This single theme related to the wrestler acknowledging that he didn't follow his usual preparation steps prior to the match he considered his all-time worst performance.

Purpose 1: Competitive Inductive Analysis Results

As previously mentioned, data to evaluate Purpose 1 contentions concerning competitive cognition and affect were obtained by asking the study participants to relate what they were paying attention to, thinking about and most aware of during the matches identified as all-time best and worst performances. The examination of competitive cognition and affect has been reported in two sections corresponding the all-time best and worst match descriptions. Figure 3 reveals the higher order themes associated with each of the dimensions arrived at in the all-time best match competitive inductive analyses while Figure 4 reveals the higher order themes associated with each of the dimensions arrived at in the all-time worst match competitive inductive analysis. The presentation of each analysis proceeds by dimensions with the subsumed higher order themes being revealed and discussed.

All-Time Best Match - Competitive Inductive Analysis

All-time best match competitive affect. As can be observed in Figure 3, the dimension of **competitive affect** contained the single higher order theme of *emotional activation*. This higher order theme was composed of four

Figure 3 - All-Time Best Performance Competitive Higher Order Themes Organized By Dimension

HIGHER ORDER THEMES	DIMENSIONS
EMOTIONAL ACTIVATION	COMPETITIVE AFFECT
ABSORPTION INTO TASK PERFORMANCE AUTOMATIC	FOCUS
TECHNICAL/TACTICAL THOUGHTS AWARENESS OF COACH INPUT AWARENESS OF OTHERS AS AUDIENCE	COMPETITIVE COGNITIVE CONTENT
CONFIDENCE DOUBT TURNS INTO CONFIDENCE BROKE OPPONENT	CONFIDENCE
CROWD INFLUENCES INTENSITY	SOURCES OF MOTIVATION

raw data themes identified in the transcripts of three of the seven wrestlers. The quotations defining this higher order theme made reference to feelings of positive activation ranging from sensations of being "fired-up" and "intense" to a particular type of relaxed intensity. As the wrestler commented:

I went out there relaxed. I was intense but I was real relaxed, it was kind of odd. I get like that every once in a while and I wrestle really good when I do it.

All-time best match competitive focus. The dimension concerning **competitive focus** rose from seven raw data themes extracted from the transcripts of four of the seven wrestlers. These raw data themes were inductively organized into the two higher order themes of *absorption into task* and *performance automatic*. The higher order

theme of *absorption into task* was conceptualized from six raw data themes obtained from the transcripts of four of the seven wrestlers. These themes referred to an experience of an extraordinarily deep involvement in the match that precluded distraction and in some cases warped the wrestler's sense of time. The following quotations illustrate these sensations:

I think more than anything I was really into the match. I think it was just the opponent, I mean the guy I was wrestling, into that match. I was real, real focused in the match, about what was happening, the time, the score, man I wasn't distracted I don't think. I don't think I had anything else on my mind. I was in that match.

I had no conception of the time, it wasn't even a factor in my head. All I was thinking about was staying intense ... I didn't know, I had no idea. I had walked halfway back to the center of the mat and kind of looked up at the clock and realized that it was over.

The higher order theme of *performance automatic* rose from raw data themes that were clearly related to the higher order theme of *absorption into task*. These themes were identified in the comments of two of the seven wrestlers and concerned the positive experience of performance seeming to occurring in the absence of thought. The following quotation of one of the athletes eloquently illustrates this higher order theme:

You know I don't even know if it was thinking. It was like muscle reactions, it was just kind of like, boom, when he would pull, I would hit this, I'd hit that. It wasn't that I was thinking, it was a lot of muscle reaction. It was like whatever was there right at that split second, I couldn't really think about it, I just had to do it.

All-time best match competitive cognitive content. As can be observed in Figure 3, the dimension of **competitive cognitive content** contained the three higher order themes of *technical/tactical thoughts*, *awareness of coach input* and *awareness of crowd*. This dimension was the product of the inductive analysis of 14 raw data themes extracted from the interview transcripts of five of the seven wrestlers.

Five of the seven wrestlers made comments which were conceptualized within the higher order theme of *technical/tactical thoughts*. This higher order theme reflected cognitive content reported by the wrestlers that was concerned with specific techniques and tactics that they were aware of or trying to execute during their match. These thoughts were, in some cases, specific to an instant or situation and, in other cases, thoughts that were recurrent or framing the match efforts. The following quotations illustrate not only the type of thoughts but the range from situation specific to match tactics:

In the last period I was winning 6-4 and I remember not wanting to get up right away. Just so maybe to waste time but after I did get up, there was probably 30 seconds left or a minute left and I just shot as soon as I turned around, I shot back in on him and I had a hold on his leg, and I remember then like counting the time out. Looking up and seeing the clock like 20 some seconds left and just holding on to his leg for dear life and thinking just not to let up, that I had won. That was going through my mind too.

I think my position. I think I wanted to keep good position the whole time and he really just had one real good shot and I just, I wouldn't let him have his tie where he would come from on that shot. I was thinking that.

The higher order theme of *awareness of coach input* was reported by three of the seven wrestlers. This higher order theme reflected an awareness and focus on coach input during the wrestler's match efforts. As one wrestler commented:

It is kind of something where I block out the crowd or what is going on and I try and stay focused to the coach ... To the point where, I would be out there and wrestling, all these people screaming and yelling and the only voice I would hear is his. So I think, that was the only thing that I was really worried about was listening, hearing what he was saying.

The final higher order theme within the dimension of **cognitive content** was that of *awareness of others as audience*. Two of the seven wrestlers commented about a rather detailed awareness of match onlookers that did not detract from their match concentration. As one wrestler recalled:

I remember kind of looking over at their stands and like they are kind of in dismay ... because he was like captain of his team and he was undefeated at the time. And his team, they were like he was a god for junior high you know. And I remember just everyone was like whoa, everyone is like quiet and everyone on my side is going crazy, their side is just quiet. I remember remembering that.

All-time best match competitive confidence issues.

The dimension of **confidence issues** rose from 12 raw data themes that had been inductively organized into three higher order themes. As can be observed in Figure 3, the **confidence issues** higher order themes included *confidence, doubt turns into confidence and broke opponent*.

The higher order theme of *confidence* was observed in the transcripts of four of the seven wrestlers. The raw

data themes from which this higher order theme was conceptualized included not only references to general sensations of confidence during the match but as well references to confidence in the face of adversity. The comments of two of the wrestlers can be utilized to make these ideas explicit:

I mean it was just like, he knew, it just felt like he knew what I was going to hit but there was nothing in the world that he could do to stop it. That he knew I was going to hit a fireman's, he could have had a sledge hammer and still he wasn't going to stop it.

I didn't really [get bothered], a lot of times you can let [getting taken down right away] get to you right then, kind of put your head on the mat or something but I didn't. I fought as soon as he was on top of me. And I came right out and reversed him. So it turned out pretty well. I didn't let it bother me.

The second higher order theme within the dimension of **confidence issues** was that of *doubt turns into confidence*. Consistent with themes conceptualized in the best match **pre-competitive confidence issues** dimension, not all of the wrestlers were totally confident throughout their all-time best match performance. Three of the seven wrestlers made comments reflecting a growing confidence as the match progressed. The following two quotations are representative:

When I first went out there I was a little intimidated. But then as the match progressed, I knew I could beat him.

I remember after the first takedown, saying to myself, "I know I can beat him now". Cause I took him down and I knew if I could do it once I knew I could do it. The doubt that maybe I had before, that little 5% doubt, was gone.

The final higher order theme contained in the dimension of confidence issues was that of *broke opponent*. Two of the seven wrestlers discussed the sensation of coming to an awareness at a particular point during their all-time best match that their opponent had become resigned to losing the match thus further fueling their confidence. The following wrestler quotation illustrates these sentiments:

I can remember, there is always a point where you feel like you are kind of breaking a person. I definitely had that type of feeling in that match ... You can almost feel it to the point where the fight from his side kind of went down a little bit. Then you kind of get that taste that "hey I got this guy, I got him, he's hurt". I can still remember that, thinking OK, that is when you know you have it.

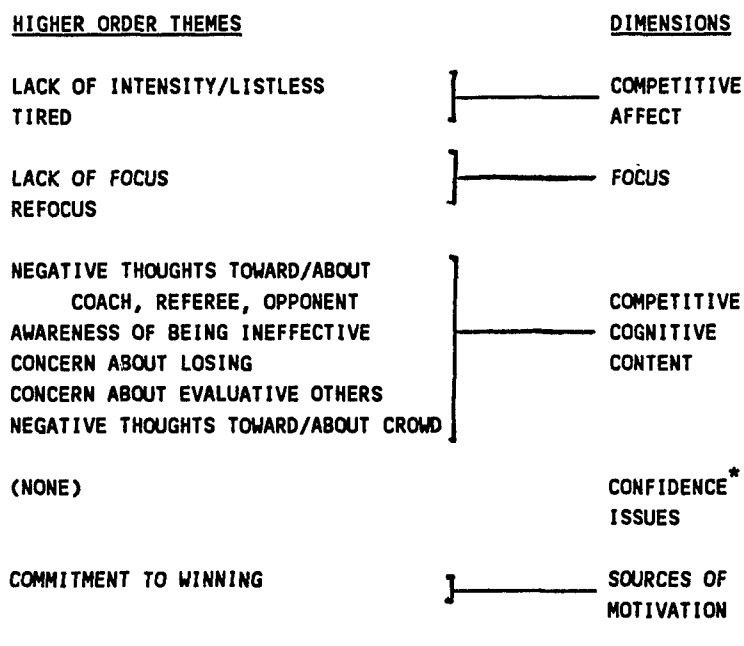
All-time best match competitive sources of motivation. The final dimension within the all-time best match competitive inductive analysis was that of **sources of motivation**. As can be observed in Figure 3, the only higher order theme identified was that of *crowd influences intensity*. Themes rising from the transcripts of three of the seven wrestlers were conceptualized into this higher order theme/dimension. These themes reflected wrestler references to the sensation of drawing emotional intensity from either the crowd in general or particular people present in the crowd. Examples of this notion can be observed in the following athlete quotations:

As the match was going on I think the fans were starting to pull for me cause they wanted to see an upset, and as I got the first takedown I could hear the fans cheering for me, there was a lot of fans there and I could sense they were pulling on my side. And I guess that kind of pumped me up, wanted me to

win even more ... after we went out of bounds after the first takedown I could hear the moaning of the fans, kind of like in shock, or sensing an upset, it was weird, it was a weird feeling, I could feel them rooting for me and wanting me to pull off the upset.

In between periods, I remember my parents and family were there and I remember thinking, and I was down 2-1 and I remember thinking, and I was down on the mat, it was my choice, and I remember just before I got set thinking about not wanting to lose, embarrass myself in front of my family. I remember thinking that. And I was doing that I think, kind of fire myself up.

Figure 4 - All-Time Worst Performance Competitive Higher Order Themes Organized By Dimension



*Although there were no raw data themes conceptualized as Confidence Issues, this dimension was identified in Figure 4 to emphasize the absence of these themes in this analysis despite the salience of such themes in other parts of the overall analysis.

All-Time Worst Match - Competitive Inductive Analysis

All-time worst match competitive affect. The dimension concerning **competitive affect** rose from eight raw data themes which were inductively organized into two higher order themes. As can be seen in Figure 4, the dimension of affect was composed of the higher order themes of *lack of intensity/listless* and *tiredness*. The raw data themes from which this dimension was conceptualized were extracted from the transcripts of five of the seven wrestlers.

The higher order theme of *lack of intensity/listless* contained raw data themes from three of the seven wrestlers indicating that they experienced feelings of listlessness during the matches with their wrestling lacking intensity or gusto. Quotations representative of these feelings included:

It was just a dull, dull feeling you know. Just like a gloomy feeling like gray clouds sort of.

I just know that I wasn't real intense. I mean I can remember that.

I just wanted to get off the mat it seemed like.

I am sure if I had put 2 and 2 together and just stopped and did it, I probably could have, but I guess I used it as a crutch [like] "I'll just stay down here and let the time go by, I'll get my points later".

The higher order dimension of *tiredness* was identified by two of the seven wrestlers during their worst performance. These feelings of *tiredness* were distinct from feelings of fatigue from the exertion of match but rather associated with the dull, flat feelings. In one

case the wrestler attributed these feelings, at least in part, to his attempts to make weight by dehydration the night before the match. The other wrestler associated these feelings with burnout from his training in preparation for the match.

All-time worst match competitive focus. The dimension of **competitive focus** rose from five raw data themes excerpted from the transcripts of five of the seven wrestlers. These raw data themes were inductively organized into two higher order themes. As can be seen in Figure 4, the dimension of affect was composed of the higher order themes of *lack of focus* and *refocus*.

Four of the seven wrestlers made reference to themes conceptualized within the higher order theme of *lack of focus* and these raw data themes reflected a quality of thought processing that was characterized by intruding or random thoughts. The following quotations illustrate this higher order theme:

I can just remember being not being real focused in the match. I think a lot of times your mind starts to wander and it seems odd that it could even in a match like that but it can. And not a great deal but just enough where you start letting things like fatigue, like pain, things like that start to nip away at you. I can't remember focusing on anything in particular.

It was kind of weird, I don't know what exactly I was thinking but it was kind of like I was thinking about other things when I was wrestling. You know about, I don't know exactly what ... my head was not there at all.

The higher order theme of *refocus* was evidenced in the transcript of a single wrestler who, interestingly, was the only wrestler that identified a winning match as his

all-time worst. Specifically, this wrestler had indicated that his thoughts were not focused initially in his match but experienced a turning point during which he gained his focus. As he described the event:

He reversed me and made it 2-1 [for] him. As soon as he reversed me, it was like "oh shit, chooo" and I was kind of like a fire drill and I escaped and it was 2-2. And then I was kind of focused. "OK here we go, I have got to take him down". And there was only 12 seconds left. So I was like "oh got to go, got to do something" and I took him down.

All-time worst match competitive cognitive content.

As can be observed in Figure 4, the dimension of **competitive cognitive content** contained the five higher order themes of *negative thoughts toward/about coach, referee, opponent; awareness of being ineffective; concern about losing; concerns about evaluative others and negative thoughts toward/about crowd*. This dimension was the product of the inductive analysis of 23 raw data themes extracted from the interview transcripts of all seven wrestlers.

Raw data themes conceptualized within the higher order theme of *negative thoughts toward/about coach, referee, opponent* were the most frequently cited with four of the seven wrestlers making such comment. This higher order theme reflected thought content that regarded particular individuals that the wrestler was aware of and thinking during their match. Negative evaluative components were associated with each of these thoughts and hence these are intimately related to the affect that the wrestler was

experiencing during the match. Quotations extracted from the transcripts illustrating this higher order theme include:

I was so busy resenting [Coach] that I wasn't wrestling the match ... I was so busy thinking, "I wish this idiot would shut the hell up so I could wrestle".

I was just so annoyed by so many things at that time. It was hard to be focused because I was like, I wanted to just tell everybody off, I wanted to tell the crowd off, I wanted to tell his coach off, I wanted to tell him off, I was just irritated by everything ... I wanted to smack the official right in the head. I just wanted to punch him.

The higher order theme of *awareness of being ineffective* within the dimension of **cognitive content** was also cited by four of the seven wrestlers. This higher order theme represented raw data themes in which wrestlers commented on a sense of inadequacy in their efforts during their all-time worst match. The following quotations of two of the wrestlers are representative:

Thinking how I got taken down, the way he was taking me down. I remember concentrating and thinking "damn what is he doing" and I remember I couldn't stop it ... I remember thinking, "man he got in there so quick, I don't know how, I can't stop it."

It just seemed like the harder I tried, the worse I was doing, just like nothing was going right ... It was like, "I've got to try harder", but when you try harder, it doesn't always work to your advantage. I mean you don't work smarter, wrestle smarter, so I was maybe taking stupid shots, trying things that I wouldn't normally try, maybe trying too hard.

Raw data themes were extracted from the transcripts of three of the seven wrestlers that were conceptualized into the higher order theme of *concerns about losing*. These themes were clearly related to **confidence issues** in that

they reflected *doubts or lack of confidence* however they were conceptualized in the dimension of **cognitive content** as clear references to thoughts at particular points in the match. The higher order theme of *concerns about losing* can be observed in the following quotation of one of the wrestlers:

I was down and I had been getting ridden for a little bit and I wasn't getting away, and it gets to a point of frustration. And I think that was the point where I started to lose it, like "man I am not going to win this match". And I think once that happens, that is when you have been broke. That doubt, that "Oh-Oh". As soon as that happens, you just made it so much tougher, it is tough to ever win it. And I think that is when it happened.

The raw data themes conceptualized into the higher order theme of *concerns about evaluative others* were extracted from the transcripts of three of the seven wrestlers. These raw data themes centered on wrestler concerns about how valued others would react to his performance. Of the five themes extracted, four were specific to the coach while a single concern regarded friends that had come to observe the match. The following quotations are illustrative of such wrestler concerns:

Coach screaming and yelling at me. He was screamin and yelling at me telling me I wasn't doing things right during the middle of the match which mentally, "Oh my god coach is already mad at me, the match isn't even over and he is already screaming."

I remember that a couple of my friends, they were around like 30, they had come to Raleigh to see the match and I remember thinking about how crappy I was feeling with them in the stands and that bothered me. Knowing that they were up there and I was wrestling so poorly.

The final higher order theme within the dimension of **competitive cognitive content** was that of *negative thoughts toward/about crowd*. Two of the seven wrestlers made reference of awareness of the crowd that was coupled with negative thoughts and feelings. Typical of the comments by these athletes was the statement: "I was frustrated, I was like ready to double pump the crowd off".

All-time worst match competitive confidence issues.

The inductive analysis of all-time worst match competitive data yielded no themes that were conceptualized as **confidence issues** although, as mentioned, the **cognitive content** higher order theme of *concerns about losing* are certainly related. The absence of themes conceptualized as **confidence issue** themes is noteworthy and interesting in the context of the salience of these issues in the all-time best match as well as throughout the Purpose 2 analyses.

All-time worst match competitive sources of

motivation. A theme emerging from the transcript of a single wrestler was conceptualized within the higher order theme of *commitment to winning* within this dimension. Interestingly, this theme emerged from the transcript of the single wrestler that had identified a winning match as his all-time worst performance. As the wrestler commented:

Just winning. My whole focus was just, I got to win, no matter what happens here, I have got to win. But if he takes me down or not, I have got to win.

Purpose 2 Results

To assess Purpose 2 contentions it was necessary to organize season match data according to performance level and interpret these data in the context of all-time best and worst matches. The results of analyses described in Chapter II to assess Purpose 2 contentions are reported in following sections: (a) compiled deductive categorization of pre-competitive and competitive season match themes, (b) idiographic analysis results of pre-competitive and competitive season match themes, and (c) nomothetic analysis results of pre-competitive and competitive season match themes. Again separate analyses were conducted on the data from the pre-competitive and competitive periods and hence each section of the Purpose 2 results includes subsections corresponding to these periods.

Purpose 2: Compiled Deductive Categorization of Season Match Themes

As mentioned in Chapter 2 regarding the Purpose 2 analyses, each of the 653 raw data themes extracted from the post performance interviews were carefully examined and, if possible, categorized according to previously identified dimensions and higher order themes inductively produced in the analysis of all-time best and worst performances. Two concerns emerged during the deductive categorization of season themes. The first concern was that not all of the emergent themes from season matches were amenable to deductive categorization according to all-time best and worst themes. This concern was addressed

by creating new higher order themes on an ad hoc basis. Some of these new higher order themes reflected issues present in the Purpose 1 analysis but in an insufficient frequency to emerge as independent higher order themes and hence had been lumped into general categories such as "irrelevant thoughts". Other new higher order themes created reflected issues that were notably absent from the Purpose 1 analysis.

The second concern regarded the potential for error or deficits in consistency of the deductive categorization of raw data themes. Whereas the Purpose 1 inductive analysis resulted in higher order themes that were defined by their constituent raw data themes, the deductive categorization in Purpose 2 required that pre-determined higher order themes define individual raw data themes. The examination of raw data themes compiled by higher order theme allowed for an evaluation of consistency in the deductive categorization process as well as in the ad hoc creation of new higher level themes.

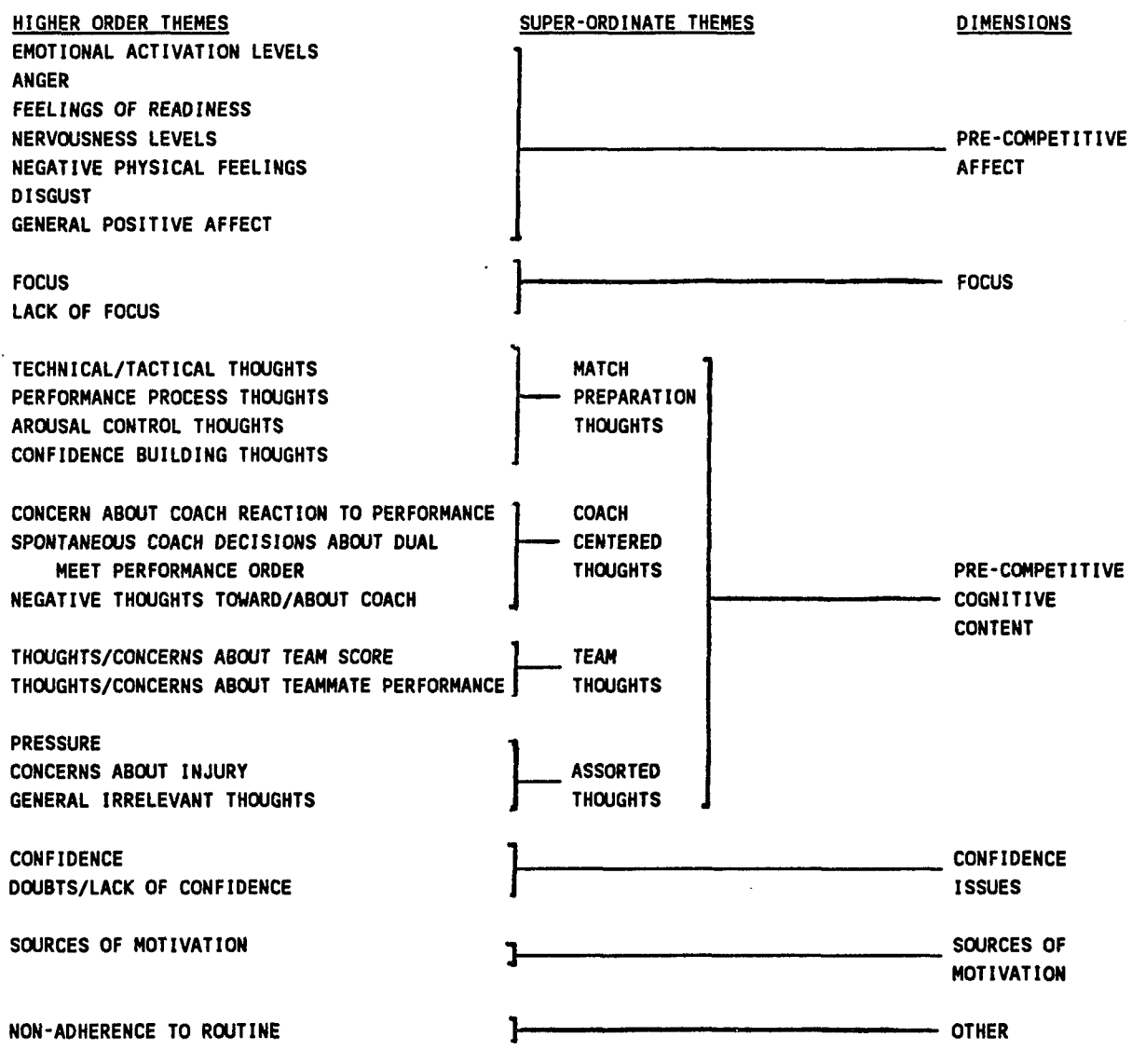
In this section the results of deductive categorization of pre-competitive and competitive themes from the 39 season matches will be overviewed according to the theme cohort evaluation. In reviewing this compilation of season match data, it must be kept in mind that these themes cohorts were culled from interviews concerning matches across a wide performance spectrum. Illustrative quotations will be interspersed throughout the results.

The examination of the compiled analyses serves three purposes. First, the identification of all theme issues serves to characterize the totality of the issues at stake across the season performances. Second, the identification of all higher order themes serves to provide definitional understanding of the particular issues to be discussed in subsequent stages of the Purpose 2 analyses. Third, the installation of super-ordinate themes to organize the proliferation of higher order themes in the dimension of cognitive content necessitates additional explanation. Although a broader reconceptualization of the higher order themes may have alleviated the need for these super-ordinate themes, the introduction of this additional level of abstraction allowed for the retention of the more specific salient higher order theme issues.

As was encountered in the Purpose 1 results, the presentation of the compiled season match theme analyses occurs in two sections corresponding to pre-competitive and competitive periods. The discussion of results within these sections proceeds by dimension with each of the subsumed higher order themes being revealed and discussed. However, unlike Purpose 1 results, the installation of super-ordinate themes will be evidenced in the dimension of cognitive content as an additional level of abstraction to organize the proliferation of higher order themes. Figure 5 reveals the super-ordinate and higher order themes associated with each of the dimensions arrived at in the

compiled season match pre-competitive deductive analyses while Figure 6 reveals the super-ordinate and higher order themes associated with each of the dimensions arrived at in the compiled season match competitive deductive analysis.

Figure 5 - Compiled Season Performance Pre-Competitive Higher Order Themes Organized By Dimension



Compiled Deductive Categorization of Season Match Themes - Pre-competitive

Season match pre-competitive affect. A total of 98 raw data themes identified in the season match data were categorized in the dimension of **pre-competitive affect**. As can be observed in Figure 5, the dimension of **pre-competitive affect** was composed of a total of seven higher order themes. These higher order themes included *emotional activation levels, nervousness levels, anger, feelings of readiness, negative physical feelings, general positive affect* and *disgust*.

Twelve raw data themes emerging from transcripts of four of the six wrestlers were conceptualized under the rubric of *emotional activation levels*. This higher order theme included a spectrum of raw data themes from emotionally intense through lacking intensity. Again it should be noted that although feelings referenced as lacking intensity or not being sufficiently "pumped up" were evidenced, it was not always entirely clear whether these feelings were associated with being completely over-aroused or with under-arousal. The following wrestler quotations illustrate high, more moderate and low levels of activation:

I was really pumped up, like I had a lot of adrenaline going, you know to go out there and kind of like, not rip the guy's head off but I really wanted to go out there, just being psyched up to go out there and wrestle.

I just was kind of pumped up because we were at their home and I like beating the guy in front of their crowd.

I just went out there and I just wasn't really pumped up the way I needed to be. I just was in a blah mood.

A higher order theme related to *emotional activation* was that of *nervousness levels*. This higher order theme contained 18 raw data themes found among the transcripts of five of the wrestlers. A spectrum of levels of nervousness were evidenced from intense nervousness to the point of fear through nervous confidence. The following quotations will serve to illustrate the variety encountered within this higher order theme:

I was nervous, kind of real nervous, kind of scared more than anything.

A little bit nervous but I felt pretty good ... just a little bit nervous, worried a little bit, not scared, just a little bit nervous.

I was nervous but ah, yea, kind of a nervous confident.

Another higher order theme related to *emotional activation* was that of *anger*. Six raw data themes were encountered among the transcripts of half of the wrestlers were specific to feelings of *anger* that permeated their feelings prior to season matches. Each of these themes made reference to feelings of *anger* in relation to either team performance or the coach. The following quotations of two of the wrestlers serve to illustrate this higher order theme:

I was a little bit pissed about the way the people had been wrestling.

I was just, I was pissed off, is the best way to put it ... I was frustrated and I was ticked off at [Coach] and I kind of, I wanted to get out there and get it over with, just angry I guess.

The higher order theme of *feelings of readiness* contained a total of 41 raw data themes encountered among the transcripts of all of the wrestlers. Raw data themes conceptualized as *feelings of readiness* were all self-referenced commentary reflecting positive, but nebulous sensations of "feeling good" and being "ready" to compete. As previously mentioned, further interview probing often unearthed issues surrounding *feelings of readiness* themes that were subsequently conceptualized in other higher order themes and dimensions, however, the global assessment represented in these themes were salient and hence maintained throughout the analyses. Although positive, *feelings of readiness* themes were not necessarily all equally ardent. For example, wrestlers often made comments such as "I had a good week of practice and preparation, I just felt ready" and "I was just ready to wrestle, I was in the right frame of mind ... I was just anxious [eager] to wrestle, ready to go". Alternatively comments such as the following reveal a lesser degree of readiness to compete:

I was rested up pretty well, worked pretty hard all week and stuff and just felt that I was pretty ready for the match ... I didn't feel perfect I guess, sometimes I can tell when I feel really good I feel real light on my feet kind of thing. I didn't exactly feel like that. I felt pretty good though. I wasn't perfect but I was pretty close.

The higher order theme of *negative physical feelings* contains 13 raw data themes from among interview transcripts of four of the six athletes. The themes conceptualized within this higher order theme made specific

comment about physical feelings that were considered to be non-optimal for entering a match. These included references such as being "nervously tight", "physically drained", "tired and lethargic", "sore", "a little weak".

The higher order theme of *general positive affect* contained a total of six raw data themes identified among the transcripts of two-thirds of the wrestlers. These *positive affect* themes included references to global sensations of positive feelings such as feeling particularly "good", "relaxed", "excited". In contrast to the references to positive affect in the higher order theme of the *feelings of readiness*, the *general positive affect* themes are not performance related themes. An example of the type of themes categorized within this higher order theme is:

I felt pretty good. I just felt good. Over night weigh-in and stuff ... just because it was such a nice day out, like I felt good, made me feel a lot better, like I say if it is a crummy day, I mean just everything just felt good, good night's sleep and everything. So I felt pretty good about it.

The final higher order theme identified in the dimension of affect was that of *disgust*. A single wrestler made several salient comments concerning an overwhelming sense of disgust prior to his matches concerning the previous matches of his teammates. As he expressed this sensation:

I was so disgusted with way the whole team was wrestling that I just wanted to win my match and get the hell out of that gym.

Season match pre-competitive focus. A total of 16 raw data themes identified in the season match data were categorized in the dimension of **pre-competitive focus**. As can be observed in Figure 5, the dimension of pre-competitive focus was composed of a total of two higher order themes. These higher order themes included *focus* and *lack of focus*.

Both of these themes are entirely consistent with higher order themes identified in the Purpose 1 analyses. The higher order theme of *focus* consists of eight raw data themes from the comments of four of the six wrestlers concerning a **pre-competitive focus** that was directed on the task at hand. By contrast, a further eight raw data themes found among the comments of four of the six wrestlers were conceptualized in the higher order theme of *lack of focus*. Such comments included:

I wasn't concentrating, I was lost ... I wasn't concentrating as much, I don't know, I just didn't feel mentally ready.

I wasn't mentally with it. I just wasn't ready ... I was totally, I was like zoned, like in a different land. You know I was like way out there ... I wasn't thinking about anything. I was kinda spaced. I don't know what it was. I wasn't there mentally. I wasn't ready to wrestle. I was kinda just like la-de-da-de-da.

Season match pre-competitive cognitive content. A total of 173 raw data themes identified in the season match data were categorized in the dimension of **pre-competitive cognitive content**. As can be observed in Figure 5, this dimension was composed of a total of 14 higher order themes that have been organized into four super-ordinate themes

for discussion convenience. Five of these higher order themes were direct deductive products of the Purpose 1 analysis. An additional five of these higher order themes were evidenced among the Purpose 1 raw data themes although inductively organized under the rubric of *irrelevant thoughts*. These themes were present in sufficient numbers in the season data to be organized into independent higher order themes. An additional four higher order themes emerged from the season data reflecting related but previously unidentified issues. These higher order themes will be discussed according to the super-ordinate themes of match preparation thoughts, coach-centered thoughts, team-centered thoughts, and assorted thoughts.

Match preparation thoughts included the higher order themes of *performance process*, *technical/tactical thoughts*, *arousal control thoughts*, and *confidence building thoughts*. As in the Purpose 1 analyses, the higher order themes of *technical/tactical* and *performance process* thoughts can be seen to be task relevant thoughts, but differing in the degree of specificity. More precisely, the 26 raw data themes conceptualized within the higher order theme of *technical/tactical thoughts* reflected a high degree of specificity to technical or tactical issues. By contrast the 44 raw data themes that were classified as relating to *performance process* reflected thoughts about the way the athlete wanted to wrestle the match but lacked anchor in specific techniques or tactics. Raw data themes

relating to both of these higher order themes were found among the comments of all of the wrestlers.

The higher order theme of *arousal control* contained a total of 10 raw data themes mentioned by five athletes. All of these themes were related to wrestler efforts to either elevate or suppress their arousal level to prepare for their match. Eight of the raw data themes were related to wrestler efforts to keep their arousal level under control in an effort suppress anxiety or pressure. Two of these themes related to the wrestler efforts to elevate their arousal level to get "up" for a match. The following quotations illustrate the type of themes conceptualized within this higher order theme:

Being at [university] and having the big crowd and stuff there, I was kind of, I tried to pretend like the crowd was there to see me wrestle ... It worked good cause it makes it so you are not fighting the crowd and the opponent. So everything they would boo or something, I was thinking that they were booing at the other guy.

Just go out and just have fun. That was what I was thinking. I was thinking instead of sitting trying to put pressure on myself saying "oh I've got to kill this kid", I just said "hey, you just wrestle him, let's just go out and have some fun".

I didn't have any idea about the guy. How good he was or anything like that. So I wanted to build him up to be pretty good.

The final higher order theme within the super-ordinate theme of match preparation thoughts was that of *confidence building*. Consistent with Purpose 1 analyses, this higher order theme related to self-statements made to build confidence for the upcoming performance. A total of 17 raw data themes found among the transcripts of two-thirds of

the wrestlers were conceptualized within this higher order theme.

The super-ordinate theme of coach-centered thoughts contained the three higher order themes of *concern about coach reaction to performance*, *spontaneous coach decisions about dual meet performance order* and *negative thoughts toward/about coach*. The higher order theme of *concern about coach reaction to performance* was composed of five raw data themes found among the transcripts of half of the wrestlers. These raw data themes concerned wrestler apprehension about consequences of failing to perform up to the coach's expectations. Such concerns are well illustrated in the following quotations:

I was thinking that if I didn't [win], I knew the coach would -- I just didn't want to lose, cause I knew the coach would be mad. If I won then it would be a lot, the ride home would be better, back to [city] and stuff.

I was [thinking] like, "Coach man, I've seen this kid whip some ass, I beat a kid 4-3 at Juniors and he just beat the piss out of that kid. Coach man, you think this kid is a scrub and he's an ass kicker" and I respected him ... Prior to the match I thought, "man Coach thinks I am going to kick this kid's ass", and this was my attitude OK, I thought "man Coach thinks I am going to kick this kid's ass and he is probably going to kick my ass. Coach is going to get pissed", like that. That was my whole attitude.

Fourteen raw data themes identified among the transcripts of half of the wrestlers were conceptualized within the higher order theme of *spontaneous coach decisions about dual meet performance order*. This higher order theme reflected uncertainty and/or surprise on the part of wrestlers when the coach made tactical decisions

about opponent match-ups affecting performance order or even opportunity. Frequently, these decisions were made very shortly prior to the match in which the wrestler was aware that he might have the opportunity to wrestle. The following quotations illustrate the contents of this higher order theme:

It was kind of hard to get psyched up for it cause I didn't know I was going to wrestle till actually the [weight] pound match. Coach was saying [teammate] was probably going to go [but then] we lost a couple of matches and didn't do as well as we had planned in a couple of the other weights so he was "[wrestler] you're going". So I didn't have much time to try to get ready for it mentally ... I mean I was kind of in the back just in case, trying to get ready but I thought [teammate] was going and then [weight class] came up and he was like "all right [wrestler] you're going". And it was like "whoa".

I think I warmed up a little bit early ... it throws me off a little bit. It just throws me off mentally a little bit because then I am just about ready to go and Coach doesn't tell us until there is about 30 seconds left in the match before. So it kind of bursts your mental bubble a little bit, and I got to wait another seven minute match or what ever.

The final higher order theme in the super-ordinate theme of coach-centered thoughts was that of *negative thoughts toward/about coach*. A total of four raw data themes expressed by two of the athletes were conceptualized within this higher order theme. These raw data themes reflected wrestler animosity toward the coach concerning previous incidents.

The super-ordinate theme of team-centered thoughts contains the two related higher order themes of *thoughts/concerns about team score* and *thoughts/concerns about teammate performance*. The higher order theme of

thoughts/concerns about team score contained 14 raw data themes identified among the transcripts of four of the six wrestlers. The vast majority of these comments reflected concerns about a precarious team score situation prior the wrestler's match and the pressure associated with the "must win" situation. However, there were a few positive themes emerging regarding the team performing well with the dual meet victory secured. The following quotations illustrate the contents of this higher order theme:

I was focused on our team score, like what the scenario would be if I won, and that was about all I was focused on.

We were getting really bad team points so I wanted to score some points to get the team a little bit back in it and try to get everybody, you know, try to swing the momentum a little bit and get some more points for the match.

They had the momentum and I was just trying to say, "don't let them keep the momentum going" or whatever.

I felt pretty good going out there knowing that the [dual] match was in pretty good shape as far as points.

The higher order theme of *thoughts/concerns about teammate performance* was composed of a total of 11 raw data themes identified among the transcripts of five of the six wrestlers. These raw data themes reflected more specific thoughts about teammate performance. Again most of these themes reflect negative thoughts about the impact of teammate performance but there were several positive comments as well. The following quotations will serve to illustrate the type of raw data themes contained within

this higher order theme:

I was getting into the match before and [teammate] got a pin so I guess that kind of got me psyched up.

Mentally I was just trying to get my, you know, focused into my match even though I must admit that the previous match kind of brought me down a little bit.

I was getting a little fired up because of the fact that I didn't think [teammate] wrestled very well at [weight class]. I don't like going out after a loss. Nobody does, it makes it a little more difficult, so I was thinking about that cause [teammate] was behind most of that match.

Everybody had lost up to that point except [teammate] so we were just getting blown out. I was trying not to let that bother me but it kind of did ... I was trying not to let it bother me that everybody else was getting beat, even really, beat pretty bad teamwise. So I was trying not to let that bother me, I was trying to talk myself out of that.

The super-ordinate theme of assorted thoughts contains the three higher order themes of *pressure*, *concerns about injury* and *general irrelevant thoughts*. The higher order theme of *pressure* was composed of six raw data themes evidenced among the transcripts of four of the six wrestlers and related wrestlers making particular note of either perceived pressure to win or, in one instance, the notable lack of pressure. Quotations illustrating this higher order theme are:

I definitely felt a little bit of the pressure as far as, just the pressure from, from me lately you know to perform because I haven't been really ... I think from everywhere really, from myself definitely and then from coach definitely, no question about that.

I didn't feel any pressure at all this time around. There wasn't that many fans and, I mean, I had nothing to lose as far as I was concerned.

Two wrestlers made a total of four references to thoughts prior to their matches that were conceptualized into the higher order theme of *concerns about injury*. These comments were in reference to previously sustained injuries and concerned potential implications for the present match. The type of concerns that were identified can be observed in the following wrestler quotations:

I was just kind of thinking in the back of my mind, thinking about my back, even though it didn't hurt during the match, but right before it hurt real bad, it was real sore just before, and then after. So before I was kind of thinking, "oh man this could be a little, like if I get stuck under him or something and he puts all his weight on it, it could really hurt or something".

I was worried about my knees. What if this, what if I get it yanked this way, that way, you know. The [dual] match is close, what if it gets torn all the way, I couldn't finish, then the team would lose, and stuff like that. So I was a little worried about it.

The higher order theme of *general irrelevant thoughts* is composed of 18 raw data themes emerging among the transcripts of all of the wrestlers that were not task relevant per se but also did not fall into any particularly salient groups of themes. This wide variety of themes included references to being glad the wrestler didn't have to make weight again, disliking the opponent, the pep band, the audience, wishing they were home, and disliking wrestling up a weight class.

Season match pre-competitive confidence issues. A total of 40 raw data themes identified in the season match data were categorized in the dimension of **pre-competitive confidence issues**. As can be observed in Figure 5, the

dimension of **pre-competitive confidence issues** was composed of a total of two higher order themes. These higher order themes were *confidence*, and *doubts/lack of confidence*.

Both of these higher order themes are consistent with the corresponding higher order themes in the Purpose 1 analyses in the dimension of **confidence issues**.

Specifically, the higher order theme of *confidence* deals with feelings of confidence that the wrestlers experienced prior to their performance. A total of 31 raw data themes identified among the transcripts of all of the wrestlers were conceptualized within this higher order theme. There were some degrees of "confidence" noted among the raw data themes conceptualized within this higher order theme ranging from total confidence to statements of conditional confidence. Statements such as the following illustrate a sense of total confidence:

I knew he was good but I mean I definitely knew I should beat him.

But right before I was out there I knew I could beat the guy.

I knew, I don't know why, it was weird, I knew I was going to pin him but I didn't know with what.

By contrast, following quotations illustrate a more conditional sense of confidence:

I wanted to go out there and wrestle a solid match and I figured that if I could wrestle a good solid match then I knew I would win.

I had a lot of confidence as far as that went you know and, I mean I knew that if I just went out and opened up, I should, you know, I should win.

Nine raw data themes found among the transcripts of half of the athletes were conceptualized within the dimension of *doubts/lack of confidence*. These themes reflected wrestler doubts about their ability to rise to the occasion and concerns about losing. These assessments included references to topics such as previous losses, previous performance, thinking of losing and the quality of the opponent. One could reasonably argue that the higher order themes of *confidence* and *doubts/lack of confidence* could be conceptualized upon a single continuum and that the division in to two higher order themes is arbitrary. This contention is granted although there was some system to the distinction. Specifically, themes that discussed confidence were placed in the higher order theme of *confidence* while themes that discussed doubts or lack of confidence were placed in the higher order theme of *doubts/lack of confidence*.

Season match pre-competitive sources of motivation. A total of 28 raw data themes were identified in the season match data and categorized in the dimension of **pre-competitive sources of motivation**. As can be observed in Figure 5, the dimension of pre-competitive affect was composed of a single higher order theme of the same label of *sources of motivation*. Raw data themes conceptualized within this higher order theme emerged from among the transcripts of all of the wrestlers. While the number of raw data themes was fairly large, the variety of issues that provided intensity to competitive efforts did not fall

neatly into identifiable clusters. In broad terms these included references to performing for the team, for the coach, to spite the coach, for the home crowd, for parents and relatives, determination to break a streak of bad performances, to "test" oneself against a superior opponent, and, of course, to beat dreaded cross state rivals.

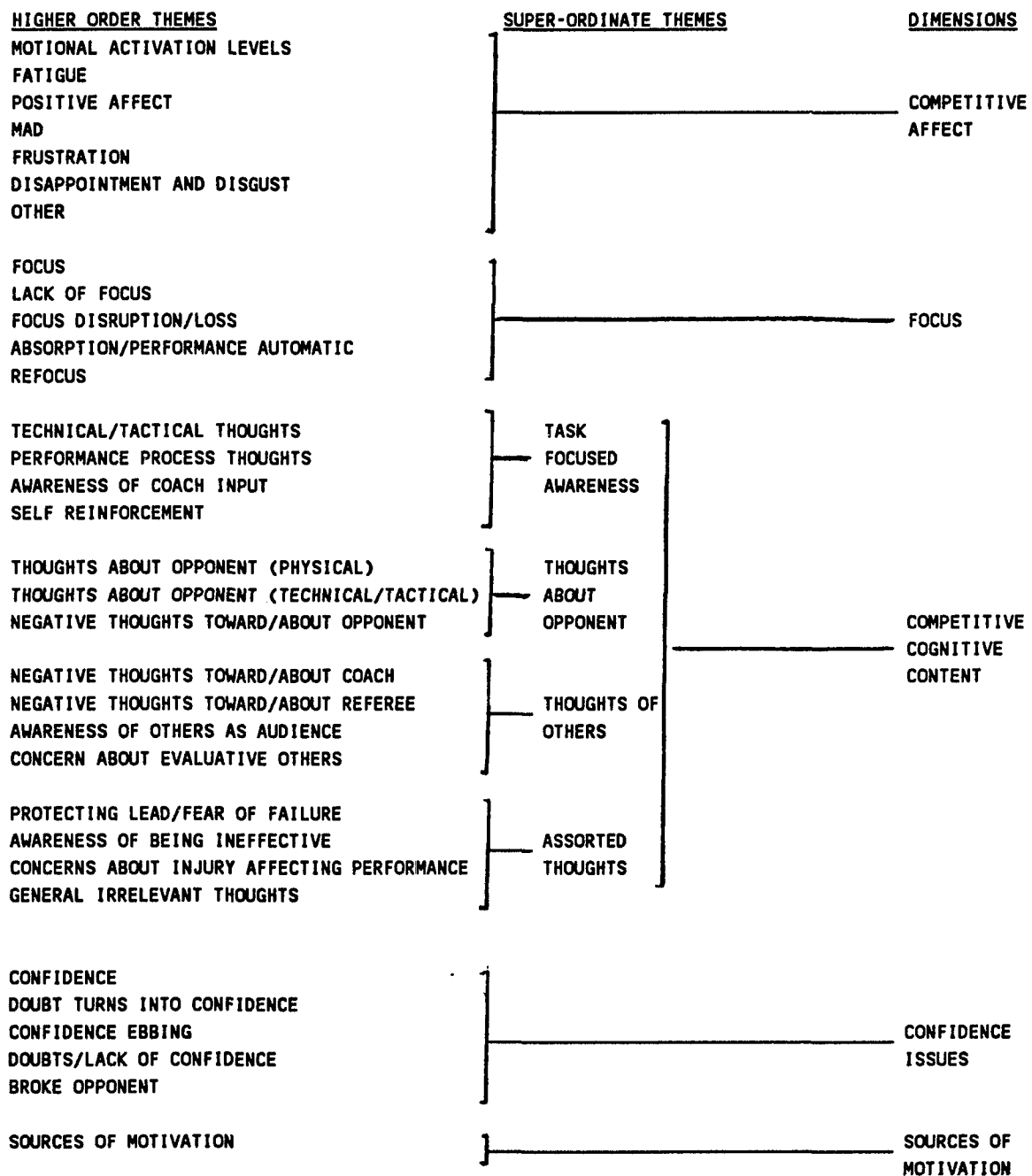
Season match pre-competitive other. A single raw data theme distinct from others in the data set was salient as well as being reminiscent of relevant literature and hence has been allowed to stand alone. This data theme was *non-adherence to routine* and reflected a wrestler's perception that a number of significant changes in his routine had influenced his match performance. In this wrestler's words:

They made me drill with [X] and stuff, I mean just a lot of things changed where, compared to, that haven't been. It has been like you usually get one pattern and it's a ritual. You know usually I'll drill with [Y] and then before the match roll with [Z] and that kind of thing. So now they made me drill with [X] the whole time and like I hate drilling with [X] ... He is just so slow and he's so big, he throws me down ... and then we had like a different prematch meal, we had like, went to a buffet where they had roast beef and pork chops and stuff. And mashed potatoes and stuff where I usually eat breakfast food.

Compiled Deductive Categorization of Season Match Themes - Competitive

Season match competitive affect. A total of 43 raw data themes identified in the season match data were categorized in the dimension of **competitive affect**. As can be observed in Figure 6, this dimension was composed of a

Figure 6 - Compiled Season Performance Competitive Higher Order Themes Organized By Dimension



total of seven higher order themes. These higher order themes included *emotional activation levels, fatigue, positive affect, mad, frustration, disappointment and*

disgust and *other*.

The higher order theme of *emotional activation levels* was composed of nine raw data themes emerging among the transcripts of two-thirds of the athletes. The majority of the themes conceptualized within *emotional activation levels* reflected feelings of non-optimal arousal levels associated with a lack of intensity that could have been associated with over or under arousal. However there was a single theme reflecting high positive intensity while two other themes emerged clearly depicting over-arousal. The following three wrestler quotations illustrate *activation level* themes depicting lack of intensity, high positive intensity, and over-arousal:

I was just kind of like wrestling like ouwh
la-de-da-de (real slow) here we go, you know.

I expected him to be a little bit easier at first
cause I was so pissed, I had so much emotion going, I
thought I was going to just go out there and tear him
apart but it took until really after the second
takedown to break him.

I was really nervous, I think it drained me.

Five raw data themes emerged among the transcripts of two of the wrestlers that were conceptualized in the higher order theme of *fatigue*. These raw data themes center on unexpected feelings of fatigue or tiredness that these athletes encountered during particular matches. The feelings were of particular note as unusual to the wrestler and attributed to the effects of cutting weight, or alternatively, the effects of a lengthy road schedule. As

one wrestler described his experience:

I was trying but he felt just so much stronger for some reason, not just because, I don't know, I wasn't ready you know. I don't know, I just didn't feel like, I felt like I had already wrestled a match or something, I was just tired, I couldn't, I felt like the end of practice kind of thing. Where you just want to get through it after a while. I was amazed I was reaching that point so fast in my match, you know, right at the beginning of the match I was reaching it.

The higher order theme of *positive affect* was composed of five raw data themes emerging from among the transcripts of half of the wrestlers. These themes included references to feeling "good", "comfortable", "excited" or "happy" during the match or about something that happened during the match.

The higher order theme of *mad* was composed of five raw data themes emerging from among the transcripts of two of the six wrestlers. The feelings of being *mad* were usually triggered by something that occurred in the match that the wrestler did not appreciate. An example of a raw data theme within the higher order theme of *mad* was:

I was kind of mad cause he was backing away so much. Like I would tie up and he would just kind of back right off the mat every time, and he complained a couple of times about like bumping heads. I was just getting, it kind of makes me mad.

Another emotional response experienced by the wrestlers during matches and triggered by the circumstances of the match was that of *frustration*. The higher order theme of *frustration* was composed of 12 raw data themes found among the transcripts of five of the six wrestlers. This negative affective response was experienced when the

wrestler's efforts were unsuccessful or when calls by the officials were perceived as bad, particularly at critical moments. Representative quotations include:

I was frustrated really, I think it was more frustrated at myself because I knew it was things that I usually don't do or don't get hit with and I was kind of beating myself bad.

[Getting called for stalling] was a little frustrating cause I was really getting kind of ticked off about it ... It was the fact that I knew what I was trying for but the official had never seen me wrestle or anything so he just thought maybe I was blocking off.

It was frustrating but there is not much I could do about it at that point ... I knew they weren't going to call him for stalling. Although he had a warning, you know they weren't going to give that second stalling warning in front of the home crowd.

The higher order theme of *disappointment and disgust* was composed of four raw data themes emerging among the transcripts of half of the wrestlers. These negative affect themes were associated with self-referenced wrestler evaluations of performance while still wrestling the match. The following quotation is illustrative of themes of *disappointment and disgust*:

Disgusted and discouraged ... I was getting very disgusted with myself because I knew I wasn't doing what I needed to be doing.

The final higher order theme in the dimension of **competitive affect** was that labelled *other*. This higher order theme was the repository of two of raw data themes from two of the wrestlers that were salient but not amenable to inclusion in any of the other higher order themes. The first involved a moment of levity followed by embarrassment with the wrestler realizing that his mirth was

inappropriate for the situation. The second involved a wrestler experiencing extreme surprise about being thrown to his back followed by extreme worry that he might experience something that he had never before experienced (being pinned).

Season match competitive focus. A total of 59 raw data themes were identified in the season match data and categorized in the dimension of **competitive focus**. As can be observed in Figure 6, this dimension was composed of a total of six higher order themes. These higher order themes included *focus*, *lack of focus*, *focus disruption/loss*, *absorption/performance automatic*, and *refocus*.

The higher order theme of *focus* is consistent with related higher order themes in other analyses in this investigation. Specifically, these themes reflected a high level of task focused concentration. This higher order theme contained a total of 26 raw data themes identified among the transcripts of all of the wrestlers. The following quotations are illustrative of the type of raw data themes that were conceptualized within the higher order theme of *focus*:

I was pretty much into the match, I mean I don't remember being aware or focusing on anything outside of the match.

I really don't think I was aware of much, anything other than Coach and the guy I was wrestling.

I wasn't really thinking about the crowd or even the coach that much ... [just] my opponent I guess. I was just aware that. I was aware of just being, I don't know, just of my opponent, I was really focused I guess. I just wanted to, I was real intense on him.

It was pretty much just focusing on what I was trying to do. And I, just like I say, just trying to fight, get some points back.

The higher order theme of *lack of focus* is also consistent with related higher order themes identified in other analyses in this investigation. Specifically, the raw data themes conceptualized within the higher order theme of *lack of focus* all relate a lower quality of task focused concentration than evidenced in the higher order theme of *focus*. Seven raw data themes were categorized as relevant to a sense of *lack of focus* and these themes emerged from among the transcripts of half of the athletes. The theme of *lack of focus* can be observed in the following wrestler quotations:

I really wasn't paying attention to anything, you know what I mean. I wasn't concentrated ... I wasn't focused, that was my biggest problem and I wasn't ready.

I was just so out of it, I was like phtttt, you know I was so spaced.

The higher order theme of *focus disruption/loss* contained a total of three raw data themes found among the transcripts of two of the wrestlers. These raw data themes all shared the notion that the wrestler had some sense of being focused in the match but as the match progressed either had their focus disrupted or completely lost their focus. In two of the relevant matches, it was revealed that breaks in match continuity because of opponent injury

timeouts disrupted wrestler concentration and focus. The third raw data theme regarded a loss of concentration and focus following a mistake costing a large number of points early in the match.

A total of 12 raw data themes identified among the transcripts of half of the wrestlers were categorized in the higher order theme of *absorption/performance automatic*. The *absorption/performance automatic* themes express a sense of being absorbed into the match to an extent that action and awareness merge with action seeming to almost take place in the absence of thought. The following wrestler quotations illustrate this notion:

It is kind of hard for me to remember actually ... Sometimes that happens when I am wrestling like real focused. It is kind of like when I am out there it's like muscle reaction, it is not really me thinking. I mean I am thinking yet I'm not. You know it is like real hard for me to remember after the match ... That is basically what I remember, I mean, I'm sorry, I mean I really don't remember it in detail, in order, like I do [university], you know.

I don't remember much of the match to tell you the truth. It is kind of weird ... I remember most of my other matches I guess when I am not as focused, **but when I focus more I guess I just do things I should do** ... I mean like a couple of matches, the last matches I have been wrestling, I knew like exactly what happened kind of thing. But this one I don't remember much of the match.

The final higher order theme in the dimension of *focus* was that of *refocus*. This higher order theme was composed of a total of 11 raw data themes identified among the transcripts of five of the wrestlers. These raw data themes all relate to a lack, disruption, or loss of focus that the wrestler remembers actively trying to combat to

gain satisfactory attentional focus. Some of the comments conceptualized within *refocus* included:

I got off my back finally and I think that there was a little bit of time left, like 15 seconds left in the period and I was thinking "well just let me try to collect myself, and try and get a point escape".

I was thinking a lot, just about wrestling the match and trying to get my head cut into it.

It is important to me in that kind of match to hold my composure ... I almost slipped a couple of times but I ended up holding it.

Season match competitive cognitive content. A total of 166 raw data themes were identified in the season match data and categorized in the dimension of **competitive cognitive content**. As can be observed in Figure 6, this dimension was composed of a total of 15 higher order themes that have been organized into four super-ordinate themes for discussion convenience. Ten of these higher order themes were direct deductive products of the Purpose 1 analysis. An additional five higher order themes emerged from the season data reflecting related but previously unidentified issues. These higher order themes will be discussed according to the super-ordinate themes of task focused awareness, thoughts about opponent, thoughts of others, and assorted thoughts.

The super-ordinate theme of task focused awareness included the higher order themes of *performance process*, *technical/tactical thoughts*, *awareness of coach input*, and *self reinforcement*. As in the Purpose 1 analyses, the higher order themes of *technical/tactical thoughts* and

performance process thoughts can be seen to be related task relevant thoughts, although differing in degree of specificity. The 35 raw data themes conceptualized within the higher order theme of *technical/tactical thoughts* reflected a high degree of specificity to technical or tactical issues. By contrast the 14 raw data themes that were classified as relating to *performance process* reflected thoughts about the way the athlete was trying wrestle the match but lacked anchor in specific techniques or tactics. Raw data themes relating to both of these higher order themes were found among the comments of all of the wrestlers.

The higher order theme of *awareness of coach input* contained a total of 18 raw data themes mentioned by five athletes all related to wrestler awareness of match technical or tactical input by the coach from the sidelines. These themes were related to both an awareness while action was taking place as well as looking to the coach for information during breaks in the action. The following quotations illustrate the type of themes conceptualized within this higher order theme:

Like when we go out of bounds, when I would go back to the middle, then I would look at the Coach and he would say keep the pressure on, keep inside control and I would be like "OK keep inside control".

[I was aware of] Coach ... him telling me what was there, what was open. Stuff that I wasn't paying attention to ... he wasn't yelling and screaming, he was telling me what he thought was open.

The higher order theme of *self reinforcement* contained a total of 14 raw data themes among which all athletes were

represented. These "self reinforcement" themes concerned self reassurance or positive self feedback by the wrestler during the performance. The following quotations illustrate the type of themes conceptualized within this higher order theme:

I got a couple of takedowns and I was thinking "that's good".

I got that, and that period ended and I was just trying to tell myself "hey you are still in it, you just have to go to work again and try".

Just [thinking] that I could beat this guy or whatever. I kept saying to myself "what are you doing", "let go", "let's get it started". And "you're better than this guy and you should beat him".

I felt pretty good. I was getting a little tired but I was making sure that I wasn't telling myself that so I was becoming more tired. I was just kind of saying "I am feeling good, I'm feelin good", trying to bounce around, trying to stay smart.

The super-ordinate theme of thoughts about opponent contained the three higher order themes of *thoughts about opponent (physical)*, *thoughts about opponent (technical/tactical)* and *negative thoughts toward/about opponent*. The higher order theme of *thoughts about opponent (physical)* was composed of 11 raw data themes found among the transcripts of five of the wrestlers. These raw data themes were all concerning wrestler thoughts about the opponent's strength, size or conditioning level. These thoughts were often mentioned in association with technical or tactical decisions during the match as relevant information in making certain decisions. As one wrestler commented:

I remember right when we started off, I could tell he was pretty strong ... I mean you could tell, he looks pretty strong and then you know we tied-up and you could tell it was going to be a pretty physical match.

Six raw data themes found among the transcripts of four of the wrestlers were conceptualized within the higher order theme of *thoughts about opponent (technical/tactical)*. These raw data themes related to the tactics or techniques that the opponent was using. Usually these thoughts were relative to opponent tactics such as stalling to end the match in a tie or to keep the score low. As one of the wrestlers commented:

I was thinking, my exact thought, "this [expletive] is going to be content to tie". And I felt that he was totally content ... the score was tied and I was just "he is totally content to tie". And I was shooting and he never took a shot. And I was snapping him and trying to bang his head and he was just like happy it seemed.

The final higher order theme in the super-ordinate theme of thoughts about opponent was that of *negative thoughts toward/about opponent*. A total of seven raw data themes expressed by four of the athletes were conceptualized within this higher order theme. These raw data themes reflected negative wrestler thoughts and feelings directed at their opponent as a consequence of incidents occurring during the course of the match. The following quotations represent typical themes categorized within *negative thoughts toward/about opponent*:

He was complaining like "ref watch this", and I was like "come on just wrestle you pussy".

I was just like "you suck". I was irritated because I was like, what the hell, I would rather lose than fricken tie, I mean, he didn't want to wrestle.

Thoughts of others included the higher order themes of *concerns about evaluative others, negative thoughts toward/about coach, negative thoughts toward/about referee, and awareness of others as audience*. The higher order theme of *concern about evaluative others* contained a total of five raw data themes mentioned by four athletes. As in the Purpose 1 analyses, these raw data themes centered on wrestler concerns about the reactions of valued others to his performance. Of the five themes extracted, three were concerned with how the coach(es) might react to poor wrestler performance. The other two concerns were relative to a brother in attendance and the crowd in general.

Examples of concerns centered on the coaches include:

[I was aware of] Coach screaming and yelling ... I remember thinking that if I didn't get my rear end going I was going to get my ass kicked by coach.

I remember looking over at Coach and Coach [assistant] and them not really saying anything because they were pretty pissed off at that point ... Just at the whole situation, what the team had been doing and then you know I was losing so they just kind of sat there. Usually they will say something when you look over but they weren't doing much of that so ... It really didn't bother me cause I kind of knew what they [the coaches] were thinking. So I tried just not to let it affect me and kept going with what I was trying to do.

The higher order theme of *negative thoughts toward/about the coach* was composed of a total of seven raw data themes culled from among the interviews of half of the study participants. These raw data themes reflected negative, non-task related thoughts about the coach that

were occupying the athlete's mind during the match. These thoughts were related either to incidents that had occurred prior to the start of the match or else to negative feedback that the wrestler had received during the match itself. The following quotations illustrate this notion:

Like when I would look over to the bench or something he would be yelling stuff out that was positive and I was just like "what did you change your mind now cause I am winning or something", I was still kind of upset about that I guess.

It gets to the point where now I am not only battling the person I am wrestling, I am battling Coach too because he is not a very positive influence on the side when things aren't going very well. He yells and screams ... which kind of makes, you know, makes it a little worse I think.

A total of four raw data themes found among the transcripts of half of the study participants were conceptualized within the higher order theme of *negative thoughts toward/about the referee*. The *negative thoughts toward/about the referee* reflected wrestler perceptions that the official had committed either sins of omission or commission in his management of the match and that these sins could influence the outcome of the match. An illustrative quotation in this higher order theme was:

The referee we had last night was, I mean he was horrible, I mean he just didn't have a good feel for anything. And the guy kept doing that I mean like twice he stopped it for potentially dangerous rather than a stalemate or even a stall. And I was like "you have to be kidding me" ... the guy just didn't have a feel you know and I remember thinking, "I can't believe this".

The final higher order theme in the super-ordinate theme of thoughts of others was *awareness of others as audience*. This higher order theme contained eight raw data

themes extracted from among the transcripts of two-thirds of the wrestlers. These raw data themes indicated a wrestler awareness of onlookers to the match and included references to the crowd, a roommate, the pep band, teammates on the bench and opposing coaches. In contrast to *awareness of crowd* higher order themes evidenced in the all-time best competitive analysis, many of these themes did not reflect some special awareness in addition to an absorption in performance. Rather most, but not all, of the *awareness of others as audience* themes reflected an awareness impinging upon the wrestler's concentration.

These raw data themes included:

I was more aware of the crowd, not necessarily of what they were saying but more aware that I was wrestling in front of a crowd. I think it was just because they were a home crowd.

Just it was weird, I, I usually don't hear any, any people from the crowd but I heard my roommate. He said something once and I, and I remember hearing that for some reason ... he just yelled something and that just stood out in the crowd, it was weird.

I was pretty aware of the crowd I guess ... the cheering kind of. I heard it more I think today than usual. Maybe cause I was a little less focused on my match.

The super-ordinate theme of assorted thoughts was composed of the four higher order themes of *concern about losing/protecting lead*, *aware of being ineffective*, *concern about injury affecting performance* and *general irrelevant thoughts*. The higher order theme of *concern about losing/protecting lead* was composed of five raw data themes culled from among the transcripts a third of the study

participants. These themes reflected failure concerns in some cases causing the athlete to change their wrestling strategy from "wrestling to win" to "wrestling not to lose". The following wrestler quotations illustrate these two related ideas:

Just [thinking] that I didn't want to lose again or that I can't lose again. That's, I guess that was the main thought.

It is just a problem that I start out well and then I don't finish up well ... I just, I guess I get too conservative ... just maybe because I am trying to hold on to the lead or something.

The higher order theme of *aware of being ineffective* was entirely consistent with this higher order theme in the Purpose 1 analyses. The higher order theme of *aware of being ineffective* was evidenced among the transcripts of five of the six wrestlers in a total of 12 raw data themes. These raw data themes reflect an awareness (in some instances a preoccupation) of performance ineffectiveness and being unable to accomplish what the wrestler thought were attainable match objectives.

Two of the wrestlers made comments conceptualized within the higher order theme of *concern about injury affecting performance*. These two raw data themes reflected wrestler perceptions that concern over previously sustained injuries caused them to avoid taking risks that may have aggravated these injuries or caused pain. As one of the wrestlers commented:

I think inevitably [my knee] made me a little more timid on a few of my shots ... it was a planted seed. I think it is coming with, because of practice and everything, I have been hesitant on my shots because I

am a little timid and afraid I am going to hurt it again and there is no place for that. I need to work through that.

Finally, two raw data themes were labeled as *general irrelevant thoughts*. Two athletes made reference to thoughts that were not amenable to reduction among the established higher order themes. These thoughts regarded a sense of disbelief that a lowly regarded opponent had escaped from a pinning situation, and disbelief that the wrestler had managed to get himself into a particular situation.

Season match competitive confidence issues. A total of 41 raw data themes were identified in the season match data and categorized in the dimension of **competitive confidence issues**. As can be observed in Figure 6, this dimension was composed of a total of five higher order themes. These higher order themes included *confidence*, *doubt turns into confidence*, *confidence ebbing*, *doubts/lack of confidence* and *broke opponent*.

The higher order theme of *confidence* was composed of 26 raw data themes garnered from among the transcripts of all of the wrestlers. The raw data themes conceptualized within this higher order theme were entirely with the *confidence* higher order themes in other analyses and hence no further characterization is necessary.

The higher order theme of *doubt turns into confidence* was composed of three raw data themes from the comments of two of the six wrestlers. These themes reflected feelings by the wrestlers that they were outclassed at the beginning

of the match that were replaced by realizations that these doubts had been either exaggerated or unfounded as the match progressed. As one of the wrestlers commented:

Just [thinking] that he wasn't as good as I thought he was or like he is not so tough and thinking that I could go with him, that I had the capability of beating him ... I felt pretty good, I mean you know, there it is, a shot I can actually help the team out here.

The higher order theme of *confidence ebbing* reflects nearly the opposite sentiments to those expressed in *doubt turns into confidence*. Six raw data themes emerging among the transcripts of half of the wrestlers revealed feelings of faltering confidence as the match progressed. This disconcerting feeling is illustrated in the following wrestler quotation:

I mean I was getting pretty down. I just couldn't believe, you know, I mean, you start doubting like "what in the world is happening to me here".

Another related higher order theme was that of *doubts/lack of confidence*. This higher order theme was composed of three raw data themes encountered among the transcripts of two of the wrestlers. Misgivings about the wrestler's ability to measure up to the task and the effects of these misgivings can be observed in the following wrestler quotations:

There is a lot of times when I feel myself, you know, where I kind of think "well there it is -- no"; you know, you kind of second guess yourself ... Today that happened a few times too where I just kind of let a few things go, a few opportunities slide where I should have been more aggressive, not so much in the sense of just pounding but actually going after it.

I was just really tentative on my feet and I wasn't taking shots at all. I wasn't confident at all.

I think it was kind of more or less that I was nervous or afraid to lose a takedown.

The final higher order theme emerging within the dimension of competitive confidence issues was that of "broke opponent". Three wrestlers identified points in three matches at which they became certain that their opponent had given up any hope of winning the match. A wrestler quotation of such a point illustrates the his higher order theme:

He got a shot, it was real deep on me and it kind of scared me. I fell I think, I fell on my butt or something, I remember trying to fight it, and I was like "holy shit", cause it was like a minute left in the match and I was thinking "oh my gosh, I am not going to lose this one". So I was fighting, trying to fight it really hard and I ended up getting away. I remember he was really deep and we broke away, it was like on the edge of the mat and he didn't want to go, he was broke. I could tell just mentally cause he just kind of gave up, he just stood there.

Season match competitive sources of motivation. A total of 7 raw data themes identified in the season match data were categorized in the dimension of **competitive sources of motivation**. As can be observed in Figure 6, this dimension was composed of a single higher order theme of the same label of *sources of motivation*. This higher order theme was composed of seven raw data themes emerging from among the transcripts of two thirds of the wrestlers. Three of the raw data themes reflected a commitment to winning. Two of the raw data themes concerned a sense of "pride" that spurred the wrestler to continue struggling with all of his resources even though he was getting so

badly beaten so as to have no real hoping of winning the match or making the score respectable. A single raw data theme emerged concerning the motivating effects of wrestling an opponent that complains during the match. The final raw data theme conceptualized within the dimension of sources of motivation was that of the motivating effect of being placed in danger of being pinned.

Purpose 2: Results of Pre-competitive and Competitive Idiographic Analyses

Case study analyses of data arranged according to performance rankings were conducted for the purpose of examining hypothesized associations between performance levels and cognitive events. As discussed in Chapter II, the individual ordinal performance arrays were created by having the study participants rank order from best-to-worst all of the matches from which data had been accumulated.

In examining the ordinal performance arrays, it was found in all cases that the match identified as the all-time best performance in Interview 1 remained cherished as the all-time best performance in the data set. By contrast, four of the six wrestlers experienced new all-time lows in performance among the season matches for which they had been interviewed. Three of these wrestlers experienced one match that was ranked below their prior all-time worst performance with the fourth wrestler identifying three 1990-91 season matches in the data set as falling below the previous all-time worst performance.

Three of the wrestlers that ranked season matches below previous all-time worst performances were seemingly capricious either in their performance ratings or rankings of these performances. The interview question regarding performance assessment specifically asked the wrestlers to rate their performance on an 11 point Likert scale with the descriptors of "all-time worst" and "all-time best" attached to the scale anchors of 0 and 10. While it would be expected that matches ranked below the match identified in Interview 1 as the all-time worst match would have a performance rating of 0, it was found that these wrestlers provided performance ratings between 3 and 6 for these matches. However, examination of the raw data themes emerging from these performances revealed no contradictions to the findings from the Purpose 1 all-time worst performance analyses. Hence, it would seem, while this observation is vexing, that the evaluative processes of these individuals in ranking and rating performance were not entirely capricious.

The reporting of the idiographic analyses results begins with a preliminary characterization of the data arrays for each wrestler. Case-by-case reporting of pre-competitive and competitive analysis results are contained in the two subsequent sections. Consistent with the reporting of results of previous analyses, the idiographic analyses proceed by dimension. Within some dimensions, where the emergence of common data themes

across similarly rated performances was apparent, the discussion of super-ordinate and higher level themes has been characterized according to performance levels. This occurs most notably in the dimension of cognitive content. The discussion of other dimensions, sparsely populated with themes or lacking readily apparent consonance in emergent themes across similarly rated performances, proceeds by higher order themes.

Within both the pre-competitive and competitive sections, a summary of patterns in each dimension culminates each case study analysis. These summaries identify any evident dimensional trends across the performance arrays in broad strokes and draw upon relevant higher order themes regardless of dimensional classification. For example, when examining issues related to affect it is relevant to make reference to **cognitive content themes** evidencing an affective component such as *negative thoughts toward/about coach*.

Characterization of Case Study Ordinal Performance Arrays

Case 1. A total of nine matches were organized within the performance array of the Case 1 study participant. The polar ends of the performance spectrum were represented by the matches identified in Interview I as all-time best and worst performances. The season match performance ratings ranged from a low of three to a high of seven ($\bar{M}=4.5$, $SD=1.7$) and were correlated with season performance rankings at $-.81$. The performance ratings within this data array in order from highest to lowest performance ranking

were all-time best, 5, 7, 5, 5, 5, 2.5, 2, all-time worst. Among these matches were five wins and four losses with match outcome correlating with performance ratings at .73 and performance ranking at -.69.

In examining the performance data array for this study participant, it seems reasonable to discuss some of the results in terms of three performance levels particularly in the dimension of **cognitive content** wherein there were identifiable groups of matches sharing very similar performance ratings and raw data themes. The all-time best match, also the top ranked match, stands as a distinct high level of performance. The matches ranked second through sixth (performance ratings of 5, 7, 5, 5 respectively) evidenced the emergence of very similar raw data themes and share similar, more moderate performance ratings. Likewise the performances ranked seventh through ninth (performance ratings of 2.5, 2, all-time worst) share similar raw data themes while evidencing very low performance ratings.

Case 2. A total of eight matches were organized within the performance array of the Case 2 study participant. The polar ends of the performance spectrum were represented by the matches identified in Interview I as all-time best and worst performances. The season match performance ratings ranged from a low of six to a high of nine ($\bar{M}=7.1$, $\underline{SD}=1.3$) and were correlated with season performance rankings at -.94. The performance ratings within this data array in order from highest to lowest performance ranking were

all-time best, 9, 8, 7.5, 6, 6, 6, all-time worst. Among these matches were three wins and five losses with match outcome correlating with performance ratings at .86 and performance ranking at -.85.

The data array from this study participant was framed at the polar ends of the performance spectrum by the performances identified in Interview 1 as all-time best and worst performances. Examination of raw data themes from these performances reveal these performances to stand as distinct from other performances. The performances ranked between these polar ends of the performance spectrum represent a range of performance rather than a level. Themes emerging in these more moderate performances adhere strictly to neither of these polar extremes in pre-competitive cognitive content, rather, aspects of both are apparent.

Case 3. A total of six matches were organized within the performance array of the Case 3 study participant. The match identified as the all-time best match remained the top ranked performance while one season match was ranked below the previous all-time worst performance. The season match performance ratings ranged from a low of three to a high of seven ($M=4.6$, $SD=2.0$) and were correlated with season performance rankings at -.88. The performance ratings within this data array in order from highest to lowest performance ranking were all-time best, 7, 5.5, 3, all-time worst, 3. Among these matches were two wins and four losses with match outcome correlating with performance

ratings at .80 and performance ranking at -.83.

In examining the performance data array for this study participant, it seems reasonable to discuss some of the results in terms of three performance levels particularly in the dimension of **cognitive content** wherein there were identifiable groups of matches sharing very similar performance ratings and raw data themes. The all-time best match which was the top ranked match stands as a distinct performance level. The matches ranked second and third (performance ratings of 7, 5 respectively) evidenced the emergence of very similar raw data themes and more moderate performance ratings. Finally, the performances ranked fourth through sixth (performance ratings of 3, all-time worst, 3 respectively) share similar raw data themes (or the absence thereof) while evidencing very low performance ratings.

Case 4. A total of nine matches were organized within the performance array of the Case 4 study participant. The match identified as the all-time best match remained the top ranked performance while three season matches were ranked below the previous all-time worst performance. The data array for this subject provides an interesting picture given the relative placements of the all-time best and worst performances in the context of the performance ratings and rankings. Specifically the three season matches ranked below the wrestler's all-time worst performance received performance ratings of 6, 6 and 4 on a

Likert scale that had the all-time worst match anchored at 0 and the all-time best match anchored at 10 while the four matches ranked above the all-time worst match ranged in performance ratings from 7 to 8. As indicated, the season match performance ratings ranged from a low of four to a high of eight ($\bar{M}=6.5$, $SD=1.4$) and were correlated with season performance rankings at $-.94$. The performance ratings within this data array in order from highest to lowest performance ranking were all-time best, 8, 7.75, 7, 7, all-time worst, 6, 6, 4. Among these matches were four wins, two ties and three losses with match outcome correlating with performance ratings at $.85$ and performance ranking at $-.84$.

In examining the performance data array for this study participant, it seems reasonable to discuss some of the results in terms of three performance levels particularly in the dimension of **cognitive content** wherein there were identifiable groups of matches sharing very similar performance ratings and raw data themes. The top ranked and all-time best rated match stands alone as a discrete performance level. The matches ranked second through fifth (performance ratings of 8, 7.75, 7, 7 respectively) can be argued to be representative of a more moderate performance level that is distinctly below the all-time best performance yet falling above the all-time worst performance. Finally, the sixth through ninth ranked performances (performance ratings of all-time worst, 6, 6, 4) can be argued to represent a low performance level with

each being identified as an all-time worst performance or below in ranking.

Case 5. A total of nine matches were organized within the performance array of the Case 5 study participant. The match identified as the all-time best match remained the top ranked performance while one season match was ranked below the previous all-time worst performance. The season match performance ratings ranged from a low of zero to a high of nine and a half ($M=7.3$, $SD=3.3$) and were correlated with season performance rankings at $-.82$. The performance ratings within this data array in order from highest to lowest performance ranking were all-time best, 9.25, 9, 8.75, 9.5, 7, 7.5 all-time worst, 0. Among these matches were six wins, one tie and two losses with match outcome correlating with performance ratings at $.58$ and performance ranking at $-.15$.

In examining the performance data array for this study participant, it seems reasonable to discuss some of the results in terms of three performance levels particularly in the dimension of **cognitive content** wherein there were identifiable groups of matches sharing very similar performance ratings and raw data themes. The top five ranked performances (performance ratings of all-time best, 9.25, 9, 8.75, and 9.5 respectively) evidenced the emergence of very similar raw data themes and shared similar relatively high performance ratings. The sixth and seventh ranked matches (performance ratings of 7, 7.5

respectively) share common raw data themes and were rated as more moderate performances. Finally the two lowest ranked performances (performance ratings of all-time worst, 0 respectively) also evidence similar raw data themes and as well as extremely low performance ratings.

Case 6. A total of nine matches were organized within the performance array of the Case 6 study participant. The match identified as the all-time best match remained the top ranked performance while one season match was ranked below the previous all-time worst performance. The season match performance ratings ranged from a low of three to a high of eight and a half ($\bar{M}=7.0$, $\underline{SD}=1.8$) and were correlated with season performance rankings at $-.66$. Clearly the correlation between performance rankings and ratings for this study participant is the lowest of the group. However, the matches ranked 2 through 7 all received performance ratings between 7 and 8.5, and while the ordering of these matches is not exactly as might be expected according to the ratings, it does seem plausible that such close performance ratings may be jostled in ranking when other potential considerations such as opponent difficulty are taken into account by the wrestler. For example, the sixth ranked but highest rated performance occurred against the opponent rated as weakest by the wrestler. Hence it was not entirely surprising to find mitigating factors such as opponent difficulty influencing the rankings of similarly rated performances when evaluated as a cohort. The performance ratings within

this data array in order from highest to lowest performance ranking were all-time best, 7.5, 8, 7.5, 7, 8.5, 7, all-time worst, 3. Among these matches were seven wins and two losses with match outcome correlating with performance ratings at .97 and performance ranking at -.72.

In examining the performance data array for this study participant, it seems reasonable to discuss some of the results in terms of three performance levels particularly in the dimension of **cognitive content** wherein there were identifiable groups of matches sharing very similar performance ratings and raw data themes. The top ranked and all-time best rated performance stands as a distinct performance level. The matches ranked second through seventh (performance ratings of 7.5, 8, 7.5, 7, 8.5, 7 respectively) evidenced the emergence of very similar raw data themes and shared similar, more moderate performance ratings. Likewise the performances ranked eighth and ninth (performance ratings of all-time worst, 3 respectively) share similar raw data themes while evidencing very low performance ratings.

Case 1 Idiographic Analysis: Pre-competitive Results

Case 1: Pre-competitive affect. Raw data themes conceptualized within the higher order theme of *feelings of readiness* were evidenced in each of the top eight ranked matches (performance ratings of all-time best, 5, 7, 5, 5, 5, 2.5, 2 respectively) although these themes were not uniformly ardent. All of the *feelings of readiness*

comments of this wrestler included reasonably positive references to "feeling good" and "being ready". An additional component evident in each of the wrestler's comments was associated with being "warm" or properly warmed-up and, with the exception of the fifth and seven ranked performances, there were positive statements in this regard. By contrast, the *feelings of readiness* themes from fifth and seventh ranked performances featured qualifying references. Specifically, in the fifth ranked performance it was indicated that despite efforts to get warmed-up that "there was a little bit missing" while the seventh ranked performance included the flat statement: "I didn't think I was warmed up that great". Indeed, additional related themes conceptualized in the higher order theme of *negative physical feelings* were evidenced with references to inadequate warm-up being associated with muscular soreness prior to the seventh ranked match and not breaking a sweat prior to the eighth ranked match.

Raw data themes conceptualized within the **pre-competitive affect** higher order theme of *positive affect* were evidenced in the second and third ranked performances (performance ratings of 5 and 7 respectively). The raw data themes emerging from both of these matches were in reference to positive relaxed feelings. In the match ranked second the wrestler commented, "I kind of felt more relaxed than usual I guess. I felt like I had no pressure, nothing to lose". Similarly in the third ranked performance the wrestler

indicated, "I just felt good ... I was just in a good, relaxed state of mind".

The higher order theme of *nervousness* was evidenced in the moderate and low level matches ranked fifth and eighth (performance ratings of 5 and 2 respectively). The raw data theme emerging from the transcript of the fifth ranked performance expressed the wrestler's nervousness in reference to having to wait for his match to begin about which he commented, "I mean I just hate waiting, I get anxious, I just wanted to get it over with". In the raw data theme from the eighth ranked performance the wrestler indicated that he was "a little bit nervous" because of the context of the match but commented further that "I get butterflies before every match but that is just normal". The allusion to the normalcy of the nervousness was interesting given that this theme only emerged as a notable issue in two of the nine matches in the data array.

A raw data theme conceptualized within the higher order theme of *tired* emerged in the fifth ranked match (performance rating of 5). Implicated for these feelings of mental and physical fatigue was the particularly extensive competitive road schedule in which this was the culminating match.

Case 1: Pre-competitive focus. Raw data themes conceptualized within the dimension of **pre-competitive focus** were evidenced in three of the nine matches, all of which were categorized in the higher order theme of *lack of*

focus. Themes emerging in the second ranked match (performance rating of 5) revealed that the wrestler was attempting to focus his attention to prepare for the match but that his mind was distracted. The fourth ranked performance (performance rating of 5) evidenced very similar sentiments with the wrestler indicating some degree of focus but achieved through purposeful effort. Finally, raw data themes conceptualized within the higher order theme of *lack of focus* were evidenced in the seventh ranked performance (performance rating of 2.5) reflected a total lack of concentration upon which the wrestler commented "I was lost ... I wasn't concentrating as much, I just didn't feel mentally ready".

Case 1: Pre-competitive cognitive content. As described in the characterization of the Case 1 data array, it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of high, medium and low levels of performance. The raw data themes emerging within the dimension of **pre-competitive cognitive content** for the top ranked and all-time best performance were solely related to *technical/tactical* thoughts. Specifically, the wrestler had indicated that prior to his all-time best match his thoughts were focused on visualizing his performance and thinking about technical and tactical issues to prepare for the upcoming match.

The more moderate level performance (ranked second through sixth) also evidenced raw data themes

conceptualized within the super-ordinate level theme of match preparation thoughts. Specifically, themes emerged from all of these matches categorized in the higher order themes of *technical/tactical* and *performance process* thoughts. Additional performance preparation thoughts such as self-statements regarding *confidence building* and *arousal control* were also evidenced across these performances. However, with the exception of the fourth ranked match, a variety of themes emerged conceptualized within the super-ordinate theme of assorted thoughts associated primarily with the higher order theme of *irrelevant thoughts* and not directly related to performance preparation. Such raw data themes emerging in relation to the second ranked performance included thoughts about the "nice crowd" in attendance, the fine performance a teammate was having as well as a concern about "messing up" and losing the match. The third ranked match evidenced a raw data theme concerning the lack of *pressure* the wrestler perceived as a consequence of a small number of fans and a perception of an abnormal lack of coach pressure to win. In the fifth ranked match the wrestler made reference to a desire to perform well in front of a preparatory school teammate who was representing the opposing school. Finally in the sixth ranked performance the wrestler admitted to being preoccupied with concerns about not making the same mistakes that he had in a match the night before.

Among the low level performances, it was observed that the seventh and eighth ranked matches also evidenced match preparation thoughts conceptualized within the higher order themes of *technical/tactical* and *performance process* thoughts. However it was interesting to note in these matches, as compared to higher ranked performances, that there was a shift in these thoughts from what the wrestler could do to the opponent to what the opponent could do to him. The following quotation from the seventh ranked match illustrates this contention:

I was just focusing on his height advantage and trying to think of how I could attack him, offensively, and also I was focusing on that he was a good rider. That's one thing I guess I was more aware of with this match. I knew like what he did on top or whatever, like I knew he was a good rider ... he was just tall and I knew like if he would shoot in on me, he had long arms to suck [my legs] in or whatever.

In the seventh and eighth ranked performances the wrestler also indicated that his thoughts were consumed with a number of *task irrelevant thoughts* that were not associated with performance preparation. In the seventh ranked match these included the awareness that his brother and brother's fiance were in the audience with associated concerns about not performing well in front of them. He was also preoccupied with a loss in the previous night's match and experiencing *pressure* from the coach to win. Associated with this variety of thoughts was a *concern about losing* with the wrestler commenting, "I was just afraid of losing to tell you the truth, instead of going out and winning". The eighth ranked match occurred in a

dual meet in which the team was soundly beaten. The super-ordinate theme of team-centered thoughts evidenced nearly overwhelming *concerns about teammate performance* from watching teammates perform poorly as well as associated *concerns about the team score* as a consequence of these teammate performances.

The ninth ranked and all-time worst rated performance provides an interesting contrast to the other low level performances. Specifically, the only raw data themes emerging in the dimension of cognitive content were related to *confidence building*. There were no other match preparation thoughts identified nor thoughts conceptualized within any of the other super-ordinate themes. This all-time worst rated performance was the match during which effects of the consumption of copious quantities of "the worst foods possible" after weigh-in came back to haunt the wrestler.

Case 1: Pre-competitive confidence issues. Raw data themes conceptualized in the higher order theme of *confidence* emerged in four of the nine performances in the data array. These themes were evidenced in the first, fifth, eighth and ninth ranked performances (performance ratings of all-time best, 5, 2, all-time worst respectively). The *confidence* theme emerging in the top ranked match revealed that positive outcome expectancies based on the wrestler's performance earlier in the particular tournament as well as an awareness that teammate ranked below him on the depth chart had beaten his opponent

earlier in the year. The confidence expressed concerning the fifth ranked performance also was based on a previous performance and the knowledge that the opponent was not particularly strong (rated and ranked as his second weakest season opponent). By contrast raw data theme encountered in the eighth ranked match indicated that the wrestler felt some degree of confidence but clearly "not 100%". Finally, the performance lowest ranked and all-time worst rated match evidenced themes of pre-competitive *confidence* and positive expectancies based on prior performance although again recall that the low level of performance in this match was revealed to be related to dietary indiscretions.

Raw data themes conceptualized within the higher order theme of *doubts/lack of confidence* were evidenced in the matches ranked first, sixth, and seventh (performance ratings of all-time best, 5, 2.5). In the top ranked match the wrestler indicated that, despite being confident that he could beat his opponent, there were some doubts and feelings of intimidation because of the opponent's impressive physique and status as defending tournament champion. Both the sixth and seventh ranked matches occurred subsequent to what the wrestler considered inadequate performances and insecurities concerning these matches emerged as significant *doubts* for the upcoming performance.

Case 1: Pre-competitive sources of motivation. Themes emerging from the transcripts of this study participant

classified in the dimension of **sources of motivation** were only evidenced in three of the seven matches within the ordinal array. In the top ranked and all-time best rated performance a strong *commitment to winning* was identified as a source of motivation. **Sources of motivation** identified in the second ranked match (performance rating of 5) included a desire to perform well in front of the home crowd and a desire (as compared to a commitment) to win to break a losing streak. The final match in which **sources of motivation** emerged as an issue was the match which was ranked eighth of the nine performances (performance rating of 2). The theme emerging from this interview transcript was that of the desire to win for the team; to help the team get going in the midst of a dismal team performance.

Case 1: Pre-competitive Summary. There were three distinct performance levels identified in the performance array of this study participant. In the examination of **pre-competitive affect** it was found that positive affect and *feelings of readiness* apparent in the high and more moderate performance levels were absent in the lowest performance level. Implicated in this pattern of results were references to feeling warm at the higher performance levels while lower ranked performances made references to not being properly warm. Novel references to *nervousness* (although qualified as normal), *negative physical feelings* and being *tired* occurred only in the lowest ranked performances with the exception of *nervousness* in the fifth

ranked performance. Additionally, negative affect associated with a variety of concerns (e.g., losing, team performance, evaluative others, pressure) emerged primarily among matches in the lowest performance level.

Although no themes were evidenced in the top ranked performance in regard to **pre-competitive focus**, examination of cognitive content themes revealed only task relevant themes. Among the moderate and low level performances, themes related to a *lack of focus* were evidenced and further substantiated by the variety of non-task issues emerging in **cognitive content**. The combined evidence in the dimensions of **focus** and **cognitive content** reveals a concentration on task relevant issues deteriorate significantly across performance levels particularly in the lowest ranked season match where the wrestler was consumed with thoughts about the team situation.

As alluded to, **cognitive content** themes in the top ranked performance were solely related to task relevant thoughts whereas in lower ranked performances these thoughts were joined with a variety of performance irrelevant thoughts and concerns. In the lowest ranked performances, the variety of task irrelevant thoughts and concerns became quite absorbing while task related thoughts that did emerge took on a reactive rather than pro-active focus.

In dimension of **confidence issues**, it was observed that the top ranked performance, despite some small *doubts*,

was characterized by a sense of *confidence* buttressed by a *commitment to winning*. Broadly speaking, across the more moderate and low levels of performance, *confidence* was replaced by themes relating to *doubts* and a *lack of confidence* as well as associated *concerns about losing*. The exceptions to this generalization were found in the fifth and ninth ranked performance; the former against a lowly regarded opponent while the latter featured dietary imprudence as a factor. Additionally, themes related to *confidence building* emerged as salient in moderate and low level matches perhaps associated with an awareness of impinging *doubts* and reduced *confidence*.

Themes conceptualized within the dimension of **sources of motivation** were thinly evidenced. It can be observed that a *commitment to winning* was evident in the top ranked performance while external sources of motivation were identified in the other two matches with such themes.

Case 2 Idiographic Analysis: Pre-competitive Results

Case 2: Pre-competitive affect. Raw data themes conceptualized within the higher order theme of *feelings of readiness* were evidenced among six of the eight matches. These themes reflected feelings of varying degrees of positive affect and readiness. In describing pre-competitive affect in the top ranked match (all-time best match) the athlete made emphatic statements concerning his sense of readiness. The matches ranked third through seventh in performance (performance ratings of 8, 7.5, 7.5, 6, 6 respectively) and characterized in the moderate range

of performance also evidenced positive expressions of readiness for performance such as "feeling good", "in pretty good physical shape" and "ready to wrestle" although each of these statements were clearly less emphatic than in the top ranked match. In particular, the third ranked match (a winning performance) comments on *feelings of readiness* were hedged with the comment that "I wasn't really sure if I was in as good a shape as I had been before" while the *feelings of readiness* emerging in the sixth ranked performance were tempered with the following concern from the wrestler's pre-match practices:

I hadn't been practicing real well. I mean pretty well but I didn't feel as technically sound as I usually feel ... I just didn't feel like I was hitting things as smoothly.

Raw data themes conceptualized within the higher order theme of *emotional activation levels* emerged in the top three ranked performances (performance ratings of all-time best, 9, 8 respectively). Each of the *emotional activation level* themes were in reference to being intensely charged or extremely "psyched up" for the match. In the top ranked match the wrestler described feelings of positive nervousness in comments such as, "I was nervous, very nervous, I was nervous but I felt good ... I was just in tune and psyched-up". By contrast, in the second ranked performance, the intense activation encountered was associated with anger. Similar to the first ranked match, prior to the third ranked performance the wrestler

commented that "I was really pumped up, like I had a lot of adrenaline going ... just psyched up to get out there and wrestle".

The matches ranked four through eight (performance ratings of 7.5, 6, 6, all-time worst respectively) all evidenced themes related to *emotional activation level* but conceptualized within the higher order theme *nervousness*. In the fourth ranked match the wrestler indicated that he was not tremendously nervous in a negative way but wanted to get out and wrestle the match. By contrast, in the fifth ranked match the wrestler indicated that he was quite nervous because of the pressure situation. Matches ranked sixth through eighth featured comments concerning a notable nervousness but not beyond normal levels with the wrestler making reference to trying to walk the "butterflies" off.

Finally the match referenced as the all-time worst match and ranked as the worst performance among the matches in the data array evidenced a theme concerning *positive physical feelings* prior to the match. As previously discussed, these positive physical feelings were particularly interesting in the context of the investigation because this all-time worst performance was, in part, associated with dehydrating 14 pounds to make weight for the match. Hence although physically the wrestler felt "pretty good" prior to the match, during the match this indiscretion was manifested and negatively influenced performance.

Case 2: Pre-competitive focus. A single theme emerged from the transcripts of this wrestler concerning **pre-competitive focus**. This theme emerged in the discussions of this wrestler's all-time best match and referred to a sense of *total focus* that the wrestler experienced prior to participation in this match. No other themes emerged from the transcripts of this wrestler that were conceptualized within the dimension of **pre-competitive focus**.

Case 2: Pre-competitive cognitive content. As described in the characterization of the Case 2 data array, the data array from this study participant was framed at the polar ends of the performance spectrum by the performances identified in Interview 1 as all-time best and worst performances. The performances ranked between these polar ends of the performance spectrum represent a range of moderate performance rather than a level and themes emerging in these performances adhere strictly to neither of these polar extremes in **pre-competitive cognitive content**, rather, aspects of both are apparent. The discussion of this athlete's data array progresses by revealing the results of the all-time best and worst matches followed by results of the matches ranked second through seventh.

The top ranked and all-time best rated performance evidenced the emergence of **cognitive content** raw data themes that were classified solely in the super-ordinate

theme of match preparation thoughts. Specifically, the themes emerging concerning this match were all conceptualized as *technical/tactical* or *performance process* thoughts with the wrestler visualizing his plan for each phase of the match and focusing on how tough he wanted to wrestle.

In contrast, the all-time worst match did not evidence the emergence of any match preparation thoughts or task specific thoughts. Rather, themes emerging from this match were all conceptualized within the super-ordinate theme of assorted thoughts in the higher order theme of *general irrelevant thoughts*. Specifically, the wrestler's thoughts were preoccupied with *concerns about losing* and letting the team down. Equally, a preoccupation was revealed with concerns relating to the coach's decision to have the wrestler compete up a weight class after cutting a substantial amount of weight to qualify in a lower weight class.

The performances ranked second through seventh (performance ratings of 9, 8, 7.5, 7.5, 6, 6 respectively) represented a spectrum of more moderately rated performances that shared characteristics with both the all-time best and worst matches as well as evidencing unique themes. In each of these matches match preparation thoughts conceptualized in the higher order theme of *performance process thoughts* were evidenced. These themes uniformly made reference to a desire to "go 100 percent" and to "wrestle aggressively" but lacked any technical or

tactical specificity. However, match preparation themes of *technical/tactical* thoughts were evidenced in the fourth and sixth ranked performances although manifested in interesting ways. Specifically, the *technical/tactical* thoughts in the former focused on reactive as opposed pro-active responses to what his nationally ranked opponent might do while in the latter these thoughts were focused on several techniques that the wrestler had been having trouble completing.

Other match preparation thoughts such as *confidence building* and *arousal control* were evidenced in the third through sixth ranked performances. In the third ranked performance the theme of *arousal control* emerged with the wrestler engaging in self talk to increase his activation level to prepare for the match while the *arousal control* thoughts in the fifth ranked match were in an effort to switch feelings of negative nervousness to the positive. The *confidence building* thoughts from the fourth and sixth ranked performances were in relation to self assurances that the wrestler was capable of competing with a nationally ranked opponent. Comparable themes emerged in the fifth ranked performance with the wrestler reassuring himself that the opponent was not the strongest wrestler on the opposing team.

A number of themes in evidence concerning these more moderately rated performances were conceptualized in the super-ordinate theme of coach-centered thoughts. Themes

conceptualized within the higher order theme of *spontaneous coach decisions about dual meet performance order* were evidenced in the second, third, fourth and seventh ranked performances. In each case the wrestler was uncertain as to whether he would be participating in the particular dual meet until just prior to (as little as mere seconds before) the start of the particular match. The wrestler indicated that it was difficult to get mentally ready for matches in these situations because often over the course of the season he would not wrestle. Themes related to *negative thoughts about/toward the coach* emerged in the second ranked match although it was clearly indicated that these negative thoughts and feelings acted as a motivating force. Themes conceptualized within the higher order theme of *concern about coach reaction to performance* were prominent in the fourth and sixth ranked performances with the wrestler thinking that he needed to perform well to avoid incurring the coach's wrath. A related concern from assorted thoughts was evidenced in the fifth ranked match where the wrestler perceived a great deal of *pressure* from the coach to perform against the particular despised conference opponent.

Themes conceptualized within the super-ordinate theme of team-centered thoughts emerged from the interview transcripts regarding second, fifth and sixth ranked performances. In the second ranked performance, positive *thoughts about teammate performance* were cited with the wrestler wanting "to continue the roll". By contrast in

both the fifth and sixth ranked matches themes emerged which concerned the negative impact of, and preoccupation with poor *teammate performances* prior to the wrestler's match as well as associated *concerns about team score* in each dual meet.

Raw data themes conceptualized within the super-ordinate theme of assorted thoughts and categorized as *general irrelevant thoughts* were evidenced in the sixth and seventh ranked performances. These included concerns in the sixth ranked match about having to wrestle up a weight class. Thoughts concerning the pep band emerged prior to the seventh ranked performance about which the wrestler commented "this will be kind of weird but the drummers were playing some pretty cool beats and stuff and I kind of like to dance...."

Case 2: Pre-competitive confidence issues. Raw data themes conceptualized within the dimension of **confidence issues** emerged in six of the eight performances in the data array. The performances ranked second, third, sixth and seventh (performance ratings of 9, 8, 6, 6 respectively) contained themes conceptualized as *confidence*. The raw data theme regarding *confidence* in the second and third ranked performances revealed that the wrestler felt confident about his chances of winning the match with the assessment in the third ranked match based on his perception of being able to "out-condition" his opponent. The *confidence* expressed concerning the sixth ranked match

was positive but clearly less emphatic and conditioned by references to the opponent's national standing. Finally, the seventh ranked performance evidenced the emergence of a *confidence* theme indicating that the wrestler had positive expectancies based upon the hard work that he had been doing prior to the meet.

The higher order theme of *doubts/lack of confidence* emerged in the first, fourth and sixth ranked matches (performance ratings of all-time best, 7.5, 6). In the top ranked performance the wrestler indicated that he felt very ready for the match, however, there were some doubts in his mind because of a previous loss to this opponent as well as his impressive performance record. The themes emerging conceptualized as *doubts/lack of confidence* emerging in the fourth and sixth ranked performances were both related to facing opponents which were nationally ranked with the wrestler admitting to some reservations as to his ability to win.

Case 2: Pre-competitive sources of motivation. Raw data themes emerged from six of the eight performances that were conceptualized as *sources of motivation*. There was no common thread among these sources other than each of them was cited as a reason to win. Themes from top ranked and all-time best rated performance were related to a *commitment to winning*, a desire to prove that the previous year's state championship was not a fluke as well as the presence of college recruiters. The second ranked match (performance rating of 9) themes were associated with

animosity toward the coach and a desire to reveal aspersions cast upon the wrestler as unfounded. The third ranked match (performance rating of 8) evidenced themes regarding a desire to perform well in the wrestler's last collegiate dual meet opportunity as well as the presence of the wrestler's parents. The fifth ranked match (performance rating of 6) evidenced themes of "doing for the team". Themes emerged from the transcript of the sixth ranked performance indicating that the role of underdog against a highly ranked opponent provided intensity. Finally in the seventh ranked match the wrestler again expressed the importance of performing well in front of his parents.

Case 2: Pre-competitive Summary. Distinct performance levels were not identified in this study participant's data array although the top and bottom ranked performances stood in stark contrast while more moderate performances represented an intermediate range rather than a level of performance. **Pre-competitive affect** themes emerging in the top ranked match were of positive nervousness as well as positive affect associated with feelings of total readiness to wrestle. Across the more moderate performance levels, a pattern of decreasing *emotional activation levels* could be identified with the second ranked performance featuring extremely high activation and *anger*, the third ranked performance featuring "pumped up" feelings while lower performances made reference to normal *nervousness*. Among

the more moderate performances, references to global feelings of *readiness* and positive affect were evidenced although, as mentioned, some are less emphatic than others. As well, the fifth and sixth ranked performances evidenced some negative affect associated with *pressure* and with concerns about the team, teammate performance and coach's reactions. The lowest ranked performance was associated with the effects of dehydrating a substantial amount of weight and the positive feelings and normal nervousness are interesting in this context.

The only **pre-competitive focus** theme emerging was one of total focus prior to the all-time best performance. Examination of **cognitive content** themes revealed only task relevant themes in this match while the remainder of the performances evidenced a wide variety of other concerns perhaps indicative of lower levels or lack of focus.

The dimension of **pre-competitive cognitive content** reveals an identifiable pattern of results ranging from a total task focus in the top ranked performance through a total absence of task relevant thoughts and total obsession with failure concerns and other irrelevant issues in the all-time worst performance. The range of more moderate performances all featured some task relevant thoughts although in contrast to the top ranked performance none of these thoughts bore any technical or tactical specificity. As well, each of these performances featured a variety of concerns about the team/teammate performance, coach's

reaction, uncertainty and other task irrelevant issues.

There was not quite as clear of a pattern in the dimension of **confidence issues** although the results were not totally capricious. The top ranked match revealed "a little bit of doubt" conditioned by a strong sense of readiness while the second, third and seventh ranked matches evidenced feelings of *confidence* against the opponents ranked the lowest in difficulty. Themes of *lack of confidence and doubts* in the fourth and sixth ranked performances may also be associated with opponent difficulty as these two opponents were nationally ranked competitors and the top rated in difficulty by the wrestler. Finally the lowest ranked performance evidenced *consuming concerns about losing*.

In contrast to some of the other study participants, this wrestler placed great emphasis on finding reasons to perform or **sources of motivation**. This was interesting in itself although no particular unifying thread was identified across the performance spectrum.

Case 3 Idiographic Analysis: Pre-competitive Results

Case 3: Pre-competitive affect. Raw data themes conceptualized within the higher order theme of *feelings of readiness* were evidenced among all but the fifth ranked performance. The top four ranked matches (performance rating of all-time best, 7, 5.5, 3 respectively) all reflected reasonably positive statements of readiness with each instance indicating that wrestler "felt good" and

"felt ready to wrestle". The sixth and lowest ranked performance (performance rating of 3) evidenced a less emphatic sense of readiness with the wrestler indicating that he "felt pretty decent" and that he was "pretty ready to go" with the emphasis on the qualifier of "pretty".

Raw data themes conceptualized within the higher order theme of *emotional activation levels* emerged concerning **pre-competitive affect** in the first and fifth ranked matches (performance ratings of all-time best, all-time worst respectively). The raw data themes emerging from the top ranked match were in reference to the wrestler feeling emotionally intense and an anxiousness to get going in the match. By contrast the raw data themes emerging from the fifth ranked match were in reference to feelings of being under-aroused and feeling flat.

Matches ranked third and fourth in performance (performance ratings of 5.5, 3 respectively) evidenced raw data themes related to *emotional activation levels* but conceptualized within the higher order theme of *nervousness levels*. The raw data themes in these matches made reference to moderate and tolerable levels of nervousness. The following quotations from the third and fourth ranked performances respectively characterize these feelings:

I don't feel that I was overly nervous, I didn't feel like the world was coming down on me or anything. Maybe a little bit of extra pressure but nothing that was real great.

No more than the usual, like a little anxiety you have or whatever, adrenaline really. You know, you always get a little bit but I don't think anything more than that.

Case 3: Pre-competitive focus. A single theme emerged from the transcripts of this wrestler concerning **pre-competitive focus** and this theme emerged from the discussions of the wrestler's all-time worst match. This raw data theme had been conceptualized in the higher order theme of *injuries affecting mental state* and reflected the wrestler's perception that his physical injuries, while not physically incapacitating, had a debilitating effect on his concentration prior to the match.

Case 3: Pre-competitive cognitive content. As described in the characterization of the Case 3 data array, it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of high, medium and low levels of performance. As observed among some of the other all-time best performances, match preparation thoughts categorized as *technical/tactical* and *performance process* thoughts emerged as dominating wrestler **cognitive content**. These task relevant thoughts included references to visualizing particular techniques, setting up his opponent for particular attacks and pressuring his opponent throughout the match.

The second and third ranked performances, representing more moderate levels of performance, also evidenced the emergence of match preparation thoughts conceptualized within the higher order themes of *technical/tactical* and *performance process* thoughts. Additional match preparation raw data themes conceptualized in the higher order theme of

arousal control emerged in the second ranked match with the wrestler trying to relax and reminding himself that he was wrestling because it was something he wanted to do. In contrast to the top ranked performance, the moderate level second and third ranked performances evidenced the emergence of non-task thoughts which impinged on athlete thought processes. Assorted thoughts in the higher order theme of *irrelevant thoughts* included second ranked performance themes concerning a distaste for the opponent in which the wrestler was reflecting back on a previous meeting and harboring negative thoughts and feelings toward this opponent. Raw data themes emerging concerning **pre-competitive cognitive content** in the third ranked match reflected the perception of *pressure* to have a winning performance. These pressures emanated from within the wrestler as well as from the coach.

The fourth through sixth ranked matches represented the lowest performance levels in the data array with the matches ranked fourth and sixth both receiving performance ratings of 3 while the fifth ranked match had been identified as the all-time worst match in Interview 1. Only raw data themes conceptualized within the super-ordinate theme of match preparation thoughts emerged in the fourth ranked performance, however in contrast to those emerging in higher ranked performances, there was a notable absence of specific *technical/tactical* thoughts with only non-specific *performance process* themes in evidence such as references to "keeping the pressure on the

whole match" and "really going at him".

The fifth ranked match evidenced no raw data themes that were conceptualized as match preparation thoughts. Rather, **cognitive content** was consumed by *concerns about injuries* and confidence concerns. The sixth and lowest ranked performance evidenced raw data themes related to match preparation conceptualized within the higher order themes of *technical/tactical* and *performance process* thoughts. Examination of these themes revealed that the wrestler's thoughts were dominated by reactive rather than pro-active concerns and this was a notable contrast to match preparation thoughts encountered in higher ranked performances. As the wrestler commented in this regard:

I was thinking "well he's got a good double but if", you know I was kind of playing ... "he does that but I'll do this". You should always have that in the back of your head, you should know your opponent somewhat but you shouldn't base everything you do on that.

Additionally in the lowest ranked performance, **cognitive content** themes emerged categorized within the super-ordinate theme of team-centered thoughts. Specifically, prior to the lowest ranked performance and in the context of a dismal team performance, it was revealed that, despite efforts to block out these concerns, the wrestler's thoughts were consumed with *concerns about teammate performance*.

Case 3: Pre-competitive confidence issues. Raw data themes conceptualized in the higher order theme of *confidence* emerged in three of the six performances in the

data array. The performances ranked first, second and sixth (performance ratings of all-time best, 5, 2, all-time worst respectively) contained these themes. The *confidence* themes in evidence from the top ranked match made reference to a solid conviction that the wrestler would be able to win the particular match while the second ranked performance themes revealed "a lot of confidence" but qualified by "I knew if I went out and opened up, I should win". The raw data theme conceptualized within the higher order theme of *confidence* that emerged in the lowest ranked match indicated that the wrestler had some uncertainty and expected a very tight match but viewed the possibility of a win as realistic based on previous meetings with the particular opponent.

Raw data themes conceptualized within the higher order theme of *doubts/lack of confidence* emerged from commentary on the fifth ranked match. This match was identified as the wrestler's all-time worst performance in Interview 1 and the wrestler indicated that a central concern in his thoughts was whether he would be able to win the match given the injuries he had sustained.

Case 3: Pre-competitive sources of motivation. Raw data themes emerging from the transcripts of this athlete conceptualized within the dimension of **sources of motivation** were observed only in the matches ranked as second and third in performance among the six matches. Interestingly, the wrestler's best rated and ranked season

match (overall performance ranking of 2 and rating of 7) occurred after he had written off the current season and had started looking to the next season. The themes identified within this match as *sources of motivation* made reference to a commitment to wrestle well (as compared to a concern with winning) and a desire to turn things around for the next season. By contrast, the third ranked match (performance rating of 5.5) evidenced as a *source of motivation* the feeling that wrestler needed to win. As the wrestler commented:

I really wanted to win the match and it was a match that I felt needed to win ... I kind of just wanted to get back on track like I said as far as just showing myself and showing Coach and everything that I am still here, that I can still perform really, but that didn't work out for me really.

Case 3: Pre-competitive Summary. There were three distinct performance levels identified in the performance array of this study participant. **Pre-competitive affect** in the top ranked performance was characterized by high emotional intensity with positive feelings and global sensations of readiness. Across moderate and low levels of performance a decrease in intensity was evidenced ranging from normal nervousness to under-aroused with a similar pattern visible in global sensation of positive affect and readiness. Negative affect associated with concerns about the teammate performance was quite salient in the lowest ranked performance.

Only a single pre-competitive **focus** theme was evidenced across the data array as the wrestler did not

seem to organize his descriptions around characterizations of the quality of the organization of his thoughts in the pre-competitive period. In examining **cognitive content** it seems reasonable to suggest that the array and intensity of themes emerging across decreasing levels of performance is consistent with a decreasing *focus*.

In the dimension of **cognitive content** match, the top ranked performance was found to evidence themes solely relative to match preparation. The more moderate level performances also evidenced such themes as well as the emergence of additional irrelevant thoughts such as negative thoughts about the opponent or concerns associated with pressures. Finally low level performances were revealed to evidence match preparation thoughts lacking specificity or focused on reactive as opposed to pro-active concerns as well as an absence of *confidence building* self talk and consuming concerns about team performance in the lowest ranked performance.

As revealed previously, themes in **confidence issues** revealed a clear pattern of references to high *confidence* through to *doubts and lack of confidence* across the performance array. **Sources of motivation** evidenced an interesting contrast between the two emergent themes with the best season performance emphasizing a commitment to wrestle well while the second best season match source of motivation related to a need to win.

Case 4 Idiographic Analysis: Pre-competitive Results

Case 4: Pre-competitive affect. Pre-competitive affect themes conceptualized within the higher order theme of *feelings of readiness* were evidenced among all but low performance level matches ranked sixth, seventh and ninth ranked matches. The top ranked match (performance rating of all-time best) evidenced emphatic statements concerning the wrestler's feelings of readiness for competition. The *feelings of readiness* themes emerging from the second, third, fifth and eighth ranked matches (performance ratings of 8, 7.75, 7, 6 respectively) were less definite yet clearly positive statements of "feeling good" and "being ready to wrestle". The fourth ranked performance (performance rating of 7) *feelings of readiness* themes regarded a lack of readiness with the wrestler commenting:

I didn't realize that if I was going at all that I was going [weight class] until I looked up and there was 53 seconds left on the [weight class] match clock. So all of a sudden I was going. I really wasn't that ready. I mean it was fine but I just wasn't that ready right off the bat.

Raw data themes conceptualized within the higher order theme of *emotional activation levels* emerged in matches ranked first, third, sixth and ninth (performance ratings of all-time best, 7.75, 6, 4 respectively). The *emotional activation* themes emerging from the first and third ranked matches both made reference to being highly activated or "fired-up" with associated positive affect and an eagerness to wrestle. By contrast *emotional activation* themes emerging from the sixth and ninth ranked matches were in

reference to being under-aroused, lacking intensity or feeling "blah". In both of these matches the feelings of being under-aroused were associated with other negative affect themes, in one case feeling "tired" and "drained" from the long road schedule and in the other "drained" and "burnt-out" from a tough season.

An associated higher order theme to *emotional activation levels* evidenced in the fifth and seventh ranked performances was that of *anger*. Specifically, prior to both of these matches the wrestler revealed that he was "upset", "angry" and "disgusted" because of the way his teammates had been performing.

Case 4: Pre-competitive focus. **Pre-competitive focus** themes emerged in regard to three of the nine performances. *Focus* themes were evidenced in the highest ranked season match (performance ranking of 2 and rating of 8) with the wrestler indicating that his thoughts were concentrated on the task at hand. By contrast, themes conceptualized within the higher order theme of *lack of focus* were evidenced in the low level performances ranked sixth and ninth (performance ratings of all-time worst, 4) in the data array. In the descriptions of the pre-competitive periods of these matches, it was indicated that the wrestler's mind was not focused on the task at hand but rather disrupted with a variety of other thoughts.

Case 4: Pre-competitive cognitive content. As described in the characterization of the Case 4 data array,

it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of high, medium and low levels of performance. Although match preparation thoughts were evidenced in reference to the all-time best match, in contrast to other study participants, none of these were conceptualized within the higher order themes of *technical/tactical* or *performance process* thoughts. Interestingly, the only **cognitive content** themes emerging concerning pre-competitive issues were those conceptualized within the higher order theme of *confidence building*. These themes regarded self reinforcement as to the wrestler's readiness for the match at hand.

The second through fifth ranked performances were argued to represent a more moderate performance level when compared to the all-time best performance. The variety of **cognitive content** themes can be seen to be considerably greater than in the all-time best performances. Among these matches, raw data themes conceptualized within the super-ordinate theme of match preparation thoughts were sparsely evidenced. Indeed *performance process thoughts* were the only match preparation thoughts emerging and only in the third and fourth ranked performances. In the third ranked performance *performance process* raw data themes regarded the wrestler's desire to "open up, cut loose and hit some good shots". The fourth ranked performance occurred in a situation where the outcome of the match was critical in determining team victory or loss and hence the

performance process themes reflected this situation. As wrestler commented:

I really wasn't going to go out there and try some ridiculous move. I like to stay with basics especially in this type of situation because of the fact that the team score was so close.

Team-centered thoughts were salient among the moderate second through fifth ranked performances. Themes emerging from the interview transcripts regarding the second ranked performance in the data array reflected *thoughts/concerns about team score and teammate performance*. These thoughts were positive in that the team victory was nearly sealed up because the team had been performing well. Hence the wrestler indicated that he was under little pressure from this quarter. In the third ranked performance *thoughts about teammate performance* emerged from the transcripts of this match with the wrestler indicating that he was "getting a little fired up" because a teammate did not wrestle well. *Concerns about team score* were salient in both the fourth and fifth ranked performances as in both instances the wrestler's performance was crucial in determining the team match outcome.

Concerns conceptualized within the super-ordinate theme of coach-centered thoughts were prominent throughout the second to fifth ranked performances. More precisely, *spontaneous coach decisions about dual meet performance order* emerged as salient in each of these matches. In the second ranked performance this theme emerged but not as a negative factor with the wrestler indicating that he knew

he was going to be wrestling and was ready despite being unsure of exactly when he might be called upon. In third ranked match however, the wrestler indicated that the sudden decision to place him later in the performance order "burst [his] mental bubble a little bit" although the delay afforded him the opportunity to regroup somewhat. The fourth ranked performance occurred in the midst of a wrestler/coach conflict and hence the wrestler was unsure when or even if he would wrestle. On top of the initial uncertainty (only resolved at the meet intermission), some consternation was created when the wrestler was then called upon to perform several matches sooner than he had anticipated. In the fifth ranked match the wrestler was again faced with a *spontaneous coach decision about dual meet performance order* however in this case the wrestler had correctly anticipated the coach's tactical strategy for the dual meet and so was prepared. The final coach-centered thoughts encountered were those conceptualized within the higher order theme of *negative thoughts toward/about coach*. As previously mentioned, prior to the fourth ranked performance a situation had developed with the coach that involved some animosity and this was reflected in pre-competitive **cognitive content**.

Several themes conceptualized within the super-ordinate theme of assorted thoughts emerged in the third through fifth ranked performances. For example the third ranked performance evidenced thoughts about the "nice

crowd" in attendance as well as enjoying the pep band. The fourth ranked performance involved thoughts about the *pressure* of the situation while the fifth ranked performance included an awareness that the wrestler was facing a strong opponent.

The matches ranked sixth through ninth were considered to represent a low performance level as a consequence being identified as the all-time worst performance or below in ranking. Performance preparation thoughts were only encountered in the eighth ranked performance in which *technical/tactical* thoughts were related to the wrestler's familiarity with his opponent. Likewise Coach-centered thoughts were only encountered in a single match, the ninth ranked performance, and these were related to *spontaneous decisions about dual meet performance order* with the wrestler not knowing for sure when he was going to wrestle until immediately prior to the match. Although clearly not a foreign situation for this athlete, in this instance the possible opponents represented widely disparate challenges and the wrestler was called upon for an earlier rather than a later match.

Team-centered thoughts emerged as salient seventh and eighth ranked performances. The seventh ranked match occurred during a particularly dismal team performance and the themes conceptualized within this super-ordinate theme reflected the situation. Specifically raw data themes conceptualized within the higher order themes of *concerns about teammate performance* and *concerns about team score*

figured prominently and revealed that the wrestler was absorbed with negative thoughts related to these issues. By contrast *positive thoughts about teammate performance* emerged from the interview transcript regarding the eighth ranked performance with the wrestler indicating the teammate preceding him had a big win. However, raw data themes also emerged regarding this performance reflecting *concerns about team score* with wrestler being well aware that his match could provide critical points toward a team victory.

The super-ordinate theme of assorted thoughts was evidenced among all of the lowest ranked performances. The sixth ranked performance featured prominently *concerns about losing*. Associated with these concerns was a perception of *pressure*. As the wrestler described this situation:

[Coach] put a lot of pressure on me personally for this match because this individual was recruited here at [university] and decided to go to [university]. So there was a lot of pressure, "don't lose to this guy, the son of a bitch didn't come to school here, we don't lose to people that don't come to school here" kind of thing. So there was a lot of outside pressure coming in.

Concerns about injury emerged from each of the three lowest ranked performances. These concerns were salient in the seventh and ninth ranked matches but markedly more substantial in the eighth match. The eighth ranked match also evidenced themes associated with *negative thoughts about/toward the opponent* based on the wrestlers familiarity with his opponent whom he described as a

"dirtbag" and a "real jerk". Finally, prominent *irrelevant thoughts* concerning a desire to return home were evidenced prior to the ninth ranked performance (the culmination of a lengthy road trip).

Case 4: Pre-competitive confidence issues. Confidence issues emerged as salient in five of the nine performances in the data array. In the top ranked and all-time best rated performance, strong *confidence* themes were evidenced including the comment, "I knew I was going to win, there was no doubt". Interestingly however, he went on to indicate that there might have been some little hint of *doubt* because of the quality of the opponent. The second and third ranked performances (performance ratings of 8, 7.75 respectively) evidenced definite statements of *confidence* explicitly premised on the wrestler's assessment of opponent quality. Themes reflecting *confidence* emerged in the fifth ranked performance (performance rating of 7) but while these themes evinced positive outcome expectancies, they were qualified as a reasonable expectation if the athlete wrestled a "solid match". The *confidence* theme emerging in the eighth ranked match (performance rating of 6) was a flat statement of confidence based on the wrestler's perception that he "was the better wrestler".

Case 4: Pre-competitive sources of motivation. Raw data themes emerging from transcripts of interviews regarding four of nine performances were conceptualized

within the dimension of **sources of motivation**. A salient *source of motivation* from the top ranked and all-time best rated performance was that of a strong desire to win the match against a highly ranked opponent so the wrestler could put himself "in the realm of things nationally". In the third ranked match (performance rating of 7.75) the salient source of motivation theme related to the wrestler's dissatisfaction with the performance and outcome in the previous night's match about which he commented, "I didn't want to feel like that again". The raw data themes emerging in the fourth and seventh ranked matches (performance ratings of 7, 6 respectively) were relative to a desire to win for the team. In the case of the fourth ranked match this desire was to "win the match to put the team score out of reach" while the theme from the seventh ranked performance, in reference to a devastatingly bad team performance, revealed the desire to win "to give our team a little bit of respect because of the fact that we hadn't wrestled with any".

Case 4: Pre-competitive other. A single salient theme was identified among the interview transcripts of this wrestler that was not amenable to reduction among other themes in the data array. However since it was salient and consistent with other literature in the area it was retained for discussion. Specifically, in the ninth ranked match, receiving a performance rating of 4, the wrestler indicated he had half-heartedly prepared for this match and

hence was not ready enough when he stepped on the mat.

Case 4: Pre-competitive Summary. There were three distinct performance levels identified in the performance array of this study participant. **Pre-competitive affect** themes relevant to positive feelings associated with readiness to wrestler were evident across the high and moderate performance levels excepting the fourth ranked performance whereas these references were notably lacking in among the low performance level matches. Positive affect and feelings of intensity were salient among higher ranked performances. By contrast, increasing references to themes related to negative affect emerged across more moderate and particularly in low ranked performances and include a variety of concerns and worries related to team performance, pressure and losing, anger related to disgust with teammate performance, negative physical feelings and feelings of being under-aroused and tired.

The dimension of **pre-competitive focus** revealed high levels of concentration in the highest ranked season performance while lack of focus themes become salient among low level performances. Examination of **cognitive content** themes reinforces this pattern with increasing evidence of non-performance related issues emerging across performance rankings with almost no task relevant thoughts emerging prior to the low level performances. Most notable was the plethora of team and coach-centered thoughts emerging from this study participant's data.

Each of **confidence issues** themes emerging were conditioned in reference to assessments of the quality of the opponent. The confidence themes emerged primarily among high and moderate level performance while *concerns about losing* were more evident in the lowest ranked performances.

A variety of **source of motivation** themes were evidenced without any particular unifying thread although it can be observed that self-referenced themes were evidenced in the first and third ranked performances while team-referenced themes were identified in the fourth and seventh ranked performances with additional team score concerns evident across the lower ranked performances.

Case 5 Idiographic Analysis: Pre-competitive Results

Case 5: Pre-competitive affect. Raw data themes conceptualized within the higher order theme of *feelings of readiness* were evidenced among the top four ranked and high level matches. These top four ranked matches (performance ratings of all-time best, 9.25, 9, 8.75 respectively) all made reference to "feeling good" and being "ready to wrestle" with the fourth ranked match being hedged slightly in the comment, "I was mentally up there but I wasn't peaked".

Raw data themes conceptualized within the higher order theme of *nervousness* emerged concerning **pre-competitive affect** in the matches ranked second, and fifth through ninth (performance ratings of 9.25, 9.5, 7, 7.5, all-time

worst and 0 respectively). The raw data themes in the second ranked match made reference to a positive *nervousness* with "adrenaline flowing" and feelings of being eager to wrestle. The themes emerging from moderate level matches ranked fifth through seventh all made reference to normal *nervousness* that was not accompanied by negative affect. By contrast the *nervousness* referred to in the low level performances was in reference to extreme nervous to the point of being "scared", "nervously tight", "a dulling flat feeling" and "not charged up".

Case 5: Pre-competitive focus. Raw data themes emerged from the performance arrays in four matches that were conceptualized within the dimension of **pre-competitive focus**. Raw data themes emerged in the matches ranked second, fourth, and sixth (performance ratings of 9.25, 8.75, 7 respectively) conceptualized within the higher order theme of *focus* indicated that the wrestler was concentrating on preparing for the upcoming performance. By contrast, raw data themes from the low level eighth and ninth ranked performances revealed a *lack of focus* with the wrestler indicating that his thoughts were scattered and not focused on the task at hand.

Case 5: Pre-competitive cognitive content. As described in the characterization of the Case 5 data array, it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of high, medium and low levels of performance. The top five ranked and high level performances all evidenced match

preparation themes that were conceptualized in the higher order themes of *technical/tactical* and *performance process* thoughts. The wrestler's description of his **cognitive content** prior to these performances revealed a rather tight focus on task relevant issues with including specific techniques and performance qualities. Further, there were no raw data themes emerging from interview transcripts of this wrestler in regard to these performances that were conceptualized in any other higher order themes.

The sixth and seventh ranked performances represented a more moderate performance level in the data array with the performances being rated at 7 and 7.5 respectively. Similar *technical/tactical* and *performance process* thoughts emerged from the interview transcripts of these performances. Additionally prior to the more moderate performances, the match preparation themes conceptualized in the higher order theme of *arousal control* emerged. Specifically, prior to the sixth ranked performance it was revealed that aside from self-referenced *technical/tactical* and *performance process thoughts*, the wrestler was trying to keep his mind off the match because he didn't "want to sit and think a whole lot because I would have got scared -- not scared, too nervous". Similarly prior to the seventh ranked match the wrestler indicated that he was thinking "just go out and have fun" so as to avoid putting pressure on himself by concentrating on having to beat the opponent.

The low level and lowest ranked matches evidenced the emergence of raw data themes that were markedly different from the previous pattern identified. There were no raw data themes emerging which could be considered to be relevant to match preparation thoughts. Instead the wrestler's thoughts were primarily consumed with thoughts conceptualized within the super-ordinate theme of assorted thoughts, particularly within the higher order theme of *general irrelevant thoughts*. Specifically, prior to the eighth ranked performance, it was indicated that the wrestler was totally despondent and preoccupied with a prior loss that had ruined his perfect high school record, and further, concerned about how people would view him now that he had lost. As this wrestler expressed his thoughts and feelings prior to this match:

I can't say I wasn't out of it, I wanted to win but I was just, it was like a dulling. I had lost the week before and I was just like the whole world was still coming down around me. It was still like I was in a burning house and I was like "shit, even if I win this I still can't get out of this place alive". It was just kind of like "aaaaah". No matter what I did, even if I pinned [opponent] it wasn't going to matter because I had lost the week before. It's pathetic, I can't change that one loss. I am still going to have a 1 one the end of my record.

Similarly, the lowest ranked performance evidenced the total absence of *match preparation thoughts*. Rather, *irrelevant thoughts* such as an overwhelming desire spending the holidays back in his home town with friends and family and *concerns about losing* were predominant. As the wrestler commented "I thought about losing, I think I was

more worried about losing instead of winning". An associated theme emerged in coach-centered thoughts reflecting salient *concerns about the coach's reaction to performance* when the wrestler got his "ass kicked" by his highly regarded opponent.

Case 5: Pre-competitive confidence issues. Confidence issue raw data themes emerged in almost all of the performances within the data array. The *confidence* theme emerging in top ranked and all-time rated performance was one of *total confidence*. This sense of *total confidence* is apparent in the following quotation:

Mentally I knew it, I knew that I was going to go out and win that match. And I knew that he knew that I was going to beat him. I mean I didn't talk to him or say anything to him. I just knew it. I knew that there was nothing that he could do to beat me and I knew that I was going to beat him and he knew that he was going to lose that match. It was just something I knew.

The raw data themes emerging from the performances ranked second through fifth were not the emphatic statements of *confidence* evidenced in the top ranked match yet revealed solid success expectancies. Similar expectancies were evidenced concerning the sixth and eighth ranked performances (a tie and a win respectively) but qualified with the idea that the wrestler knew he had to wrestle well in the former and the idea that he was going work in the latter. Finally the ninth ranked performance evidenced the emergence of raw data themes conceptualized as *doubts/lack of confidence* in which the wrestler expressed extreme doubts as to his ability to rise to the

occasion.

Case 5: Pre-competitive sources of motivation. There were no themes emerging from the transcripts of this wrestler that were conceptualized within the dimension of **sources of motivation**. This particular wrestler did not seem to frame his pre-competitive perception and descriptions of the wrestling environment in reference to **sources of motivation**.

Case 5: Pre-competitive Summary. There were three distinct performance levels identified in the performance array of this study participant. A clear pattern emerged across the data in the dimension of **pre-competitive affect** with the top level performances all referencing feelings of positive affect and *readiness*. More moderate performances made reference to normal *nervousness* while themes relating to negative arousal states including references to being dull or *scared* were evidenced in low level performances. Additional related themes in the lowest ranked performances related to concerns about the perceptions of coach and others as well as about losing.

Pre-competitive focus themes and examination of **cognitive content** theme patterns reveals that the high and moderate level performances evidenced a *focus* on task issues whereas low level performances featured a distinct *lack of focus*. The **cognitive content** dimension is interesting as throughout the high and moderate levels of performance, exclusively match preparation themes were

evidenced although *arousal control* themes only emerged in the moderate performance matches. In distinct contrast, the low level performances evidenced total absence of task relevant thoughts while ego related concerns were salient.

Themes related to **confidence issues** revealed total *confidence* in the top ranked performance followed by less emphatic but tangibly positive statements of *confidence* through to the eighth ranked performance. The lowest ranked performance evidenced a total *lack of confidence* and associated concerns about *losing*.

As mentioned, this wrestler did not seem to frame his perceptions of the pre-competitive environment in terms of sources of motivation although it can be commented that this wrestler placed great store in winning.

Case 6 Idiographic Analysis: Pre-competitive Results

Case 6: Pre-competitive affect. Raw data themes conceptualized within the higher order theme of *feelings of readiness* were evidenced among the six of the nine matches for which this wrestler was interviewed. Specifically, *feelings of readiness* themes emerged from the matches ranked second through sixth and ninth (performance ratings of 7.5, 8, 7.5, 7, 8.5, 3 respectively). The *feelings of readiness* themes for the moderate level performances ranked second to sixth all included wrestler references to "feeling good", and being "ready to go" with the exception of the third and fourth ranked matches where these feelings were qualified with concerns about conditioning levels and comments such as "not feeling perfect but feeling pretty

good". The theme emerging in the ninth ranked match (performance rating of 3) also included references to being ready to wrestle but the wrestler qualified his feelings of readiness with the comment that he was surprised that he felt as ready as he did after his efforts to make weight.

Raw data themes conceptualized in the higher order theme of *emotional activation levels* and the related higher order themes of *anger* and *nervousness levels* emerged all of the matches excepting the eighth ranked. The performances ranked first, second and fourth (performance ratings of all-time best, 7.5, 7.5 respectively) all evidenced themes indicating very high levels of emotional intensity described as being "psyched up" or "pumped up". The performances ranked first, third, and fifth (performance ratings of all-time best, 8, 7 respectively) also made references related to *emotional activation* but conceptualized in the higher order theme of *anger* with the wrestler indicating feelings of *anger* and agitation associated with animosity toward the coach or teammate performance.

The sixth ranked match (performance rating of 8.5) evidenced themes relating to *nervousness*. The wrestler indicated that prior to this match he was particularly aware of being *nervous* and although this sensation was not abnormal, it was notable because he was surprised to find he was nervous for an opponent that he knew would not be challenging. However, the wrestler also made reference to

positive affect prior to this match in noting that he felt particularly good about the day in general and about being able to wrestle on such a day.

The performances ranked seventh and ninth (performance ratings of 7 and 3 respectively) evidenced raw data themes also conceptualized within the higher order theme of *emotional activation levels*. In contrast to previously mentioned themes, these low ranked performances evidenced themes related to a *lack of intensity* or being under-aroused with the wrestler feelings described as being not really "gung ho" and not as "pumped up as usual".

Raw data themes relating to the pre-competitive period of the fifth, seventh, eighth and ninth ranked performances (performance ratings of 7, 7, all-time worst, and 3 respectively) all made reference to *negative physical feeling* states. Prior to each of these performances the wrestler made reference to feeling *tired* and physically depleted from previous training and competition and/or efforts to make weight. As well, in the eighth ranked and all-time worst rated performance the wrestler made reference to almost overpowering feelings of being *scared*.

Case 6: Pre-competitive focus. Raw data themes conceptualized within the dimension of pre-competitive focus emerged from the transcripts of this wrestler concerning two matches. A theme conceptualized within the higher order theme of *lack of focus* was evidenced in the moderate level fifth ranked performance (performance rating of 7) and revealed that the wrestler's thoughts were not

totally focused on the upcoming performance but rather on thoughts about a situation that had developed with the coach. By contrast, the match ranked sixth in the performance array (performance rating of 8.5) evidenced a raw data theme conceptualized within the higher order theme of *focus* indicating that the wrestler had felt reasonably focused prior to the performance. This match was interesting in that the performance rating was the highest of all of the season matches yet ranked in the bottom third of the performance array. As previously mentioned, the opponent in this match was rated by this wrestler as the weakest of his opponents.

Case 6: Pre-competitive cognitive content. As described in the characterization of the Case 1 data array, it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of high, medium and low levels of performance. Themes emerging from the interview transcripts concerning the match identified as the all-time best performance were solely related to the match preparation thoughts of *performance process* and *confidence building*.

Interestingly, the match selected as the all-time best performance by this wrestler occurred during his junior high years against a vaunted opponent with a senior high school reputation. Considering the wrestler indicated that his technical expertise in the sport was minimal at that stage of his career, it is perhaps not surprising that

there was a lack of specificity evidenced in his task relevant thoughts. His "game plan" for this match is evidenced in the following quotation:

I was thinking that if someone was going to beat me that I really wanted them to know who they had wrestled. So I was thinking if he was going to beat me, "man I am going to try to get into a real fight with him" kind of thing. That's what I was thinking.

The *confidence building* thoughts in this match were related to his *performance process* thoughts in that the wrestler was reassuring himself that the opponent could not be so dominant that respect could not be earned.

The more moderate performance level matches ranked second through seventh also reflected match preparation thoughts. *Technical/tactical* and *performance process* thoughts were uniformly identified among these performances. In each case references to specific techniques and tactics for use in the upcoming match were salient. Additionally, in each of these matches the wrestler indicated that he was focusing on wrestling a very physical style with a desire to intimidate his opponent. Additional match preparation themes were evidenced in the second ranked match in the form of *confidence building* thoughts and in third and seventh ranked matches in the form of *arousal control* thoughts. The raw data themes conceptualized as *confidence building* thoughts emerging in the second ranked performance were relative to the wrestler reassuring himself that he was capable of competing with a nationally ranked opponent. The *arousal control* thoughts evidenced in the third ranked match were associated with an

effort to avoid becoming over-aroused while the *arousal control* thoughts in the seventh ranked match were associated with attempts to elevate the wrestler's arousal level because of the perception that he was under-aroused. Examination of the wrestler's perception of opponent difficulty in these matches was revealing in that the opponent in the third ranked performance was rated and ranked by the opponent as the most difficult among opponents in the data set whereas the opponent in the seventh ranked performance was one of the lowest rated and ranked opponents.

A variety of themes also emerged among the moderate level second through seventh ranked matches that were not associated with match preparation. More precisely, coach-centered thoughts emerged in third, fifth and seventh ranked performances. The third and seventh ranked performances evidenced raw data themes reflecting a *concern about coach reaction to performance* with the wrestler thinking that the coach would be "mad" if he lost but that with a win "the ride back home would be better". Themes emerged concerning the fifth ranked performance conceptualized within the higher order theme of *negative thoughts toward/about coach* regarding a situation that had developed with the coach involving some animosity. Associated with this situation was a sense of uncertainty and concern on the wrestler's part as to whether or not he would be wrestling the match that was not resolved until

just prior to the match. The theme reflecting this uncertainty and concern was conceptualized in the higher order theme of *spontaneous coach decisions about dual meet performance order*.

The super-ordinate theme of assorted thoughts included references to *concerns about injuries*. In the second ranked performance it was revealed that the wrestler had some concerns about a previously sustained injury and what may happen if he got caught in the wrong position. The emergence of a theme conceptualized in the higher order theme of *pressure* in the sixth ranked match related to the wrestler's perception that, in contrast to previous matches, there was a notable lack of pressure to perform emanating from the coach. The seventh ranked performance evidenced a number of *irrelevant thoughts*. This match occurred at the end of a long road trip and the wrestler had a variety of thoughts concerning a desire to get home, the length of the trip home, and pleasure at not having to make weight again.

The eighth and ninth ranked performances (performance ratings of all-time worst and 3) can reasonably be considered to represent low performance levels given that their ranking status and low performance ratings. Raw data themes emerging from the two lowest ranked performances stand in contrast to those in the previously identified performance levels. The only match preparation thoughts emerging from the interview transcripts from the eighth and ninth ranked matches were conceptualized within the higher

order theme of *performance process* although notably different from other *performance process* themes. Specifically, these themes were related to the wrestler's desire to do physical harm to his opponent and salient even in the context of his preference for the use of instrumental aggression as a performance tactic. As the wrestler commented regarding the eighth ranked performance, "I wanted to hurt him more than I wanted to beat him or maybe about the same". The remainder of the raw data themes emerging from transcripts of the two lowest ranked matches could not be construed as task relevant. Specifically *irrelevant thought* themes emerging concerning the eighth ranked performance indicated that the wrestler was consumed with concerns about the negative physical feelings he was experiencing as well as being preoccupied with the quality and array of accomplishments of the opponent. Team-centered thoughts reflecting *concerns about team score* and *concerns about teammate performance* were prominent in the ninth ranked performance. These themes made reference to a preoccupation with the poor team showing in general, and specific teammate performances in particular as well as thoughts focused on the team score implications of his possible match outcomes. Associated with these team-centered concerns were references to extreme *pressure* that the coach was placing on the team to win the particular dual meet over a despised conference rival school.

Case 6: Pre-competitive confidence issues. Raw data themes emerged from the interview transcripts regarding five of the nine matches that were conceptualized within the dimension of **confidence issues**. The performances ranked second, third and fourth (performance ratings of 7.5, 8, 7.5 respectively) all evidenced themes reflecting *confidence*. These themes were all reflective of high levels of *confidence* although the assertion emerging from the second ranked match was mildly tempered with a reference to a concern about an injury. Interestingly, and in contrast to other study participants, the raw data themes emerging from the top ranked performance reflected no feelings of confidence but rather only prominent *doubts and a lack of confidence*. It is not unreasonable to speculate that one of the reasons that this match is cherished as the wrestler's all-time best performances is because the wrestler was able to overcome these doubts to defeat the much vaunted opponent. The eighth ranked and all-time worst performance also evidenced extreme *doubts and a lack of confidence* although in contrast to the top ranked performance, this lack of confidence was to the point of fear.

Case 6: Pre-competitive sources of motivation. Raw data themes emerged from six of the nine performances that were conceptualized as **sources of motivation**. There was no common thread among these sources other than each of them was cited as a reason to win. The top ranked performance

(all-time best match) themes were related to a *commitment to winning* and a desire to prove the people wrong that thought he was going to lose. The second ranked match (performance rating of 7.5) included references to the importance of beating the dreaded cross state rival. The third ranked match (performance rating of 8) included references to a desire to make sure the coach was not "shut-out" and wanting to see how he measured-up was against a nationally ranked opponent. The fourth and sixth ranked matches (performance rating of 7.5) included references to the importance of winning in front of the home crowd as well as an additional reference in the fourth ranked match to making the opponent pay for the wrestler having to make weight. Finally in the seventh ranked match the wrestler expressed the importance of not having a loss in the last dual meet of the season.

Case 6: Pre-competitive other. A single salient theme was identified among the interview transcripts of this wrestler that was not amenable to reduction among other themes in the data array. However since it was salient and consistent with other literature in the area it was retained for discussion. Specifically, in the ninth ranked match (performance rating of 3), the wrestler indicated that there had been a number of changes in his routines prior to performance brought on by the situation and coaching decisions. These related to not only the pre-match meal but as well to his drilling and warm-up partners. These were identified as significant changes to

what he referred to as almost a "ritual".

Case 6: Pre-competitive Summary. There were three distinct performance levels identified in the performance array of this study participant. **Pre-competitive affect** themes across the top level of performance and the higher ranked performances in the more moderate performance level related to emotional intensity were prevalent with particular references to almost ubiquitous feelings of *anger*. Lower ranked performances included references to a feelings of a *lack of intensity, scared* and *negative physical feelings*. A variety of concerns and worries emerged as salient and, with the exception of the top ranked performance, were relatively evenly dispersed across the moderate and low performance levels although most intense in the lowest ranked performances.

The **competitive focus** themes emerging from the data array of this study participant were not particularly revealing with only two themes in evidence. However, in examining the dimension of **cognitive content** it was observed that themes emerging across the high and moderate performance levels were largely relevant to performance preparation and hence suggested some degree of focus. By contrast the low level performances evidenced largely task irrelevant thoughts and concerns with *match preparation* themes that did emerge being in relation to a desire to hurt or injure his opponents.

Confidence issue themes were interesting with the top ranked performance evidencing severe *doubts* although apparently balanced with a *commitment to win* respect. *Confidence* themes emerged in the more moderately ranked performances while *lack of confidence* to the point of fear emerged in the eighth ranked match. With the exception of the **source of motivation themes** emerging in the top ranked performance, no particular pattern or associations were noted.

Case 1 Idiographic Analysis: Competitive Results

Case 1: Competitive affect. Raw data themes conceptualized within the dimension of **competitive affect** emerged in the matches ranked third, fourth, and sixth through eighth (performance rating of 7, 5, 5, 2.5, 2, respectively). The higher order theme of *general positive affect* was evidenced in the third ranked match with the wrestler indicating that he felt "comfortable, not cautious" during the match. By contrast, negative affect themes conceptualized in the higher order theme of *frustration* emerged from the performances ranked fourth, sixth and seventh and were relative to the wrestler's efforts being thwarted either through an inability to escape or because of the opponent's stalling tactics. Themes related to *emotional activation levels* were evidenced in the eighth ranked match with it being revealed that the wrestler felt insufficiently warmed-up and activated during the early stages of the match. Additionally, themes of *disappointment* emerged during the

latter stages of this match when the wrestler began to castigate himself for his performance earlier in the match.

Case 1: Competitive focus. Raw data themes conceptualized within the dimension of **competitive focus** were evidenced in the second, fourth, sixth, eighth and ninth ranked performances (performance ratings of 5, 5, 5, 2, all-time worst respectively). The higher order theme of *disruption of focus* was emergent in the second and sixth ranked performances with the wrestler indicating that frequent opponent injury time-outs during these matches made it very difficult to maintain focus. *Focus* themes were evidenced in the fourth ranked performance revealing that the wrestler was able to maintain some, although not total, focus on the task at hand. The low level eighth and ninth ranked performances evidenced the emergence of themes conceptualized as *lack of focus* wherein it was revealed that the wrestler was having trouble concentrating on task relevant issues. The eighth match additionally evidenced the emergence of *refocus* themes in which efforts to gain focus were referenced, however, in the ninth ranked performance no such attempts were referenced.

Case 1: Competitive cognitive content. As described in the characterization of the Case 1 data array and consistent with the characterization **pre-competitive cognitive content** results for this study participant, it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of

high, medium and low levels of performance. The top ranked and all-time best rated performance evidenced only themes conceptualized within the super-ordinate theme of task focused awareness. Specifically, **competitive cognitive content** themes emerging regarding this match were conceptualized exclusively within the higher order themes of *technical/tactical thoughts* and *awareness of coach input*. Included among these themes were thoughts about particular situational tactics that had been reviewed prior to the match as well as tactical decisions made during the match to take the match into overtime. As well, it was revealed that during this match the wrestler was aware of task relevant input provided by the coach from the sidelines.

A larger variety of themes were evidenced among the more moderately rated performances (ranked second through sixth). The super-ordinate level theme of task focused awareness was evidenced in the third through sixth ranked matches although *technical/tactical* thoughts were only evidenced in the third and sixth ranked performances. *Self-reinforcement* themes emerged in the third, fourth and sixth ranked performances. The following wrestler quotations are representative of the type of self-statements evidenced among these matches:

I was just thinking, if he hits that shot I know how to defend it, but go ahead on the offense, you hit your shots, don't be intimidated by him, use your offence.

I was just saying [to myself], "it will come just be patient".

The awareness of coach input higher order theme in task focused awareness emerged only in the fifth ranked performance with the wrestler indicating that he was aware of, but hesitant to follow, the coach's advice during the match even though he scored points on the one occasion that the advice was followed.

Among moderate performances, opponent thoughts emerged as salient in the second, fifth and sixth ranked matches. *Thoughts about opponent (physical)* were evidenced in the second and fifth ranked performances with the wrestler's match strategies being influenced in both cases by an awareness of his opponent's lack of conditioning. The sixth ranked performance *thoughts about opponent (technical/tactical)* themes were in reference to the opponent's stalling tactics and were associated with feelings of *frustration*.

The third ranked match evidenced thoughts of others in the form of *awareness of others as audience* with the wrestler indicating that he heard his roommate call out during the match from the audience. As he described it:

It was weird, I usually don't hear any people from the crowd but I heard my roommate. He said something once and I remember hearing that for some reason ... he just yelled something and that just stood out in the crowd, it was weird.

Among the assorted thoughts emerging in the fourth and fifth ranked performances were themes conceptualized as *protecting lead/fear of failure* with the wrestler revealing that he felt cautious or restrained in his efforts for fear

of making a mistake that would cost him the match. In both matches the wrestler felt he started out well but fell prey to these fears as the matches progressed with the fourth ranked performance resulting in a loss and the win in the fifth ranked performance being far tougher than necessary. *Awareness of being ineffective* emerged as a salient **cognitive content** theme in the third match with the wrestler experiencing disappointment and frustration because of this awareness.

The seventh through ninth ranked matches were characterized as representative of low levels of performance. In these matches task focused awareness themes emerged in the seventh and eighth ranked performances although not in the lowest ranked and all-time worst performance. *Technical/tactical thoughts* were evidenced in the seventh ranked performance with wrestler indicating an awareness of the match status and what needed to be accomplished to win the match. *Self-reinforcement* and *awareness of coach input* themes emerged in the eighth ranked performance. *The self-reinforcement* themes involved self-statements as to the wrestler's capabilities to win the match and self-exhortations such as "let go" and "get it started". As well, the wrestler indicated that he was paying attention to the coach on the sidelines as well as looking for instructions during breaks in the action.

Opponent thoughts in the form of *thoughts about the opponent (technical/tactical)* were salient in the seventh ranked match with the wrestler revealing that he was

focusing on the opponent's height advantage and techniques associated with this advantage. This theme was particularly salient in the context of the wrestler's admission that he does not like, and always has trouble, wrestling tall opponents. Thoughts of others were salient in the seventh and ninth ranked performances with themes reflecting *concerns about evaluative others* as well as *negative thoughts about the crowd and referee* emerging. The *concerns about evaluative others* emerging in the seventh ranked match involved a desire to avoid disappointing his brother and the coach. The ninth ranked match included a thorough awareness of an intimidating crowd and thoughts about what the wrestler considered unreasonable calls by the official.

Case 1: Competitive confidence issues. **Competitive confidence issues** emerging during the top ranked and all-time best match included *doubt turning to confidence, confidence* and *broke opponent*. These interrelated higher order themes revealed that, although harboring some doubts and feeling intimidated in the early stages of the match, the wrestler developed greater confidence as the match progressed. This sense of *confidence* was further enhanced at a point in the overtime period when the wrestler sensed that the opponent no longer believed he could win.

Confidence issues emerging among the more moderately rated performances included *confidence*, and *confidence ebbing*. In the second ranked performance the wrestler

indicated a strong sense of *confidence* that his opponent would "break" if he kept attacking him. Similarly, raw data themes emerging in the third ranked performance, a hard fought but narrow loss, revealed feelings of *confidence*. The fifth ranked evidenced feelings of *confidence* early in the match although *confidence ebbing* themes emerged following a setback about which the wrestler commented, "I was just too cautious after that reversal".

Among the lowest rated performances, **confidence issues** relating to the higher order themes of *confidence*, *lack of confidence* and *ebbing confidence* were evidenced in the seventh and eighth ranked matches. During the seventh ranked match the wrestler revealed a *lack of confidence* that intensified as the match progressed culminating with the woeful wrestler admission that late in the match he had been "broke" and had given up hopes of winning or even performing well. References in the eighth ranked performance to a sense that the wrestler would be able to come back in the second period after a poor start were evidenced although these were feelings were quashed in the final period.

Case 1: Competitive sources of motivation. Raw data themes conceptualized within the dimension of **sources of motivation** were evidenced in the first and fifth ranked performances (performance ratings of all-time best, 5 respectively). The top ranked performance evidenced raw data themes conceptualized in the higher order theme of *crowd influences intensity* wherein it was revealed that the

wrestler's perception of fan support heightened his efforts and commitment to winning. By contrast, in the fifth ranked performance, the wrestler indicated that a recurring motivating thought during the match was "do anything you can to win" although this thought was also associated with the **cognitive content** theme of *protecting lead/fear of failure*.

Case 1: Competitive summary. As previously mentioned, there are three distinct performance levels identifiable in the data array. There were no **competitive affect** themes that emerged in the top ranked performance. With the exception of the second ranked match, the more moderately rated performances all evidenced the emergence of negative affect themes or **cognitive content** themes with evaluative components associated with negative affect. More specifically, while the wrestler admitted to feeling comfortable in the third ranked performance, disappointment was experienced with the *awareness of being ineffective*. Across other moderately ranked performances, the negative affect of *frustration* was apparent as well as concerns associated with failure. More rampant negative affect emerged among the matches evidencing low performance ratings. Again *frustration* was salient as well as concerns associated with failure and evaluative others, as well as disappointment and negative feelings toward the referee and crowd. In the eighth ranked performance, feelings associated with a *lack of intensity* were noted in early

phases of the match.

Competitive focus can be seen to have deteriorated across the performance levels. Although no **competitive focus** themes were evidenced in the top ranked performance, examination of **cognitive content** themes revealed a focus solely on task relevant issues. Among the more moderately rated performances a variety of references to lower quality of *focus* or *disruption of focus* were evidenced as well as the emergence of non-task **cognitive content** themes. The low rated performances evidenced *lack of focus* themes as well as prominent non-task **cognitive content** themes.

As mentioned, across the performance levels a pattern of **cognitive content** themes emerged that range from fully task oriented in the top ranked performance to a consuming focus on non-task issues in the lowest performances. The more moderate level performances revealed a mix of task relevant and irrelevant thoughts. More specifically, in addition to the type of *task focused thoughts* evidenced in the top ranked performances, the more moderate performance evidenced increasing salient *thoughts about the opponent* and concerns associated with failure. The lowest ranked performances had much more salient and diverse task irrelevant themes emerging including *negative thoughts about the crowd and referee, concerns about failure and evaluative others* in addition to the task relevant thoughts.

Themes relevant to **confidence issues** exhibited a similar pattern across the performance levels with the most tangible *confidence* themes emerging in the top ranked performance. The more moderate performances evidenced *confidence* themes that were either less emphatic or ebbing as well as *concerns about losing*. The lowest ranked performances were associated with a salient *lack of confidence, ebbing confidence* and *concern about losing* themes.

This study participant largely did not seem to frame his perceptions of the competitive environment in terms of **sources of motivation**. While it can hardly be argued that the two emergent themes define a pattern, it is interesting to note that the **source of motivation** in the top ranked match (the crowd) acted as a positive energizing force, the more moderately rated fifth ranked performance featured a desire to win associated with a *fear of failure*.

Case 2 Idiographic Analysis: Competitive Results

Case 2: Competitive affect. Salient **competitive affect** themes were evidenced in five of the eight matches within the data array. In the second ranked performance (performance rating of 9) the higher order theme of *emotional activation* was evidenced with the wrestler revealing that he felt incredibly emotionally charged and intense during the performance. *Positive affect* emerged as conspicuous during the third ranked performance (performance rating of 8) with the wrestler experiencing pleasure and feeling good about the greater than usual

effectiveness of his technical efforts. By contrast in the fifth and sixth ranked performances (performance ratings of 6, 6 respectively), negative affect themes emerged in the *frustration* of the wrestler's efforts through opponent stalling tactics. Associated with the feelings of *frustration* were those of *anger*. Additionally, the seventh ranked performance evidenced themes associated with being intensely worried or anxious about the unusual position in which he found himself (getting pinned). Finally, dominant themes emerging in the eighth ranked match (performance rating of all-time worst) related to extreme feelings of *fatigue* that the wrestler later associated with his efforts to make weight for the match by dehydrating 14 pounds.

Case 2: Competitive focus. Themes conceptualized within the dimension of **competitive focus** emerged in the second through fourth and sixth ranked performances (performance ratings of 9, 8, 7.5, 6 respectively). In each performance these *focus* themes made reference to concentrating on the match to the exclusion of potential distractions (e.g., crowd). In the fourth and sixth ranked performances, themes conceptualized as *absorption* were evidenced with the wrestler describing a deep involvement in the match characterized by the sensation that time disappeared quicker than should be expected. Interestingly these two performances were against nationally ranked competitors and rated as the wrestler's two most difficult opponents.

Case 2: Competitive cognitive content. As described in the characterization of the Case 2 data array and consistent with the characterization **pre-competitive cognitive content** results for this study participant, the data array for this study participant was framed at the polar ends of the performance spectrum by the performances identified in Interview 1 as all-time best and worst performances. There are obvious differences in **competitive cognitive content** evident when these performances are contrasted. The performances ranked between these polar ends of the performance spectrum evidenced themes both related as well as novel to these extremes with the exception of the sixth ranked performance which was a virtual duplicate of the lowest ranked performance. The discussion of this athlete's data array progresses by revealing the results of the all-time best and worst matches followed by a discussion of the more moderate performances ranked second through seventh.

The top ranked and all-time best rated performance evidenced two types of themes. The task focused awareness themes were *technical/tactical* thoughts centered on tactics developed for the opponent as well as tactics emerging that were specific to developments in the match. Thoughts of others themes also emerged that concerned a detailed *awareness of the crowd* although it was revealed that this awareness did not impinge the wrestler's performance focus.

By contrast, the bottom ranked and all-time worst rated performance exclusively evidenced themes conceptualized in the super-ordinate themes of assorted thoughts and thoughts of others with the notable absence of task focused awareness themes. Awareness of being ineffective themes were salient with the wrestler commenting:

It just seemed like the harder I tried, the worse I was doing, just like nothing was going right ... It was like, "I've got to work harder" but when you try harder it doesn't always work to your advantage. I mean you don't work smarter, wrestle smarter.

Associated with this awareness were concerns about *evaluative others* themes such as illustrated in this wrestler recollection of thoughts during the match:

I remember that a couple of my friends, they were around like 30, they had come to [city] to see the match. I remember thinking about how crappy I was feeling with them in the stands and that bothered me, knowing that they were up there and I was wrestling so poorly.

Among the more moderately ranked performances, and as previously mentioned, the sixth ranked performance (performance rating of 6) virtually duplicated the eighth ranked and all-time worst rated performance in the emergence of cognitive content higher order themes as well as the composition of the raw data themes within these higher order themes.

The second through fifth and seventh ranked performances (performance ratings of 9, 8, 7.5, 6, 6 respectively) evidenced a wider variety of themes than those previously discussed. The task focused awareness themes of *technical/tactical* or *performance process*

thoughts emerged in each of these moderate range performances. *Awareness of coach input* themes were salient in the second through fourth and seventh ranked performances although in the second ranked performance a prominent part of this awareness related to the notable absence of input by the coach. Finally in the super-ordinate theme of task focused awareness, *self-reinforcement* themes emerged in the third ranked performance with the wrestler encouraging himself through feelings of fatigue.

Thoughts about opponent themes were only evidenced in two matches with *thoughts about the opponent (physical)* emerging in the fifth ranked performance relative to the physical strength of the opponent and *negative thoughts about/toward opponent* emerging in the seventh ranked match concerning the opponent's stalling tactics. Thoughts of others emerged in three of the more moderately rated performances matches. Specifically, the second ranked performance was saturated with *negative thoughts about/toward coach* associated with animosity from prior to the match that acted as a motivating force during the match. The third ranked performance evidenced *awareness of others as audience* with support from teammates playing a central positive role in these thoughts. Prominent themes conceptualized within the higher order theme of *negative thoughts toward/about referee* emerged in the seventh ranked performance concerning a series of calls considered to be

suspect by the wrestler.

Finally, in the super-ordinate theme of assorted thoughts, awareness of being ineffective themes emerged in the sixth and seventh ranked performances. The following wrestler quotation from the seventh ranked performance is representative of these sentiments:

It just seemed like nothing was going right but yet, I mean I was working my ass off trying to finish things and get in on shots and everything but ... I couldn't finish off my moves.

Case 2: Competitive confidence issues. Themes conceptualized within the dimension of **competitive confidence issues** were evidenced in six of the eight performances. The **confidence issues** themes emerging in top three ranked performances (performance ratings of all-time best, 9, 8 respectively) share a commonality even though the first ranked performance themes were conceptualized as *doubt turns into confidence* while the second and third were labeled *confidence*. These themes all reveal scoring the first takedown as a significant portent in the wrestler's mind of how the match would progress. In the case of the first match the wrestler commented:

I remember after the first takedown saying to myself "I know I can beat him now". Cause I took him down and I knew if I could do it once I knew I could do it again. That thought, that doubt that maybe I had before, that little five percent doubt was gone.

Similarly the *confidence* themes in the second and third ranked performances included sentiments such as:

I remember after the first takedown, I knew I was going to win. You know how you get that feeling.

Right from the start I took the guy down with the low single. So right when I did that I was like "all right, I can take this guy down all day".

The *doubt turns into confidence* theme emerging in the fourth ranked performance (performance rating of 7.5) revealed that as the match progressed, the wrestler came to realize, albeit belatedly, that he was capable of competing against his nationally ranked opponent and had been giving his opponent too much respect. In the fifth ranked performance (a narrow defeat), a *confidence* theme emerged related to a sense of persistent confidence in that wrestler retained positive expectancies for the match outcome despite facing setbacks. *Confidence ebbing* themes emerging in the seventh ranked performance (performance rating of 7) again revealed the importance of the initial action flurries to the wrestler's confidence. In this match the wrestler scored the first takedown but in the process was reversed to his back. As the wrestler commented:

Like after the first takedown I knew I could take him down. So then I thought I could beat him but after he did that, I was, it took a lot of wind out of me.

Case 2: Competitive sources of motivation. Raw data themes conceptualized within the dimension of **sources of motivation** were evidenced in two of the eight matches in the data array. Determination to secure a win emerged as a *source of motivation* in the fifth ranked performance (a loss; performance rating of 6). A salient source of motivation was evidenced in the seventh ranked performance (performance rating of 6), during which the wrestler spent

a significant amount of time on his back, was regarding a determination not to experience that which had not happened before (being pinned).

Case 2: Competitive summary. Distinct performance levels were not identified in this study participant's data array although the top and bottom ranked performances stood in stark contrast while more moderate performances represented an intermediate range rather than level of performance. In the dimension of **competitive affect** there were no references to affect in the first and fourth ranked matches. Interestingly these matches were also associated with intense involvement into the performance. By contrast intense *activation* and motivating *anger* characterized the second ranked performance. Positive affect associated with pleasure was found in the third ranked performance. The remainder of the performances evidenced *frustration*, and *anger* as well as negative affect associated with *negative thoughts toward the referee/opponent*, *concerns about evaluative others* and *an awareness of being ineffective*. The lowest ranked performance evidenced an additional reference to feelings of being *tired* associated with the effects of dehydrating to make weight.

Competitive focus themes were only referenced in four of the eight matches and each of these made reference to positive states of *focus*. Interestingly references to *absorption* into the performance emerged among the moderate range of performance and against the two most difficult

opponents. Themes from the dimension of **cognitive content** provide an interesting array as it can be observed, with the exception of the fourth ranked performance, that increasingly worries, concerns, and other task irrelevant themes came to dominate thoughts across decreasing performance ratings. The fourth ranked performance themes reinforce the notion of *absorption* by evidencing only task focused awareness themes.

The examination of the dimension of **confidence issues** revealed that initial flurries of action seem to be critical to the wrestler's sense of *confidence* in the performance. The mutability and lack of stability emerging in these themes is interesting and potentially raises questions as to accuracy of the wrestler's self-perception of his abilities.

Finally, no particular pattern was evidenced in **competitive sources of motivation** although the intensity observed in the determination not to get pinned was salient.

Case 3 Idiographic Analysis: Competitive Results

Case 3: Competitive affect. Raw data themes conceptualized within the higher order theme of **competitive affect** were evidenced in three of the six matches. The first and fifth ranked performances (performance ratings of all-time best, all-time worst) evidenced themes characterized in the higher order theme of *emotional activation levels* with the top ranked performance being

characterized by feelings of very high intensity while the fifth ranked performance being characterized by feelings of very low intensity. The sixth and lowest ranked performance evidenced *frustration* as a salient affective theme with wrestler commenting:

I was frustrated really. I mean I think it was more frustrated at myself because I knew that, how the match went really, it was things that I usually don't do or don't get hit with and I was kind of beating myself bad.

Case 3: Competitive focus. The ordinal array of themes emerging within the dimension of **competitive focus** for this wrestler provided clear progression of results. The top ranked and all-time best rated match evidenced the higher order theme of *absorption* with the wrestler commenting:

I think more than anything I was real into the match. I think it was just the opponent, I mean the guy I was wrestling, into that match. I was real, real focused in the match, about what was happening, the time, the score, man I wasn't distracted I don't think. I don't think I had anything else on my mind. I was in that match.

Themes emerging in the second ranked and moderate level performance (performance rating of 7) also made reference to being *focused* with the wrestler indicating that he was "pretty much just focused on the match itself" although *refocus* themes emerged relative to wrestler efforts to manage frustrating calls by the official. *Focus* themes were not observed in the third ranked performance (performance rating of 5.5) per se but *refocus* themes emerged in reference to wrestler attempts to collect

himself after being placed in a near fall situation. The fourth ranked and low level performance (performance rating of 3) evidenced the emergence of *lack of focus* themes relating efforts by the wrestler to focus although never achieving the desired focus and in fact experiencing a further decay or *loss of focus*. Finally, the two lowest ranked performances (performance ratings of all-time worst, 3 respectively) both evidenced very salient *lack of focus* themes. The *refocus* theme emerging late in the sixth ranked performance when the wrestler was "down by a ton" provides an interesting counterpoint to the *lack of focus* theme characterizing most of that match. In thinking "well finish up hard there is nothing you can do about it now", the wrestler shifted his attention from trying to win the match to trying to score a takedown. As he indicated "I started wrestling a lot more controlled ... I mean I was wrestling a lot better but by then it was going to be near impossible to come back".

Case 3: Competitive cognitive content. As described in the characterization of the Case 3 data array and consistent with the characterization **pre-competitive cognitive content** results for this study participant, it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of high, medium and low levels of performance.

Interestingly, in the top ranked performance there were no emergent themes conceptualized within the dimension of **competitive cognitive content** although this may not be

totally surprising considering the *absorption* theme evidenced in the dimension of **competitive focus**.

The two moderate level performances evidenced a much wider assortment of themes in the dimension of **competitive cognitive content**. The super-ordinate theme of task focused awareness emerged in both of the more moderately rated performances. Both the second and third ranked performances evidenced the higher order themes of *technical/tactical* and *performance process* thoughts with particular situations being identified in association with these thoughts. Equally, *awareness of coach input* themes emerged in both moderate level matches with the wrestler conscious of particular information relayed by the coach from the sidelines. Additionally, *self-reinforcement* themes emerged in the third ranked match concerning self-exhortations and reinforcements associated with the performance.

Opponent thoughts emerged in the third ranked performance with the wrestler indicating that he was aware that his opponent was trying to stall out the match. The second ranked performance evidenced themes conceptualized in the super-ordinate theme of thoughts of others and related to *negative thoughts toward/about referee* regarding a number of decisions by the official during the match. Finally, assorted thoughts evidenced in the second ranked performance included themes relating to *protecting lead/fear of failure*. More precisely, in the later stages

of the match it was confessed, with some chagrin, that the primary concern had become protecting the lead to secure a victory.

Among the fourth through sixth ranked performances were considered to represent a low level of performance. The only task focused awareness themes were evidenced in the sixth ranked performance and these were related to *technical/tactical* thoughts and *self-reinforcement* in the face of a debacle. Thoughts of others were evidenced in the fourth and sixth ranked performances in the form of concerns as to how the coach and audience would perceive the performance. Additionally a variety of assorted thoughts emerged as prominent including an *awareness of being ineffective* in each of the matches as well as *concerns about losing* in the lowest two ranked performances.

Case 3: Competitive confidence issues. Themes conceptualized within the dimension of competitive confidence issues were evidenced in six of the seven matches. In top rated and all-time best performance evidenced the higher order theme of *doubts turn to confidence* with the wrestler indicating that an early takedown was key in helping him realize that he was capable of rising to the occasion. This confidence was further heightened when the wrestler felt he had *broke his opponent*. As the wrestler commented about this feeling:

I can remember, there is always a point where you feel like you are kind of breaking a person. I definitely had that type of feeling in that match ... you can

almost feel it to the point where the fight from his side kind of went down a little bit. Then you kind of get that taste of "hey I got this guy, I got him, he is hurt". I can still remember that, thinking OK, that is when you know you have it.

Confidence also emerged in the moderate level performances. A salient theme emerged in the second ranked performance (performance rating of 7) with the wrestler commenting that by the end of the first period he was sure that his opponent would "break" if he kept up the pressure. Similiar *confidence* themes were evidenced in the third ranked performance (performance rating of 5.5) with the wrestler initially feeling that he could "handle his opponent" although themes relating to *confidence ebbing* were also evident as a consequence of wrestler attacks being thwarted. Similar but more intense *confidence ebbing* themes emerged in the low level fourth and sixth ranked performances (performance rating of 3, 3 respectively) where attacks were not only thwarted but converted into scoring opportunities for the opponent.

Case 3: Competitive sources of motivation. Sources of **motivation** themes were evidenced in the performances ranked third, fourth and sixth in the array (performance ratings of 5.5, 3, 3 respectively). In the third ranked and moderate level performance (a losing performance) the wrestler revealed that a recurrent thought focused on his feeling that he had to win the match. The themes emerging late in the low level fourth and sixth ranked performances when the wrestler was being soundly thrashed were in reference to what was called "the pride factor". As the

wrestler commented about his efforts late in the sixth ranked performance:

I mean I obviously knew [wrestling hard] wasn't going to change the outcome. But I think [the pride factor] was the only thing that kept me going hard probably. Like in the third period I wrestled somewhat better but at least I was going hard. I think that definitely played a role then.

Case 3: Competitive summary. As previously mentioned, there are three distinct performance levels identifiable in the data array. Relatively few **competitive affect** themes emerged from the data array of this study participant. These themes ranged from feelings of pure intensity in the top ranked performance to a lack of intensity and frustration in the low level performances. However a variety of negative evaluative **cognitive content** themes such as associated with worries about losing and evaluative others as well as ineffective feelings emerged as salient particularly among low ranked performances.

A clearly identifiable pattern of results emerged across performance levels in the dimension of **competitive focus** that is entirely in consonance with the array of data in the dimension of **cognitive content**. Specifically, a range from total task *absorption* to total *lack of focus* can be observed across the data array with the more moderate performance levels containing both *focus* and *refocus* themes. **Cognitive content** in the lowest performance levels was revealed to be consumed by a variety of task irrelevant issues while more moderate performances evidenced both salient task relevant and task irrelevant thoughts.

Interesting no **cognitive content** themes emerged in the top ranked performance however this is consistent with notions of total *absorption*.

Confidence issue themes from this performance array revealed this study participant's sense of confidence to be mutable within performances. In the top ranked performance *doubt turning into confidence* was observed, however, in lower ranked performances references to *confidence ebbing* became increasingly salient. Across moderate and low level performances, salient themes relating to concerns related to failure were evidenced.

Finally, **sources of motivation** themes were only evidenced in moderate and low level performances. Pride emerged as a salient motivating force to continue efforts in the face of impending overwhelming defeat and, in fact, was associated with refocusing efforts in the lowest ranked performance while recurrent thoughts about having to win in the third ranked performance were associated with *ebbing confidence* or increasing *doubts* following each unsuccessful attack.

Case 4 Idiographic Analysis: Competitive Results

Case 4: Competitive affect. The higher order theme of *emotional activation levels* was evidenced in the top ranked and all-time best rated performance with the wrestler experiencing feelings of high intensity described as being "fired up". Interestingly, the remainder of the competitive affect themes evidenced in this data array were

negative affect themes. Specifically, the fourth, fifth and ninth ranked performances (performance ratings of 7, 7, 4 respectively) had *frustration* emerge as salient. In each of these performances this sense of *frustration* was related to opponent stalling tactics along with the referee's refusal to enforce the passivity rules. The negative affect themes evidenced in the seventh ranked performance (performance rating of 6) were related to *fatigue* and *disappointment and disgust*. The feelings of *fatigue* were those of being physically tired and attributed to the effects of the extensive competitive road schedule following a holiday training break. The *disappointment and disgust* themes were self referenced with the wrestler commenting: "I was getting very disgusted with myself because I knew I wasn't doing what I needed to be doing".

Case 4: Competitive focus. The **competitive focus** themes across the performance array presented a reasonably coherent picture. The top ranked and all-time best performance evidenced themes conceptualized within the higher order themes of *absorption* and *performance automatic* and revealing the sensation of a suspended awareness of time with action seeming to occur in the absence of thought. *Focus* themes emerging from the second and fourth ranked performances (performance ratings of 8, 7 respectively) revealed that the wrestler felt like he was reasonably focused on the task at hand. By contrast, *lack of focus* themes emerged as salient in the low level six through ninth ranked performances (performance ratings of

all-time worst, 6, 6, 4 respectively) with the wrestler additionally indicating that he was struggling to *refocus* his thoughts in the seventh through ninth ranked performances.

Case 4: Competitive cognitive content. As described in the characterization of the Case 4 data array and consistent with the characterization **pre-competitive cognitive content** results for this study participant, it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of high, medium and low levels of performance.

Only task focused awareness themes emerged in reference to the top ranked match and these were conceptualized within the higher order themes of *technical/tactical thoughts* and *awareness of coach input*.

The more moderate level performances also evidenced task focused awareness themes although within the context of a variety of additional thoughts conceptualized among the other super-ordinate themes. Specifically, *technical/tactical* and *performance process* thoughts were evidenced in second through fifth ranked performances with additional *awareness of coach input* themes emerging in the second and fourth ranked performances. Thoughts of others emerging in the more moderately rated performances were salient in third through fifth ranked performances. More precisely, *awareness of others as audience* thoughts were evident in the third performance with a greater than usual

awareness of the home crowd and the presence of the pep band being revealed. As the wrestler commented:

I was more aware of the crowd, not necessarily of what they were saying but more aware that I was wrestling in front of a crowd. I think it was just because they were a home crowd.

I was surprised that the band, I could actually hear the band playing ... just a different noise in the gym.

Additionally, *negative thoughts about/toward the coach* were salient in the fourth and fifth ranked performances. Representative of the themes emerging in this regard are the following wrestler quotations:

[Coach] was screaming and yelling at me, I wasn't even really worried about the guy I was wrestling, I was more or less worried about Coach, he was so pissed ... just a negative attitude toward Coach which doesn't help when you are trying to wrestle a match.

[Coach] was really pissed off about the other matches so by the time my match came around he really wasn't giving me much help, he wasn't supporting me much ... When he did say something he was screaming and yelling like I was , you know, he likes sometimes to treat guys like they are stupid.

The fifth ranked performance also evidenced the emergence of thoughts conceptualized in the super-ordinate themes of opponent thoughts and assorted thoughts. Specifically, themes conceptualized as *thoughts of opponent (technical/tactical)* and *general irrelevant thoughts* were evidenced. These interrelated themes revealed the awareness that the opponent's stalling tactics were aimed at securing a tie and that such a result would assure the other team's victory.

Relatively few task focused awareness themes emerged in the four lowest ranked and rated performances and, in

further contrast to higher ranked performances, there were no *performance process* or *technical/tactical* thoughts evidenced. *Awareness of coach input* themes emerged in both the eighth and ninth ranked performances with *self-reinforcement* themes emerging in the eighth ranked performance. Thoughts about others were very salient in the sixth through eighth ranked performances. Particularly prominent in the sixth and seventh ranked performances were themes conceptualized as *negative thoughts toward/about coach*. As the wrestler commented in the seventh ranked performance:

It gets to the point where now I am not only battling the person I am wrestling, I am battling Coach too because he is not a very positive influence on the side when things aren't going very well.

Associated with these thoughts about the coach were *concerns about evaluative others* with the wrestler being worried about the consequences of the poor performance relative to the coach. In the eighth ranked match, *negative thoughts toward/about the referee and opponent* emerged with the wrestler being irritated that the official was neglecting to call what he considered flagrant fouls by the opponent.

Assorted thoughts conceptualized within the higher order theme of *awareness of being ineffective* were evidenced in the seventh and ninth ranked performances with the wrestler revealing that his body and mind were not working in concert. As the wrestler described it:

I could see moves that were there, takedowns that were there. You know when you get up to a certain level of competition, they are only there for a split second. I would see them and I knew when they were going to be there and I wasn't, my mind wasn't making my body react. So I was trying to overcome that.

Finally, *concerns about injury* emerged as salient in the eighth ranked performance. It was revealed that the wrestler felt hesitant and timid during the match because he was afraid that he was going to hurt his knee again.

Case 4: Competitive confidence issues. Themes conceptualized in the dimension of **competitive confidence issues** were evidenced among only the top three performances (performance ratings of all-time best, 8, 7.75 respectively) with each of these *confidence* themes revealing a sense of control over his destiny. As the wrestler commented in the top ranked match:

I don't think I ever doubted myself. I don't think I doubted myself as such but I felt that I had to work harder, keep moving, work harder ... maybe I was down points, I had to get it back, start doing stuff even better.

Case 4: Competitive sources of motivation. The only themes emerging conceptualized in the dimension of **competitive sources of motivation** were evidenced in the top ranked and all-time best performance. The following wrestler quotation is revealing in this regard:

In between periods, I remember my parents and family were there and I was down 2-1 and I was down on the mat, it was my choice, and I remember just before I got set thinking about not wanting to lose, embarrass myself in front of my family. I remember thinking that and I was doing that I think to kind of fire myself up.

Case 4: Competitive summary. As previously mentioned, there are three distinct performance levels identifiable in the data array. The only **competitive affect** theme emerging in the top ranked performance was that of feelings of intensity. Across moderate and low level performances only negative affect themes emerged with *frustration* being evidenced in the fourth and fifth ranked performances and a variety of **cognitive content** themes emerging particularly in low ranked performances associated with worries, concerns and negative feelings toward others. Most salient were themes regarding either concerns about the coach or negative thoughts about the coach.

As mentioned, **competitive focus** themes presented a reasonably coherent picture. Specifically a logical progression was evident with the top ranked performance evidencing great involvement to the low level performances evidencing a lack of focus. This progression was consistent with the pattern of themes evidenced in the dimension of **cognitive content**. Specifically, solely task relevant themes emerged in the top ranked performance whereas the low level performances were revealed to have a virtual absence of such themes and rather an abundance of concerns, worries and negative thoughts. The moderate level performances were found to share aspects of both the high and low level performances with both task relevant and task irrelevant themes in evidence.

Confidence issue themes were only evidenced in the top three performances with high levels of confidence

revealed. Among the lower ranked performances a variety of concerns emerged that are perhaps associated with lower levels of *confidence* or *doubts*. Included among these were themes relating to ego concerns and *awareness of being ineffective*.

There was only a single theme that emerged in the dimension of **sources of motivation** and that was the reference to the *crowd influencing intensity* in the top ranked performance. This wrestler did not seem to frame his comments or perception of the competitive environment around issues of motivation.

Case 5 Idiographic Analysis: Competitive Results

Case 5: Competitive affect. **Competitive affect themes** were evidenced in four of the nine matches in the data array. The start of the second ranked performance (performance rating of 9.25) was characterized by feelings of *nervousness* and an associated "tightness". *Frustration* associated with the wrestler's inability to complete a particular technique emerged as salient in the sixth ranked performance (performance rating of 7). Finally, prominent *emotional activation* themes emerged characterizing the low level eighth and ninth ranked performances (performance ratings of all-time worst, 0 respectively) with the wrestler indicating a *lack of intensity* and "blah" feelings.

Case 5: Competitive focus. Themes conceptualized within the dimension of **competitive focus** were evidenced in

each of the nine matches in the data array. The top ranked and all-time best rated performance evidenced the higher order themes of *absorption* and *performance automatic*. Specifically, in this match the wrestler described being totally absorbed into the performance with action and reaction seeming to occur in the absence of thought. Themes conceptualized as *focus*, *refocus* and *absorption* all emerged in the second ranked performance (performance rating of 9.25) with the wrestler being totally focused and into the match although *refocusing* after a mistake costing him points. The third ranked performance (performance rating of 9) again evidenced *absorption* with the wrestler describing his performance as "going with the flow" and his recall of the match as "totally foggy" with "nothing that stands out as vivid". Both the fourth and fifth ranked performances (performance ratings of 8.75, 9.5 respectively) were exceedingly short in duration with his low ranked opponents being dispatched handily and the wrestler feeling *focused*.

Interestingly, the more moderately rated sixth and seventh ranked performances (performance ratings of 7, 7.5 respectively) evidenced the themes of *absorption*, *automatic performance* and *focus*. This wrestler was one of only two study participants that made reference to experiencing these states of special involvement during other than high level performances.

The lowest ranked performances (performance ratings of all-time worst, 0 respectively) were revealed to be

associated with a *lack of focus* although themes of *refocusing* to salvage the win were evident in the eighth ranked performance whereas the ninth ranked performance revealed to feature a total *lack of focus*.

Case 5: Competitive cognitive content. As described in the characterization of the Case 5 data array and consistent with the characterization **pre-competitive cognitive content** results for this study participant, it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of high, medium and low levels of performance.

In the top five ranked performances, also representative of a high performance level, very few themes emerged that were conceptualized in the dimension of competitive cognitive content. This is perhaps not surprising given that *absorption* was a salient theme among the top three performances while the fourth and fifth performances were exceedingly short in duration. Task focused awareness themes emerged in first and fourth ranked performances with *self-reinforcement* conspicuous in the top ranked performance while *technical/tactical* thoughts emerged in the fourth ranked performance. Thoughts about Opponent were evident in the second and fifth ranked performances. Specifically, *negative thoughts toward/about opponent* prominent in the second ranked match featuring a disdain for the opponent's complaints about the physical nature of the match. The *thoughts about opponent*

(*physical*) in the fifth ranked performance revealed an awareness of the opponent's physical strength which influenced tactical decisions. Finally, *irrelevant thoughts* were evidenced in the fourth ranked performance with the wrestler expressing surprise that his lowly regarded opponent was able to escape the first pinning combination.

In the moderate level performances, despite the presence of *absorption* and *performance automatic* themes, both the sixth and seventh ranked performances evidenced salient **cognitive content** themes. In the sixth ranked performance only opponent thoughts categorized in the higher order themes of *thoughts about opponent (technical/tactical)* and *negative thoughts about/toward opponent* were evidenced. Both of these themes emerged late in the match when the wrestler became aware that his opponent was wrestling for a tie score. The following quotation illustrates the wrestler's thoughts about these tactics:

I was just like "you suck". I was irritated because I was like, what the hell, I would rather lose than fricken tie. I mean, he just didn't want to wrestle.

Task focused awareness themes were salient in the seventh ranked performance with *performance process*, *technical/tactical* and *self-reinforcement* themes all in evidence. Related opponent thoughts themes emerged with the assessment of his opponent's fatigue levels playing into *technical/tactical* plans.

Finally the two low level performances provided an interesting contrast to all of the previous matches the dimension of **cognitive content**. In the eighth ranked performance, the wrestler's preoccupation with *negative thoughts toward/about everybody* is amply represented in the following wrestler quotation:

I was frustrated, I was like ready to double pump the crowd off ... I was just so annoyed by so many things at that time. It was hard to be focused because I was like, I wanted to tell everybody off, I wanted to tell the crowd off, I wanted to tell his coach off, I wanted to tell [opponent] off, I was just irritated by everything ... I wanted to smack the official right in the head. I just wanted to punch him.

The ninth ranked performance evidenced no themes conceptualized in the dimension of **cognitive content** with the wrestler merely characterizing his state of mind as totally "spaced".

Case 5: Competitive confidence issues. Raw data themes conceptualized within the dimension of **confidence issues** were evidenced in six of the nine performances. The higher order theme of *confidence* emerged in the first through third, fifth and seventh ranked performances (performance ratings of all-time best, 9.25, 9, 9.5, 7.5 respectively). The top ranked performance *confidence* themes were reflective of total confidence with the wrestler evincing a sense of being unstoppable. *Confidence* themes emerging among the other performances identified were nearly as strong as well as revealing a sense of resilience in the face of adversity. A theme reflecting some degree of *doubts turning to confidence* emerged in the

ninth ranked performance (performance rating of 0) when the wrestler began to realize (albeit too late) that his total lack of confidence from the pre-competitive period was unfounded.

Case 5: Competitive sources of motivation. A single theme conceptualized in the dimension of **sources of motivation** was evidenced in the data array. The eighth ranked and all-time worst rated performance included a theme related to a *commitment to winning* which served to refocus the wrestler's thoughts and efforts to salvage a win during a dismal performance.

Case 5: Competitive summary. As previously mentioned, there are three distinct performance levels identifiable in the data array. This study participant made relatively few references to themes conceptualized within the dimension of **competitive affect**. However it was observed among the low level performances that feelings of a *lack of intensity* and *disgust* were salient as well as nearly overwhelming negative thoughts toward a variety of others. By contrast, the second and sixth ranked performances evidenced some themes of nervous tightness, *frustration* and *negative thoughts toward the opponent* but these were not overwhelming sensations.

The dimension of **competitive focus** provided an interesting pattern of themes. As might be expected, high level performances evidenced high levels of task involvement whereas low level performances evidence themes

relating to a *lack of focus*. However, themes emerging in the moderate level performances suggested *absorption* and *automatic performance* as were found among high level performances. In examining themes emerging in the dimension of **cognitive content**, a pattern was evidenced that was not at odds with the **competitive focus** themes but qualifies the pattern. More precisely relatively few **cognitive content** themes emerged in the top level performances while the moderate level performances evidenced more themes although largely task relevant. Finally the low level performances evidenced themes that were largely task irrelevant. Themes emerging in the dimension of **confidence issues** are also consonant with these previously mentioned results with themes of *confidence* emerging across the performance array although the low level performances evidencing the only concerns or *doubts*.

Finally, as previously mentioned, this wrestler made almost no reference to **sources of motivation** however winning was a salient priority permeating his transcripts. The only theme emerging conceptualized in this regard was in his all-time worst performance however this is not to deny the broader salience.

Case 6 Idiographic Analysis: Competitive Results

Case 6: Competitive affect. Raw data themes conceptualized within the dimension of **competitive affect** were evidenced in seven of the nine matches. The higher order theme of *mad* emerged in the second, third, fifth and

sixth ranked performances (performance ratings of 7.5, 8, 7, 8.5 respectively) and appeared to be a dominant emotional response mode to challenge or adversative conditions although *general positive affect* themes emerged during the second and sixth ranked in reference to being "happy" about performance at various points. The third ranked performance also included references to being very *nervous* as well as references to intense negative feelings associated with *fatigue*. An additional *other* theme emerged in the sixth ranked performance concerning embarrassment following the inappropriate display of mirth over a particular incident. The seventh ranked performance (performance rating of 7.5) was characterized by feelings associated with a lack of intensity. Both the eighth and ninth ranked performances (performance ratings of all-time worst, 3 respectively) evidenced themes of extreme *fatigue* associated with being burnt-out in the former and the effects of dehydration to make weight in the latter.

Case 6: Competitive focus. Themes conceptualized within the dimension of **competitive focus** were evidenced in eight of the nine performances. References to being *focused* emerged in the first through fourth and sixth ranked performances (performance ratings of all-time best, 7.5, 8, 7.5, 8.5 respectively) although these were not uniform in degree. The *focus* themes in the top ranked performance were interesting in that the wrestler indicated being totally involved in the performance while

simultaneously aware of the things going on around him. The second and fourth ranked performances evidenced additional themes conceptualized within the higher order theme of *absorption* as well as a theme in the third ranked match related to *refocusing* efforts. This wrestler was one of only two study participants that made reference to experiencing these states of special involvement during lower ranked performances. The fifth and seventh ranked performances (performance ratings of 7, 7.5) evidenced themes referencing a *lack of focus* described as "a little less focused" than usual whereas the *lack of focus* themes emerging in the ninth ranked performance (performance rating of 0) represented more substantial comments on a state of cognitive disarray.

Case 6: Competitive cognitive content. As described in the characterization of the Case 6 data array and consistent with the characterization **pre-competitive cognitive content** results for this study participant, it seems particularly relevant to discuss the results in the dimension of **pre-competitive cognitive content** in terms of high, medium and low levels of performance.

Themes emerging in the top ranked and all-time best rated performance included task focused awareness themes such as conceptualized in the higher order themes of *technical/tactical thoughts* and *awareness of coach input*. The match identified as this wrestler's all-time best performance dated back to his junior high school years and consequently the *technical/tactical* themes reflected

rudimentary concerns consistent with what might be expected of a junior high school wrestler. Additionally, thoughts of others were salient with the wrestler being able to describe in great detail the crowd's involvement in the match.

The moderate level performances ranked second through seventh all shared a number of common themes. The task focused awareness themes of *technical/tactical* and *performance process* thoughts were evidenced in each of these matches. Additionally, *awareness of coach input* themes emerged in the second, third, fifth and sixth ranked performances as well as *self-reinforcement* themes in the second ranked performance. Opponent thoughts emerging in these matches were conceptualized in the higher order themes *negative thoughts about/toward opponent* and *thoughts about the opponent (physical)*. The *negative thoughts about/toward opponent* themes were evidenced in the second and fifth ranked performances with the wrestler expressing negative sentiments about opponent behavior during the match. By contrast, the *thoughts about opponent (physical)* themes evidenced in the fourth, and seventh ranked performances were relevant to the size or strength of the opponent and in service of tactical decisions. Finally, among the thoughts of others emerging in the fifth ranked performance were *negative thoughts about/toward coach* concerning a prior incident involving some animosity as well as a greater than usual *awareness of the crowd*.

The two low level performances provide a notable contrast in cognitive content when compared with higher ranked performances. The only raw data themes in evidence were conceptualized in the super-ordinate theme of assorted thoughts. Both of these matches evidenced the emergence of prominent *awareness of being ineffective* themes. As can be observed in the following quotations from these matches, the wrestler was quite disturbed by these thoughts:

I remember concentrating on what he was doing and I remember I couldn't stop it ... I remember thinking "man he got in there so quick, I don't know how, I can't stop it". And I remember trying to fight it but I couldn't cause techniquewise I was totally outgunned.

I didn't feel like I had a grip on anything. It was really weird ... like I couldn't get a grip on him, like position and my arms were just real tired. I don't know. I just couldn't get inside control and I was thinking "man this is weird", like I'm not usually like this, I usually can take control of the guy. So I just felt tired and couldn't do it. I could feel myself leaning and posting off him which I shouldn't have been doing. I felt real slow I guess.

Other themes emerging in the eighth ranked performance were conceptualized in the higher order themes of *concerns about losing* and *irrelevant thoughts* with the irrelevant thoughts being related to the wrestler's desire to hurt his opponent.

Case 6: Competitive confidence issues. Themes conceptualized within the dimension of **competitive confidence issues** were observed in three of the seven matches in the data array. The **confidence issue** theme emerging in the second ranked performance (performance rating of 7.5) was a *broke opponent* theme with the wrestler

coming to believe that his opponent had given up hopes of winning the match. The *confidence* themes emerging from both the fifth and seventh ranked performances (performance ratings of 7, 7.5 respectively) were related to the wrestler's sense of being able to control the progression of the match.

Case 6: Competitive sources of motivation. Themes conceptualized within the dimension of **sources of motivation** were evidenced only in the first and second ranked performances (performance ratings of all-time best, 7.5 respectively). Specifically, in the top ranked performance it was indicated that the wrestler's awareness of the spectator involvement in his match served to amplify his efforts. The opponent's complaints about the physical nature of the second match was revealed to have been a *source of motivation* with the wrestler commenting, "I don't like to wrestle people that complain all the time, it makes me want to beat him even worse -- I was thinking about that".

Case 6: Competitive summary. As previously mentioned, there are three distinct performance levels identifiable in the data array. Across high and moderate levels of performance, **competitive affect** themes associated with *feelings of intensity* emerge, frequently associated with feelings of *anger*. By contrast, the low level performances both make reference to feelings of *fatigue* and being tired. Additionally although some **cognitive content**

concerns emerged among moderate level matches, low level performances evidenced strong affective themes associated with *concerns about losing* and *feeling ineffective*.

The dimension of **competitive focus** reveals that by and large across high and moderate performance levels that the wrestler experienced high levels of concentration during the performances. The low level performances were characterized by salient *lack of focus* themes. Again broadly speaking themes emerging in **cognitive content** substantiated this observation. Specifically, the top ranked performance can be seen to evidence a focus on task relevant issues. As well, this pattern can be observed among more moderate level performances although additional task irrelevant issues emerged. By contrast, the low level performances evidenced no themes relating to task relevant issues but rather only to *concerns about losing, feeling ineffective* and a desire to injure the opponent.

This study participant did seem to frame his comments regarding the competitive experience in terms of **confidence issues** to a large degree. However *confidence* themes that did emerge suggest that the wrestler was *confident* in some degree across his high and moderate level performances. By contrast, themes that may be associated with decreased confidence emerge in low level performances such as *concerns about losing* and an *awareness of being ineffective*. Themes relating to **sources of motivation** were thinly evidenced in the comments of this study participant as well and only found in the top two ranked performances.

In both cases these themes referenced outside sources as influencing the intensity of the wrestler's efforts. In the top ranked match, the effects of the crowd were noted whereas in the second ranked match the effects of the opponent's complaints were referenced.

Purpose 2: Results of Pre-competitive and Competitive
Nomothetic Analyses

The results of the idiographic analyses were examined as a set for the purpose of identifying common characteristics across the performance arrays. The analytic strategy of conducting idiographic analyses and subsequent nomothetic analyses makes it possible to identify or formulate general principles across study participants while allowing for the designation of uniqueness rather than merely relegating these idiosyncrasies to error (Silverstein, 1988).

As indicated in the idiographic analyses, with one exception, there were high, moderate and low levels of performance identified in each of the ordinal performance arrays. The exception was Case 2 where the moderate level performances could more accurately be described to represent a moderate range rather than level of performance. In the nomothetic analyses, patterns emerging from the data across performance levels and cases were identified. As is the circumstance in any nomothetic analysis, these characterizations are broad. Yet, these observations are not intended to deny the veracity of the idiographic analyses rather, the idiographic analyses

should be seen to qualify and define nomothetic observations.

The results of the nomothetic analyses are presented in two sections corresponding to the pre-competitive and competitive time periods. As with the presentation of previous analyses, the results are revealed by dimensions although relevant observations from across dimensions are incorporated to provide the fullest possible picture within each dimension.

Pre-competitive Nomothetic Analysis Results

Pre-competitive affect. A pattern of results emerged among the related higher order themes of *emotional activation levels, anger, and nervousness levels* across performance levels. Specifically, it was observed that prior to high level performances, wrestlers reported sensations of high levels of *emotional intensity* while low level performances were characterized by listless feelings of low intensity or activation. Moderate level performances evidenced themes more usually referenced as normal *nervousness*. Themes conveying *emotional intensity* in high level performances ranged quite broadly and included references to relatively pure feelings of intensity through intense feelings of anger and included references to being extremely nervous but confident. It is important to note that listless or lethargic feelings emerging prior to the low level performances were not solely related to being either under- or over-aroused.

Rather it appears that such feelings are the common consequence of these non-optimal arousal states.

A pattern of decreasing positive affect and increasing negative affect emerged across decreasing performance levels. Broadly speaking, better performances were characterized by the global positive affect associated with *feelings of readiness*. While there were a few *general positive affect* themes evidenced among moderate level performances as well as references to *feelings of readiness*, moderate level performances also witnessed the emergence of negative sensations of *nervousness*, *negative physical feelings* and *disgust*. Prior to poor performances these themes became much more pervasive and additional references to being *scared* were evidenced.

The pattern of themes emerging in the dimension of **cognitive content** reinforced the observations of increasing negative affect across decreasing performance levels in the dimension of **competitive affect**. Specifically, it was observed that evaluative **cognitive content** themes associated with negative affect were evidenced prior to moderate level performances and quite consuming prior to poor performance. Such themes included *concern about coach reaction to performance*, *negative thoughts toward/about coach*, *concerns about team score/teammate performance*, *pressure* and *worries about losing*. Additionally, negative affect associated with *doubts/lack of confidence* were primarily evidenced in low level performances.

Pre-competitive focus. Relatively few references to **pre-competitive focus** emerged across ordinal performance arrays however a pattern was evident among these themes. Specifically, decreasing levels of *focus* were observed across decreasing levels of performance with an array of themes ranging from references to a *total focus* prior high level performance through to a *total lack of focus* prior to low level performances. Examination of the pattern of themes emerging in the dimension of **pre-competitive cognitive content** substantiated this observation. Specifically high level performances featured almost an exclusive focus on match preparation thoughts while across decreasing levels of performance, **cognitive content** themes evidenced a decreased match preparation focus with concomitant increases in task irrelevant thoughts.

Pre-competitive cognitive content. As alluded to in the previous two dimensions, there was an identifiable pattern of results in the dimension of **pre-competitive cognitive content**. Among high level performances **pre-competitive cognitive content** was almost exclusively related to task preparation thoughts, particularly *technical/tactical, performance process* and *confidence building* thoughts.

By contrast, prior to low level performances **cognitive content** was consumed by task irrelevant issues such as *concern about coach reaction to performance, negative thoughts toward/about the coach, concerns about team*

score/teammate performance, pressure and other irrelevant thoughts. Although some match preparation themes were encountered among poorer performances, changes in the essence of these thoughts were observed such as the tendency to focus on reactive as opposed to pro-active *technical/tactical* concerns or to injure the opponent.

Moderate level performances, broadly speaking, evidenced some combination of task relevant and irrelevant thoughts although not with the dominance evidenced at polar ends of the performance spectrum. There was some evidence among moderate level performances that wrestlers tended to focus more on general *performance process* thoughts rather than more specific *technical/tactical* concerns.

Interestingly, the few *arousal control* themes evidenced emerged only in moderate and low level performances. It seems reasonable to suggest there there was likely some association between task irrelevant thoughts and an awareness of a need to control arousal level. The higher order theme of *spontaneous coach decisions about performance order* also emerged as salient among moderate level performances. Each of the three wrestlers occupying positions on the team subject to these decisions made reference to the effects of the uncertainty of not knowing if or when they might wrestle.

Pre-competitive confidence issues. Intuitively, it would seem that **confidence issues** would be particularly vulnerable to shaping by performance outcome. However, the study participants' honesty and willingness to self-reflect

was particularly evident in this dimension making these findings credible. Specifically, athlete recollections of feelings of *confidence* or *doubts* were often buttressed by references to sources of confidence or doubts and followed by post hoc evaluations of the accuracy or inaccuracy of these assessments. Sources of confidence commonly identified included previous meetings with the opponent, recent personal performance history as well as feelings about the quality of the opponent.

Broadly speaking it was observed that the incidence of *confidence* and *doubts* and a *lack of confidence* themes was commensurate with the varying levels of performances. Generally, commentary from the best performances included references to high levels of *confidence*; moderate level performances more conditional evaluations while low level performances were characterized by *doubts* and *worries about losing*. This pattern was clearly not absolute as a variety of contextual factors such as opponent difficulty readily influenced levels of confidence. There was ample evidence of *doubts* being evidenced prior to high levels of performance and, conversely, *confidence* themes emerging concerning low level performances. Among high level performances evidencing *doubts*, it was observed that misgivings often seemed to be offset by a strong sense of *commitment to winning*. A number of instances were observed in which positive expectancies proved to be substantially inaccurate, at least in part, as a consequence of the

effects of dehydration or other dietary indiscretions.

Pre-competitive sources of motivation. Pre-competitive sources of motivation themes were thinly evidenced across the ordinal performance arrays. As reported in the Purpose 1 results, a commitment to winning was salient prior to all-time best performances while prior to all-time worst performances, there was a notable absence of sources of motivation. Despite intriguing possibilities observed in individual cases, moderate level performance themes had no particular unifying thread or pattern across subjects. Perhaps the most important observation in regard to this dimension is that there are marked differences between athletes in the degree to which they organized their perceptions of the pre-competitive environment around "reasons to win". Specifically, some wrestlers made almost ubiquitous references to sources of motivation whereas others did not find it relevant to discuss their competitive experience in such terms.

Competitive Nomothetic Analysis Results

Competitive affect. Patterns were observed within the dimension of competitive affect. In the higher order theme of emotional activation levels it was observed that high level performances were characterized by feelings of high intensity while low level performances were characterized by references to feelings of a lack of intensity. Few themes emerged in this higher order theme of emotional activation levels among moderate level performances. It

may be the case that more usual levels of activation were experienced and hence were not a prominent feature worthy of mention.

Also observed in the dimension of **competitive affect** was a pattern of increasing negative affect in deteriorating performance levels although this generalization is clearly less than absolute as can be observed in the one wrestler's proclivity toward *anger* across performance levels. Generally high level performances were characterized by feelings of relatively pure intensity. This is consistent with the references to intense *absorption* identified in the dimension of **competitive focus**. However, across moderate performances and particularly in poor performances, a clear increase in negative affect was evidenced with themes such as *frustration*, and *disappointment and disgust* emerging as salient. Additionally, negative feelings associated with the onset of *fatigue* were especially salient among low level performances. It was observed that references to unusual *fatigue* were often associated with wrestler efforts to make weight by dehydrating.

The pattern of themes emerging in the dimension of **competitive cognitive content** provided additional evidence supporting a pattern of increasing negative affect across decreasing levels of performance. In stark contrast to high level performances, it was found across moderate and low performances that wrestlers were increasingly consumed with **cognitive content** featuring negative evaluative

components. For example, themes featuring negative affective components included *negative thoughts toward/about opponent, coach and referee; concerns about evaluative others; protecting lead/fear of failure; and an awareness of being ineffective*. Additionally, the negative feelings associated with *doubts/lack of confidence and ebbing confidence* were primarily found in low level performances.

Competitive focus. The dimension of **competitive focus** provided one of the clearer patterns of results in the nomothetic analyses. High level performances were characterized by high levels of task involvement such as associated with the higher order theme of *absorption/performance automatic*. More moderate level performances were characterized by references to being *focused* although themes relating to *focus disruption/loss* and *refocus* were also evidenced. Salient *lack of focus* themes emerged primarily in low level performances. In contrast to moderate level performances, there was a virtual absence of *refocus* themes emerging from the interview transcripts of low level performances. Interestingly, there were several *absorption* themes evidenced in moderate level performances. However the emergence of *refocus* themes and the variety of **cognitive content** themes in these performances suggested a lesser state of involvement than observed in high level performances.

The clear pattern of results emerging in the dimension of **competitive focus** was reinforced by the pattern of themes observed in the dimension of **cognitive content**. Specifically, it was observed in high level performances that there were either task focused awareness themes in evidence or an absence of any **cognitive content themes**. Task focused awareness themes can be argued to indicate concentration on the match while the absence of any **cognitive content** themes is consistent with notions of *absorption*.

Low level performances evidenced consuming task irrelevant thoughts and few task focused awareness themes and this is consistent with notions of a *lack of focus*. Further, the incidence of both task focused awareness and task irrelevant themes in moderate level performances is consistent with a notion of some sort of intermediate level of *focus* in the match.

Competitive cognitive content. As alluded to previously, there was a clear pattern of themes emerging in the dimension of **competitive cognitive content** and this pattern can be seen to be intimately related to the pattern of results in the dimension of **competitive focus**. It was observed that, when **competitive cognitive content** themes emerged in high level performances, they were task relevant themes such as *technical/tactical*, *performance process*, *awareness of coach input* and *self-reinforcement* thoughts. By contrast, relatively few task focused awareness themes

were evidenced among poor performances. Rather **cognitive content** in these matches was revealed to be consumed by a variety of worries and concerns unlikely to contribute to performance. These included themes of *negative thoughts toward/about opponent, coach and referee; concerns about evaluative others; protecting lead/fear of failure; awareness of being ineffective and general irrelevant thoughts.*

Cognitive content in moderate level performance was found to have aspects of both high and low level performances. Specifically, it was observed that a mix of task relevant and task irrelevant themes emerged in moderate performance **cognitive content**. Further, task irrelevant concerns emerging in moderate level performances were not nearly as consuming as those found among low level performances.

Competitive confidence issues. The themes emerging in the dimension of **competitive confidence issues** provided a fairly predictable pattern across the ordinal performance arrays. Broadly speaking, in high level performances, themes of *confidence* emerged and often these themes made reference to a sense of persistent confidence in the face of adversity. By contrast, themes reflecting *doubts* or a *lack of confidence* emerged as most salient among low level performances. Moderate level performances evidenced themes reflecting less emphatic confidence and/or doubts.

More interesting among **competitive confidence issues** were findings regarding mutable confidence. These themes

clearly reveal that pre-competitive expectancies are not stable and undergo constant revision during the performance. Themes related to *doubts turning into confidence* were primarily evidenced in high level performances although they were not absent among moderate level performances. By contrast *confidence ebbing* themes were primarily evidenced among low level performances although again they were not absent in moderate level performances. It was interesting to note that the allusions to changes in *confidence* were almost always made in reference to specific match events. For example in the idiographic analyses it was revealed that one wrestler in particular placed great importance on initial flurries of action as a portent of how the match would progress.

Competitive sources of motivation. Very few competitive source of motivation themes emerged across the ordinal performance arrays. There was no particular thread unifying the themes that did emerge other than they all represented some salient thought providing direction and intensity to wrestler efforts.

CHAPTER IV

DISCUSSION AND CONCLUSIONS

Chapter IV has been divided into four sections. The first section discusses the results of the Purpose 1 analyses by addressing the four hypotheses generated regarding the all-time best and worst performances. The second section discusses the results of the Purpose 2 analyses by addressing the two hypotheses generated regarding the pattern of cognition and affect across ordinal performance arrays. The third section provides an assessment of investigation strengths, limitations and future research directions. Finally concluding statements will be included in the fourth section of this chapter.

Purpose 1 Summary and Discussion

The first purpose of this investigation was to replicate the Gould et al. (1990) study concerning the best and worst performance with regard to pre-competitive and competitive cognition and affect. There were four hypotheses postulated regarding this purpose. The discussion of Purpose 1 results progresses by addressing each hypothesis separately.

Hypothesis 1

The first hypothesis postulated that:

Best match pre-competitive cognition and affect would be characterized by optimal mental state descriptions including positive expectancies, heightened arousal and intensity, and heightened effort and commitment

as well as mental preparation strategies including a mental preparation routine, tactical/strategy focus and motivational strategies.

In this investigation, the inductive analysis of raw data themes emerging from the interview transcripts of the seven study participants regarding all-time best performance pre-competitive cognition and affect resulted in a total of 10 higher order themes that were subsequently abstracted in to five dimensions. Based on these results, all-time best performance pre-competitive cognition and affect were characterized by global sensations of positive affect (e.g., feeling good) and readiness to compete along with activation levels ranging from normal nervousness to intense emotional activation.

While only one wrestler made reference to being totally focused prior to this match, examination of the dimension of **cognitive content** reveals concentration on task relevant match preparation issues to be prevalent across subjects. The cognitive content prior to these exceptional performances was found to be consumed with performance preparation thoughts related to technical/tactical, performance process issues as well as confidence building self-statements.

While solid feelings of confidence were widespread, references to some small reservations were evidenced among these positive expectancies. Notwithstanding the more generally observed positive expectancies tempered with small reservations, a single wrestler did have more substantial misgivings prior to his match with a much

vaunted opponent although it appears that these doubts were mitigated by a commitment to winning. Indeed across all of the study participants, a sense of commitment entering into the match was revealed to be an important aspect. The dimension of **sources of motivation** revealed that a commitment to winning was frequently associated with the all-time best match although a variety of other topics emerged as salient as providing a sense of purpose and intensity.

With respect to Hypothesis 1, it can be seen that the results of this investigation are largely in consonance with the findings of Gould et al. (1990) in terms all-time best match pre-competitive cognition and affect. The hypothesized "optimal mental state" descriptors of positive expectancies, heightened arousal and intensity, and heightened effort and commitment are apparent in these findings. More specifically, in the dimension of **pre-competitive confidence issues** it can be observed that prior to all-time best matches there were clear references to positive expectancies. Additionally, references in the dimension of **pre-competitive affect** to *global feelings of readiness* were related to self-referenced feelings of confidence as well as general positive affect. However, it is interesting to note that there were also some clear references to wrestlers experiencing doubts prior to all-time best performances. On the basis of comparisons of more and less successful athletes such as revealed by

Williams (1986) and Mahoney et al. (1987), one might be led to expect that self-doubt would not be in evidence in all-time best performance. The data from this investigation suggests that some self-doubts in the context of positive expectancies does not make optimal performance out of the question.

The dimension of pre-competitive affect is in accord with the hypothesized sensations of heightened arousal and intensity. The majority of wrestlers made reference to high levels of *emotional activation* and intensity prior to their all-time best performance although one study participant did make reference to normal levels of nervousness. Interestingly the *emotional activation* themes revealed that the high levels of arousal ranged from pure intensity to anger. This observation coupled with the reference to normal levels of nervousness suggests that elevated activation levels for optimal performance are highly individualized states. Further, the finding that these high levels of activation are associated with optimal performance, global positive affect and confidence reinforces Svebak and Stoyva (1980) contention that high arousal levels are not necessarily aversive.

The heightened effort and commitment hypothesized for the all-time best match can be observed in the dimension of pre-competitive **sources of motivation**. Salient themes were evidenced as a *commitment to winning* as well as other prominent themes providing intensity to the wrestler's commitment to win. The elevated sense of commitment was

observed to be a mitigating factor in the face of self-doubts, particularly in the case of the wrestler experiencing severe doubts about his ability to overcome his opponent.

It had been hypothesized that mental preparation routines would be evidenced prior to all-time best performances with the collegiate athletes. Orlick and Partington (1988) and Gould et al. (1990) found mental preparation routines to be a salient issue entering into pre-competitive discussions with Olympic athletes, however, this was not the case with the collegiate wrestlers participating in this investigation.

It was observed that preparation routines of the collegiate wrestlers had not largely been individualized but rather rested primarily on coach directed team warm-up procedures. Most references to match preparation were those preparations taken as a team and not to individual procedures. Gould et al. (1990) had found in querying the Olympians that mental skills had been developed largely through a process of trial and error and experience. It seems that these collegiate wrestlers are taking this same developmental route and hence no mention of particular mental preparation routes were encountered.

It seems reasonable to suggest that a formalized mental preparation routine is not requisite for the experience of optimal performance and indeed this was largely the circumstance encountered in this

investigation. Rather it seems that the function of a mental preparation routine is to enhance the likelihood of the occurrence of optimal performance. Hence, perhaps it was not surprising that this aspect of Hypothesis 1 was not supported.

Cognitive content themes reveal that despite the absence of formalized mental preparation routines, prior to all-time best performance the wrestlers were focused on *technical/tactical* and *performance process* issues. This is entirely consistent with the findings of Gould et al. (1990). Additionally, the **cognitive content** higher order theme of *confidence building* thoughts relates to the findings of Gould et al. (1990) regarding mental preparation in that it had been found that the Olympians placed great store in positive thinking as a part of their mental preparation strategies.

Motivational strategies were utilized by some of the Olympians prior to all-time best performance (Gould et al., 1990). In the present investigation, **sources of motivation** were salient among data themes. It was not entirely clear, however, if the collegiate wrestlers were purposely indulging in these sources to provide extra performance incentive.

In summary, Hypothesis 1 was found to remain largely supported as all-time best pre-competitive cognition and affect were found to be characterized by positive expectancies, heightened arousal and intensity and heightened effort and commitment as well as featuring a

tactical/strategy focus and motivational themes. However, although hypothesized, no substantial evidence of individualized mental preparation routines was observed and hence this aspect of Hypothesis 1 was not supported.

Hypothesis 2

The second hypothesis postulated that:

Worst match pre-competitive cognition and affect would be characterized by non-optimal mental state descriptions including negative feeling states, too many/few thoughts, task irrelevant thoughts and negative thoughts as well as pre-match preparation deficiencies featuring a lack of adherence to usual mental preparation routines.

In this investigation, the inductive analysis of raw data themes emerging from the interview transcripts of the seven study participants regarding all-time worst performance pre-competitive cognition and affect resulted in a total of 12 higher order themes that were subsequently abstracted into five dimensions. The all-time worst pre-competitive analysis was revealing as two of the seven performances identified explicitly associated performance deficits with dietary indiscretions.

Regardless, based on these results it appears that all-time worst performance pre-competitive affect were characterized by listless feelings associated with being over- or under-aroused, negative physical feelings such as being tired or inadequately warmed up and even fear. However, normal physical feelings and sensations of nervousness were evidenced in the comments of the wrestler that succumbed to the effects of dehydration during his

performance. References to a lack of focus were prevalent although in some cases associated with injuries. This finding was further substantiated in the emergence of a variety of consuming irrelevant thoughts and worries about losing and the marked absence of task relevant thoughts. Some confidence building statements were evidenced although these were in the context of a general lack of confidence and doubts about the wrestlers' ability to rise to the occasion. Two wrestlers did indicate feelings of confidence; the athlete that emerged as the victor in his all-time worst performance and the wrestler struck down by his overindulgence on junk foods prior to the performance. No sources of motivation were referenced. A salient theme regarding non-adherence to the normal preparation routine was evidenced.

With respect to Hypothesis 2, the results of this investigation are largely in consonance with the findings of Gould et al. (1990) in terms all-time worst match pre-competitive cognition and affect. Hypothesized negative feeling states were evidenced in the dimension of **pre-competitive affect** with references to *non-optimal arousal/intensity* as well as *negative physical feelings* and even being *scared*.

The hypothesized mental state of too many/too few thoughts, task irrelevant thoughts and negative thoughts was also evidenced with **pre-competitive focus** themes revealing a lack of concentration on task relevant issues as well as **pre-competitive cognitive content** themes

revealing salient *irrelevant thoughts* and *worries about losing*. These observations resonate with the conclusions of Williams (1986) and the findings of Mahoney et al. (1987) in that less successful performance has been associated with lower levels of task focus and distraction. Additionally the finding that these collegiate wrestlers were experiencing *doubts or a lack of confidence* and *worries about losing* are congruent with the observations of Williams (1986) and Mahoney et al. (1987).

The hypothesized lack of adherence to usual mental preparation routines was not supported in the data although a single wrestler made reference to *non-adherence to routine* and other references were made to be not sufficiently warmed up. As mentioned in the Purpose 1 discussion, there was a notable lack of individualized preparation routines among the collegiate wrestlers while coach directed preparations were salient. Adherence to these regimented routines were not generally a topic of reflection nor does it appear that there was any great awareness of individual needs that these routines may not have addressed.

An interesting finding in this investigation with regard to all-time worst performance was that of positive or normal physical feelings and nervousness as well as themes of confidence. These themes emerged from the transcripts of wrestlers experiencing usual pre-competitive feelings but whose performance during the match was

negatively influenced by dietary indiscretions. Taylor (1988) has observed in his discussion of "slumps" that physical, technical and technological factors in addition to psychological factors are relevant to consider when examining performance deficits. Data from the present investigation serve as a reminder that, in field investigations, other impinging factors on performance cannot be held constant to allow for the examination of psychological parameters in the context of "all things being equal". Rather psychological parameters in such investigations must be examined in the context of other influences on performance. Further, practitioners in sport psychology need to heed Taylor's (1988) admonishments to probe beyond psychological factors when searching for causal factors influencing sport performance. Parenthetically, this finding provides a salient example of one of the virtues of a qualitative methodology. Specifically, qualitative data provides insight into contextual factors influencing performance whereas among quantitative data collected on standardized inventories such contextual factors would serve to confound the results by inflating error variance.

In summary, Hypothesis 2 was found to be largely supported with the hypothesized worst match pre-competitive cognition and affect characteristics of non-optimal mental state descriptions including negative feeling states, too many/few thoughts, task irrelevant thoughts and negative thoughts being widely evidenced among the data. However

some normal or positive feelings were evidenced among wrestlers whose subsequent performance suffered as a consequence of dietary indiscretions. As discussed earlier, little support could be generated for the hypothesized pre-match preparation deficiencies and lack of adherence to usual mental preparation routines and hence this aspect of Hypothesis 2 was not supported.

Hypothesis 3

The third hypothesis postulated that:

Best match competitive cognition and affect would be characterized by optimal mental state descriptions including total concentration, intensity, and confidence, as well as constructive cognitive content including a tactical/strategy focus, and focusing/refocusing techniques.

The inductive analysis of raw data themes emerging from the interview transcripts of the seven study participants regarding all-time best performance competitive cognition and affect resulted in a total of 10 higher order themes that were subsequently abstracted into five dimensions. Based on these results, all-time best performance competitive cognition and affect were characterized by feelings of positive intensity and absorption into performance. This high level of absorption may even include the sensation of action occurring in the absence of thought. High levels of concentration during performance were substantiated by presence of largely task relevant cognitive content. More precisely, examination of cognitive content themes revealed technical/tactical thoughts and an awareness of relevant coach input to be

salient although an extra-ordinary, but not distracting, awareness of non-task events was referenced by two of the athletes. This extra-ordinary awareness of the crowd was also revealed to provide additional impetus in performance.

Positive expectancies as well as evidence of confidence that was resilient in the face of adversity were prominent during all-time best performances. Additionally, references to doubts turning into confidence with the progression of the match were encountered as well as an of the opponent "breaking" at some point in the match.

With respect to Hypothesis 3, it can be seen that the results of this investigation are largely in consonance with the findings of Gould et al. (1990) in terms all-time best match competitive cognition and affect. In the hypothesized "optimal mental state" descriptions, themes in congruence with total concentration can be found in the dimension of **competitive focus**. *Absorption* into task and *performance automatic* themes describe a state of total concentration. These **competitive focus** themes are consistent with the descriptions of absorption into performance postulated by Csikszentmihalyi (1975, 1990), Ravizza (1973) and Garfield and Bennett (1984) in their descriptions of the optimal performance states of flow, peak experience and peak performance. Further, the higher order theme of *awareness of others as audience* resonates with Ravizza's descriptions of peak experience in that the

wrestler descriptions of an extra-ordinary awareness of others that did not interfere with task concentration seemed to be an integrated part of the performance experience.

In the dimension of **competitive affect**, themes emerging related to high levels of *activation* resonate with the finding by Gould et al. (1990) that Olympian all-time best performances featured feelings of high intensity. A single wrestler made reference to a sense of relaxed intensity and this resonates with the observations of Garfield and Bennett (1984) on peak performance.

As was hypothesized and in accordance with descriptions of peak performance (Garfield & Bennett, 1984) and studies of successful athletes (Mahoney et al., 1987; Williams, 1986) feelings of confidence were evidenced during the all-time best performances of these study participants. Additionally, it can be observed in the dimension of **confidence issues** that there were references to *doubts turning into confidence* with the progression of the match. This finding is an important addition to the observations of Garfield and Bennett (1984), Mahoney et al. (1987) and Williams, (1986) in that being confident does not necessarily imply that the athletes do not have doubts or that doubts or confidence is immutable during performance.

It was hypothesized that cognitive content would include a technical/strategy focus and this was borne out in the higher order theme of *technical/tactical thoughts*.

Additional **cognitive content** not found among Olympic wrestlers (Gould et al., 1990) but emerging in this investigation included an *awareness of coach input*. It may be the case that less elite wrestlers such as those participating in this study rely more upon their coaches for input than their more experienced and elite counterparts. Alternatively, it may be the case that the competitive structure at this lower level of competition requires the athletes to be more attentive to coaching instructions (Gould & Weinburg, 1985).

As would be expected on the basis of broader descriptions of the flow experience (Csikszentmihalyi, 1975, 1990), peak experience (Ravizza, 1973) and peak performance (Garfield & Bennett, 1984), there is a great deal of consistency between descriptions of the psychological experience in all-time best performance by the 1988 U.S. Olympic wrestlers (Gould et al., 1990) and those of the collegiate wrestlers participating in the study. Nonetheless, the commonality of experience is interesting given that six of the seven study participants identified matches from their high school careers.

Csikszentmihalyi (1975, 1990) has argued that the experience of flow is not contingent upon skill level but rather upon the balance between challenges and skills. Specifically, high levels of skill are not a prerequisite for the occurrence of flow, rather flow is most likely to occur when challenges match skill level. This argument

seems relevant to the observation of common experience of optimal performance across ability levels particularly as Jackson (1988) has found some preliminary evidence to suggest that flow may underlie or potentially be a precursor to both peak performance and experience.

In summary, Hypothesis 3 was found to be supported with hypothesized best match competitive cognition and affect characteristics of optimal mental state descriptions including total concentration, intensity, and confidence, as well as constructive cognitive content including a tactical/strategy focus, and focusing/refocusing techniques emerging as salient in these data.

Hypothesis 4

The fourth hypothesis postulated that:

Worst match competitive cognition and affect would be characterized by ineffective cognitive patterns including task irrelevant thoughts, lack of focus, and negative thoughts as well as negative feeling states and further, references to poor strategy selection including lack of adherence to competitive plans.

The inductive analysis of raw data themes emerging from the interview transcripts of the seven study participants regarding all-time worst performance competitive cognition and affect resulted in a total of 10 higher order themes that were subsequently abstracted in to four dimensions. Based on these results, all-time worst performance competitive cognition and affect were characterized by listless feelings, a lack of intensity and an awareness of dull, flat tired feelings. References to a lack of focus were salient and substantiated by the wide

variety of task irrelevant themes emerging in the dimension of cognitive content. The absence of task relevant thoughts was notable. Rather, cognitive content was consumed by a variety of negative thoughts and feelings toward others, an awareness of being ineffective, concerns about losing and concerns about the perceptions of others. There were no confidence issue themes encountered although the cognitive content themes relating to concerns about losing and feelings of being ineffective are tangentially relevant to low levels of confidence. Interestingly, the only references to refocusing thoughts or a commitment to winning were by the single wrestler that identified a winning effort as his all-time worst performance.

With respect to Hypothesis 4 it can be seen that, with a few exceptions, the results of this investigation are largely in consonance with the findings of Gould et al. (1990) in terms all-time worst match competitive cognition and affect. It was hypothesized that "ineffective cognitive patterns" would be evidenced with the characteristics of task irrelevant thoughts, a lack of focus, negative thoughts and negative feelings states. The results of this investigation were wholly in congruence with these hypothesized characteristics and characterizations of less successful performance (Mahoney et al., 1987; Williams, 1986).

More precisely, the dimension of **competitive focus** revealed *lack of focus* themes that were substantiated by

the absence of task relevant thoughts in the dimension of **cognitive content**. Further, the dimension of **cognitive content** evidenced a variety of task irrelevant and negative self-defeating thoughts including *negative thoughts toward/about coach, referee, opponent and crowd; concerns about losing and evaluative others; and an awareness (in some cases acute) of being ineffective.*

Evidence of hypothesized negative feeling states was rampant in the data set. More precisely, **competitive affect themes** such as *lack of intensity/listless* and *tired* as well as a variety of **cognitive content** themes associated with negative affect emerged as prominent.

Gould et al. (1990) found that Olympic wrestlers made salient references to poor strategy selections and a lack of adherence to competitive plans during their worst Olympic performances. In the present investigation, these did not emerge as prominent issues. Notable differences between the contextual settings of Olympic and collegiate competition may be relevant in the relative absence of these themes. More precisely, the Olympic athletes enjoyed extensive preparation utilizing video analysis and personal coaches to prepare strategies and tactics for individual opponents. By contrast, the collegiate wrestlers received relatively little individualized tactical preparation and little or no video analysis of opponents for season performances. Thus, in the absence of such preparation, poor strategy selection and lack of adherence to competitive plans can be seen as irrelevant issues.

Oblique references to these topics were observed in the higher order theme of *awareness of being ineffective* although the more salient aspect of these themes was related to perceptions of an inability to achieve objectives.

In summary, Hypothesis 4 was found to be largely supported with hypothesized worst match competitive cognition and affect characteristics of ineffective cognitive patterns including task irrelevant thoughts, lack of focus, and negative thoughts as well as negative feeling states emerging as salient in these data. However, although hypothesized, no substantial evidence of poor strategy selection or non-adherence to competitive plans was observed and hence this aspect of Hypothesis 4 was not supported.

Purpose 2 Summary and Discussion

The second purpose of this investigation was to extend previous analyses by following a number of individuals longitudinally to examine variables of interest as they related to differential performance. The longitudinal nature of the investigation allowed individual athletes to serve as their own referent in the examination of data as a strategy to account for individual performance histories.

Two hypotheses were generated with regard to this purpose. These hypotheses postulated that, across analyses of performances organized from best to worst, there would be a systematic identifiable decay of the characteristics

associated with best match pre-competitive and competitive cognition and affect towards those associated with worst match pre-competitive and competitive cognition and affect.

As discussed in Chapter II, the maintenance of performance ratings within the ordinal data arrays (created according to wrestler performance rankings) allowed for the cross comparison of similarly rated performances. Within these ordinal performance arrays, examination of the clustering of performance ratings broadly revealed the presence of high, moderate and low performance levels for the six study participants although the Case 2 athlete's more moderate performances could be better characterized as a range rather than a level. The emergence of raw data themes that were relatively consistent within these performance levels reinforced the notion of high, moderate and low performance levels.

As a consequence of the emergence of only three broad performance levels rather than a spectrum of six to 9 distinctly different performances, the evidence to support or refute Purpose 2 hypotheses rested was weakened to some degree. However, the examination of a moderate level of performance in addition to high and low levels does provide additional insight into what is happening across the performance spectrum and advances the previous literature where psychological processes differing across a simple dichotomy of successful and less successful performance has been made.

In the nomothetic analyses of idiographic ordinal performance arrays, broad patterns of results were observed across the three performance levels in four of the five dimensions. These patterns were clearly not absolute across individual matches within performance levels with factors such as opponent difficulty and dietary indiscretions emerging as potential moderating or mediating variables. Further, examination of the case study analyses revealed considerable idiosyncratic variation within these broad patterns of results.

The pre-competitive and competitive dimensions of affect, focus, cognitive content, and confidence issues were all found to evidence patterns of themes across the ordinal performance arrays. The pre-competitive and competitive sources of motivation dimension evidenced no such patterns although it should be mentioned that these themes were thinly evidenced across performance arrays.

The Purpose 2 discussion results occurs in two sections. These sections contain the discussion relevant to the two Purpose 2 hypotheses. Consistent with the reporting of results in Chapter III, the discussion progresses by dimension within these sections.

Hypothesis 1

Pre-competitive affect. Two broad and overlapping patterns emerged in the dimension of pre-competitive affect. The first pattern revealed decreasing positive affect concomitant with increasing negative affect across

deteriorating performance levels. The second and related pattern suggested a pattern of feelings of activation that, in some sense, corresponded to performance level. While these patterns sound reminiscent of Hullian Drive Theory (Gill, 1986), this is not what was observed or implied. Specifically, prior to high level performances, themes emerged referencing feelings of unusually high positive activation and intensity. Themes in moderate level performance revealed more normal levels of nervousness. In poor performance, listless and lethargic feelings were evidenced. These feelings, however, were not solely associated with a state of being "not up for the match" but as well associated with the distinctly contrary state being "totally stressed out".

A number of relevant theoretically or conceptually based explanations speak to these observations although clearly not with equal authority. These would include the inverted-U hypothesis (Gould & Krane, in press) and Burton's (1988) hypotheses based on a multi-dimensional conception of anxiety as well as theoretical perspectives that are more recently gaining currency such as catastrophe theory (Fazey & Hardy, 1988) and reversal theory (Kerr, 1985; Svebak & Stoyva, 1980). Each of these perspectives posit some optimal state of activation for high level performance and in this investigation this state has been characterized as featuring feelings of unusually high positive activation and intensity. While the activation levels emerging in moderate level performance do not prove

problematic nor particularly interesting from any of these perspectives, themes emerging in the low level performances are conceptually more problematic and hence more interesting.

For example, the inverted-U hypothesis would characterize the listless states evidenced in low level performance as indicative of under- or over-arousal/anxiety. This analysis is tenable based on wrestler descriptions of feelings in low level performance but problematic in light of the feelings of unusually high activation in the high level performances. The inverted-U hypothesis cannot accommodate the finding of unusually high activation promoting both high and low level performance. Burton's (1988) hypotheses implicate cognitive anxiety in the same manner as the inverted-U hypothesis while attributing drive-like status to somatic anxiety. As athlete descriptions included both references to activation and negative affect, this perspective has more relevance but suffers because of the absence of conceptual links as to the joint effects of somatic and cognitive anxiety.

More recently, Fazey and Hardy (1988) have promoted catastrophe theory which does make predictions about the joint effects of cognitive anxiety and physiological activation on performance. Broadly speaking, in this theoretical perspective physiological activation and performance are associated in the classical inverted-U relationship with the exception that there is a sharp

rather than graduated disjuncture from high to low performance shortly after arousal passes the optimal level. Further, cognitive anxiety is posited to act as a "splitting factor" which influences the tolerable level of physiological activation prior to a catastrophe. Hence escalating cognitive anxiety in the context of increasing physiological activation heightens the likelihood of catastrophic performance. Although largely untested, this perspective does provide reasonable means to conceptually accommodate the present findings.

Finally, and also largely untested, the emphasis on cognitive interpretation of arousal as pleasant or unpleasant depending on the metamotivational state in reversal theory (Kerr, 1985; Svebak & Stoyva, 1980) provides an intuitively sensible explanation for the pattern of findings in this dimension. That is, this theory predicts that peak performance occurs when one is highly activated but views this activation as positive whereas inferior performance results when activation levels are low or when high activation is interpreted negatively.

Pre-competitive focus. The pattern observed in the dimension of **pre-competitive focus** was that of decreasing levels of focus across decreasing levels of performance with an array of themes ranging from a total task focus down to a total lack of focus. This pattern of results was intimately related to the pattern evidenced in **pre-competitive cognitive content** and hence will be

discussed in conjunction with this dimension.

Pre-competitive cognitive content. The pattern observed within the dimension of **pre-competitive cognitive content** was one of decreasing incidence of task relevant thoughts concomitant with an increasing incidence of task irrelevant thoughts and concerns as performance deteriorated. It was also observed that the quality of task relevant thoughts diminished across decreasing levels of performance. Specifically, it was found that moderate level performance evidenced less specific *technical/tactical* concerns and more general *performance process* concerns while the few task relevant themes emerging in low level performance tended to focus more on reactive rather than pro-active concerns. The pattern of results in both the dimensions of **focus** and **cognitive content** are consistent with what would be inferred from results reported by Williams (1986) and Mahoney et al. (1987) in comparing successful and less successful athletes.

From a more conceptual perspective, it seems that this pattern of results can easily be accounted for by information processing perspectives such as Kahneman's (1973) assertions regarding attentional capacity. Simplistically, Kahneman (1973) has posited a parallel processing model for cognitive function in which attentional capacity represents some sort of limited pool of mental resources. Performance can be expected to be

relatively high when these resources are focused on task relevant issues. However, performance increasingly suffers as limited mental resources are increasingly diverted among a variety of concerns.

Although this oversimplified characterization of Kahneman's (1973) views implies unidirectional causality; this is a process perspective and hence reciprocal causation more properly would characterize the relationship. Specifically, the allocation of mental resources not only influences performance but also can be influenced by performance as a function of the degree to which performance feedback in the perceptual field impinges upon these mental resources. This notion becomes particularly relevant in the dimension of **competitive cognitive content** where themes emerge that clearly relevant to performance evaluation although clearly this is speculative in this study as there the research design provides no basis for inference of causality.

Pre-competitive confidence issues. A broad pattern was observed in the dimension of **pre-competitive confidence** themes with the incidence of references to high confidence evidenced prior to high level performance, conditional confidence prior to moderate level performances and doubts emerging prior to poor performances. This observation is consistent with what would be inferred from results reported by Williams (1986) and Mahoney et al. (1987) in comparing successful and less successful athletes and as would be predicted in Bandura's (1977) theory of

self-efficacy. Although salient, this pattern was clearly not absolute and obviously conditioned by factors such as opponent difficulty or dietary indiscretions.

Using Bandura's (1977) conception of self-efficacy allows some post hoc explanation of the pattern of results. Bandura (1977) has argued that self-efficacy will predict performance in the presence of necessary skills and appropriate incentives and broadly such a pattern of *confidence* themes was found. Deviations from this pattern associated with opponent difficulty or dietary indiscretion seem amenable to interpretation in terms of necessary skills and appropriate incentives. Specifically, dehydration can reduce the physical capacity of the wrestler thus effectively diminishing physical skill. The data revealed a number of instances in which wrestlers made references to inaccurately gauging the consequences of their efforts to make weight and hence efficacy judgements proved to be substantially inaccurate. In addition to being a source of information for making efficacy appraisals, opponent difficulty can also be seen to influence performance quality as a factor related to the incentive value of performing well against a particular opponent.

In summary, partial support was found for the first hypothesis in the second purpose. Specifically, there were identifiable patterns of cognition and affect evidenced across performance levels in the dimensions of

pre-competitive affect, focus, cognitive content and confidence issues while no such patterns were observed in the dimension of pre-competitive sources of motivation.

Hypothesis 2

Competitive affect. Two broad and overlapping patterns emerged in the dimension of **pre-competitive affect** and these were in accordance with the observations in the dimension of **pre-competitive affect**. Specifically, the first pattern revealed decreasing positive affect concomitant with increasing negative affect across decreasing performance levels. The second and related pattern suggested a pattern of feelings of activation that, in some sense, corresponded to performance level with high level performances referenced by feelings of unusually high positive activation and intensity and low level performance characterized by listless and lethargic feelings. Moderate level performances evidenced no references to activation levels and it may be the case that normal levels were experienced and hence not of particular note for the wrestler to report.

The theoretical or conceptual explanations discussed in **pre-competitive affect** are also relevant to **competitive affect** --- perhaps more pertinent as **competitive affect** themes were related directly to the competitive experience. Nonetheless the previous commentary on the inverted-U hypothesis (Gould & Krane, in press), Burton's (1988) hypotheses, based on a multi-dimensional conception of anxiety, and more recent theoretical perspectives of

catastrophe theory (Fazey & Hardy, 1988) and reversal theory (Kerr, 1985; Svebak & Stoyva, 1980) remain relevant.

Competitive focus. One of the clearest patterns emerging was observed in the dimension of **competitive focus**. It was observed that high level performances were characterized by an intense involvement in performance with some references to action and reaction seeming to occur in the absence of thought. More moderate level performances were characterized by references to being focused although themes relating to disruptions of focus and refocusing efforts were evidenced while salient lack of focus themes emerged primarily among low level performances. Again, the inferences based upon the observations of the comparisons of successful and less successful athletes revealed by Williams (1986) and Mahoney et al. (1987) seem quite reasonable in the light of this pattern of results.

Although themes of absorption were primarily evidenced in high level performance, such themes, although attenuated, were evidenced in several moderate level performances. This is entirely consistent with Privette's (1983) observation that peak performance is not an inevitable consequence of this state of involvement. Although a common attribute to flow, peak performance, and peak experience, only peak performance implies a state of exceptional performance. While flow and peak experience are positive performance states, they do not necessarily evidence high levels of performance.

Competitive cognitive content. The pattern observed within the dimension of **competitive cognitive content** nearly mirrored the pattern observed in **pre-competitive cognitive content** which was one of decreasing incidence of task relevant thoughts concomitant with increasing incidence of task irrelevant thoughts and concerns. Interestingly, and consistent with notions of absorption evidenced in the dimension of **competitive focus**, some high level performances evidenced few or no cognitive content themes.

From a conceptual standpoint, the previously discussed assertions of Kahneman (1973) regarding attentional capacity in the parallel processing model remain salient in the pattern of results from both the dimension of **competitive focus** and **competitive cognitive content**. As mentioned previously, it is important to recall that this is a process perspective and hence reciprocal as opposed to unidirectional causation is implied. Specifically, the allocation of mental resources not only influences performance but also can be influenced by performance as a function of the degree to which performance feedback in the perceptual field impinges upon these mental resources.

Regardless, there are some additional factors present in the competitive analysis not addressed in the pre-competitive analysis that need to be reconciled with this perspective. The first regards notions of absorption and the associated observation that high level performances

sometimes evidenced no or few **cognitive content** themes. The second regards the observation of an extra-ordinary awareness of circumstances surrounding performance (e.g., details in crowd) that does not detract from performance.

Ashcraft (1989) has observed that contentions surrounding Kahneman's (1973) assertion of limited attentional capacity in the parallel processing model include the notion that degrees of automaticity exist in information processing ranging from fully automatic through to fully conscious. Conscious mental processes require large amounts of processing capacity whereas automatic processes place relatively few demands on mental resources. Further, highly learned skills can become increasingly automatized. The experience of flow is most likely to occur in challenging activities providing clear goals and unambiguous feedback and when challenges are commensurate with skill. Such a situation is also prime for the automatic processing of highly learned skills. Additionally, with increasing levels of automatic processing, more attentional capacity would be available for subsidiary awareness without hindering primary task functioning. Conversely, the same factors disrupting flow can be seen to require a shift from automatic to conscious processing.

Some comment is relevant regarding the emergence of a particular constellation of themes within the performance arrays. In the examination of pre-competitive and competitive cognitive content of 1988 U.S. Olympic

wrestlers, thoughts or concerns about the coach were virtually absent (Gould et al., 1990). By contrast, references to the thoughts about the coach are widely evidenced in the present investigation. In higher level performances such references are in a positive light as in the higher order theme of *awareness of coach input*. In more moderate and particularly low level performances, themes regarding the coach were much more often related to negative thoughts and feelings as in the higher order themes of *concern about coach reaction to performance* and *negative thoughts toward/about coach* as well as coach-centered thoughts in *concern about evaluative others*.

Other research with collegiate wrestlers has revealed coach-centered worries to be salient (Gould & Weinberg, 1985). Given that elite wrestlers such as those studied by Gould et al. (1990) rarely report these concerns and the accordance between studies of collegiate wrestlers in evidencing such worries, Gould and Weinberg's (1985) assertion that these worries may be associated with and indicative of the structure of collegiate wrestling seems tenable. Interestingly, Gould and Weinberg (1985) found that losing wrestlers as compared to winning wrestlers more often were characterized by coach-centered concerns. This is congruent with the observation in the present investigation that moderate and particularly low level performances were found to have such cognitive content.

Competitive confidence issues. Not surprisingly, a broad pattern was observed in the dimension of **competitive confidence** themes with references to high and persistent confidence evidenced during high level performance, salient doubts and lack of confidence themes emerging in low level performances while moderate level performances evidenced themes reflecting less emphatic confidence and/or doubts. As mentioned in the dimension of pre-competitive cognitive content, these observations are consistent with what would be inferred from results reported by Williams (1986) and Mahoney et al. (1987) in comparing successful and less successful athletes. Again, Bandura's (1977) self efficacy theory can be seen to provide some coherence to seeming anomalies to this pattern associated with factors such as opponent difficulty or dietary indiscretions.

More interesting among **competitive confidence issues** were findings regarding mutable confidence. As would be expected from the perspective of self-efficacy theory (Bandura, 1977), pre-competitive expectancies are not stable and undergo constant revision during performance. Within the match, performance was observed to serve as an ongoing source of efficacy information with particular incidents and episodes being referenced as markers of changing confidence. References to doubts turning into confidence were primarily evidenced in high level performance whereas confidence ebbing themes primarily emerged among low level performances. Neither of these

themes were completely absent from moderate level performance.

In summary, partial support was found for the second hypothesis in Purpose 2. Specifically, there were identifiable patterns of cognition and affect evidenced across performance levels in the dimensions of competitive affect, focus, cognitive content and confidence issues while no such patterns were observed in the dimension of competitive sources of motivation.

Strengths, Limitations and Future Directions

Study Strengths and Limitations

As argued in Purpose 2, a major strength of this investigation was its longitudinal nature. Quite reasonably, Heyman (1983) has expressed concerns about conclusions emanating from research neglecting to account for past experience. By following athletes longitudinally, the athletes served as their own referent in intra-individual analyses thus controlling for performance history. Subsequent nomothetic analyses based on these idiographic results provided the opportunity to identify broader patterns in the results in the context of individual past experience.

The retrospective design employed in this study was both a major strength and limitation. In retrospective designs, a lingering question always remains as to the extent to which performance outcome influenced study participant perception of the experience. These doubts, although not erased, were eased in some degree by the study

participants' willingness to self-reflect, openness and honesty across interviews as well as the longitudinal nature of the investigation. Further, efforts to ensure that the interviews occurred as close to the performance as possible and prior to subsequent performance helped to avoid potential confounding of match recall.

While prospective studies remove concerns about the effect of performance outcome on the data set, by definition, they do not address the actual circumstances of the competitive experience. Likewise, quantitative designs utilizing standardized inventories, whether prospective or retrospective, fail to provide contextual insight into the competitive experiences. Clearly the retrospective and qualitative nature of this investigation provided data rich in detail and context concerning the pre-competitive and competitive time frames and this was a major strength in this investigation. Prospective and quantitative designs would not have provided insight into salient contextual factors such as the effects of dehydration or opponent difficulty, nor would they have revealed the mutability of confidence during performance.

A clear limitation surrounding the results of this investigation are associated with notions of causality. Interesting associations between cognitive events and performance emerged in the study that certainly merit further examination especially in light of the efforts to control for performance history. However, it must be

remembered that despite this methodological extension, retrospective field study designs fall short of allowing causal ascriptions to be made.

The generalizability of the findings of this study are quite limited on a number of accounts and clearly further investigation is warranted. Among the factors limiting the generalizability is the small sample size. While the small number of subjects was a pragmatic necessity for such in-depth examination, broader inference from these results must be made with a great deal of caution. In addition to having an extremely small sample size, this study was further limited to collegiate wrestlers sharing a common coach; a particular sport and population. It is an open question as to whether the results are limited to combative sport or if very similar findings would be obtained in the examination of participants in more genteel athletic endeavors. Finally, the emergence of three broad performance levels makes inferences across performance levels somewhat tenuous although certainly more substantive than previous inferences based on two performance levels.

A interesting question for future examination that emerges from the data representing a potential limitation of the present study regards that of the effect of opponent difficulty on the constellation of findings. While all of the wrestlers faced opponents of very high quality in at least some of their performances, there were also opponents in the data array that ranged from moderately to minimally

challenging. The opponents faced by the 1988 Olympians examined in the Gould et al. (1990) study were a relatively homogeneous group by comparison to the diversity of skill levels encountered by these collegiate wrestlers. However, the finding that opponent difficulty is a salient moderating or mediating variable in the association between cognitive events and performances speaks to the utility of qualitative inquiry.

Future Research Directions

Like trying to slay the mythical hydra, research investigations seldom yield definitive answers but instead typically provide impetus for multiple future investigations. So it is with this investigation. While further insight has been gained into the association between cognitive events and wrestling performance, a variety of future research directions emerge begging inquiry. Among these, five directions emerge as particularly interesting and prominent. These areas will be briefly discussed under the following headings: (a) evaluating theoretical perspectives, (b) using video technology, (c) integrating prospective and retrospective methodologies, (d) assessing and controlling for opponent difficulty, and (e) conducting evaluation research.

Evaluating theoretical perspectives. A number of conceptual issues have been advanced as relevant in the discussion of findings in this investigation. The present investigation was primarily a methodological extension of

previous work in this area and hence not a direct evaluation of theoretical orientations. However, as mentioned in the data analysis, it was a difficult task to allow the data to "speak for itself" because the data could be seen to be readily interpretable from a number of theoretical perspectives. Several potential conceptual approaches were identified in the discussion including the contentions of Bandura (1977), Kahneman (1973), and Csikszentmihalyi (1977, 1990). Future examination of such data wholly within one of these perspectives may prove interesting and useful for further unraveling the relationship between cognitive events and performance.

One conceptual approach identified in conjunction with this investigation that merit further investigation includes Bandura's (1977) self efficacy theory. Atheoretical approaches such as reviewed by Williams (1986) do not account for nor explain mutable confidence and mediating or moderating variables. This investigation reveals these to be salient and worthy of investigation.

Findings in the dimension of cognitive content readily recommend further investigation of information processing models such as Kahneman's (1973) assertions on parallel processing and limited attentional capacity. While typically assertions regarding this theoretical perspective have been assessed via the dual task paradigm, it would be difficult and certainly ethically suspect to create some sort of field setting elaboration of this design. However, it is not unreasonable to specify minimal field conditions

and associated hypotheses consonant with this paradigm a priori (rather than as a post hoc explanation as in this investigation) for the testing of contentions within this perspective.

Further, as with numerous other investigations, the arousal/performance relationship emerged in this study as salient. Present perspectives provide either little conceptual clarity and coherence or are largely unsubstantiated empirically. The phenomenological experience of arousal and the consequences in performance can be examined within more recent perspectives (Fazey & Hardy, 1988; Kerr, 1985).

Finally, Csikszentmihalyi (1975, 1990) observations on the flow experience were salient in this investigation. This area needs to be further examined. Jackson (1988) has found preliminary evidence to suggest that this state may underlie or be a precursor to peak performance. Further she has argued that motivational orientations such as postulated by Nicholls (1984) may mediate the experience of flow. Clearly the present investigation could be extended, using similar methodology, by specifically addressing issues surrounding motivational orientations and the relationship to performance and the experience of flow.

Using video technology. The use of video technology may provide the opportunity for much more exacting retrospective research investigation. Snyder and Ammons (1991) have found photo-elicitation interviewing techniques

with videotapes including slow motion and stop action replays to be quite useful in stimulating detailed recall in sporting settings. Not only could video recordings of provide the impetus for much more vivid and detailed recall by the study participant but as well as stimulus for researcher probes to explicate responses. For example, in the context of the present study, it would have been interesting to examine commentary regarding mutable confidence with the actual incidents of the match, in particular, the incidents identified as turning points. Further, as Gould et al. (1990) have recommended, pre-competitive behavioral analyses both separately and in combination with study participant commentary may reveal provide additional insight into preparation consistencies and idiosyncrasies across performances as well as insight into conscious and unconscious aspects of mental preparation efforts.

Integrating prospective and retrospective methodologies. While the retrospective design employed in this study provides insight into the thoughts and feelings of the participants, the question remains as to the degree to which performance outcome shapes recall. Conversely, prospective designs, by definition, fail to examine the actual events of the competitive episode and hence there is always the question of the relevance of prospective data past the moment it was collected. However the collection of some data fixing pre-competitive cognition and affect in addition to the collection of retrospective data may serve

to more securely provide some conception of the nature of the experience. For example, prospective indices of confidence alone would not have provided insight into the mutability of confidence during performance and while this is revealed in retrospective indices, the question remains as to the effects of performance outcome upon disclosure. By securing prospective and retrospective data in this regard a much fuller and secure picture could be obtained.

Assessing and controlling for opponent difficulty. As identified in the project limitations, the variety of opponent difficulty levels across performances serves to confound the evaluation of performance. It would be interesting to examine cognitive events across performance levels within opponent difficulty cohorts. For example, what is the pattern of cognition and affect across performance levels when the opponent is very challenging? How does this pattern compare with the pattern emerging with less challenging opponents? Clearly to acquire sufficient data to accomplish intra-individual analyses utilizing such cohorts, it would be necessary to follow athletes over a much longer time period than in the present study. Alternatively, opponent difficulty could be controlled for in some degree through the examination of sporting events that do not place such a premium upon the competitor (e.g., swimming, archery).

Conducting evaluation research. If research efforts such as the present investigation are to be of use, efforts

need to be made to translate the findings into sporting applications. However the blind application of such programs provides little promise in the absence of evaluation. In addition to evaluating the efficacy of such programs, the evaluation of systematic and consistent psychological skills training programs potentially provides the opportunity to evaluate causal links between psychological skills and performance. For example, interventions teaching thought control skills such as thought stopping and refocusing could be longitudinally evaluated not only on their efficacy for organizing cognitive content but as well for the effects on performance. Further, Campbell (1975) and Smith (1988) advocated experimental case study designs for investigating causation in field settings.

Summary and Conclusions

The present investigation was designed to address two purposes. The first purpose was to attempt to replicate the findings of Gould, Eklund and Jackson (1990) concerning pre-competitive and competitive affect and cognition in all-time best and worst wrestling performance. The results of data collected in this investigation from collegiate wrestlers on all-time best and worst performance were largely in congruence with Gould et al. (1990) findings with each of the four hypothesis generated in this purpose being strongly supported. More specifically, all-time best performance pre-competitive cognition and affect were found to be characterized by high emotional activation and

feelings of readiness, a match preparation focus including technical/tactical and performance process thoughts, confidence building thoughts as well as confidence and a commitment to winning. However, no substantial evidence of individualized mental preparation routines was observed and this was one of the few elements of the hypothesis not supported.

All-time worst performance pre-competitive cognition and affect were found to be characterized by non-optimal arousal and intensity, negative physical feelings, doubts or a lack of confidence and even fear. Further, a lack of focus was prevalent with cognitive content consumed by concerns about losing, irrelevant thoughts. Again, little support could be generated for the hypothesized pre-match preparation deficiencies and lack of adherence to usual mental preparation routines. An additional important finding was related to the observation that some normal or positive feelings were evidenced among wrestlers whose subsequent performance suffered as a consequence of dietary indiscretions.

All-time best performance competitive cognition and affect were found to be characterized by high emotional activation, high levels of absorption into the match, technical/tactical thoughts, awareness of coach input, feelings of confidence and growing confidence and an extraordinary and motivating awareness of the crowd. All-time worst performance competitive cognition and affect were

found to be characterized by a lack of intensity or tired, listless feelings, a lack of focus and a variety of task irrelevant thoughts. However, although hypothesized, no substantial evidence of poor strategy selection or non-adherence to competitive plans was observed and hence this aspect of Hypothesis 4 was not supported.

The present findings clearly supported Purpose 1 contentions and are important for several reasons. First, the findings of Gould and his associates (1990) were clearly replicated with a sample of less experienced collegiate wrestlers. These results also resonate with literature on peak performance, peak experience and flow (Garfield & Bennett, 1984; Ravizza, 1973; Csikszentmihalyi, 1975, 1990). Taken together, it can be seen that an increased understanding of the cognitive factors associated with excellent and poor wrestling performance has been obtained. Given the understanding of the topology of this relationship, there is an increased need to examine and begin to understand causal links between cognitive events and performance.

The second purpose of this investigation was to examine inferences based on cross-sectional or episodic investigations regarding pre-competitive and competitive cognition and affect. More specifically, a pattern of association between cognitive events and performance level has been inferred on the basis of comparisons of successful and unsuccessful performance or on the basis of all-time best and worst performance. The second purpose of this

investigation examined the validity of these inferences through intra-individual analyses of data collected longitudinally.

Subsequent nomothetic interpretation of idiographic analyses revealed that there were identifiable patterns of cognition and affect evidenced across performance levels in the dimensions of pre-competitive and competitive affect, focus, cognitive content and confidence issues while no such patterns were observed in the dimension of pre-competitive sources of motivation. Specifically, in the dimension of affect, a pattern decreasing positive affect concomitant with increasing negative affect across deteriorating performance levels was evident. This pattern of findings was also associated with feelings of high intensity and activation in high performance levels, normal levels of activation and intensity in moderate performance and listless lethargic feelings in low performance levels.

It was observed in the dimension of focus and supported by the pattern of findings in cognitive content that a high level of concentration and absorption were associated with better performance. This level of focus declined through moderate performances to a notable lack of focus in poor performances. Associated observations in the dimension of cognitive content included evidence of only task relevant thought in better performance. This was contrasted by incidence of almost totally task irrelevant thoughts in poor performance. Moderate performance level cognitive content

shared aspects of both ends of the performance spectrum.

Finally, the dimension of confidence issues evidenced levels of confidence commensurate with performance level with doubts being overwhelmingly salient among poor performances. Findings anomalous to this pattern were often associated with opponent difficulty and dietary indiscretions. Perhaps more interesting in this dimension was the evidence of mutable confidence. Doubts turning into confidence were primarily evidenced in high level performances while confidence ebbing themes were most salient in poor performance. Although changing levels of confidence were observed in moderate level of performance, there was no predominance in directionality.

As with Purpose 1 findings, Purpose 2 results resonate with literature on peak performance, peak experience and flow (Garfield & Bennett, 1984; Ravizza, 1973; Csikszentmihalyi, 1975, 1990) as well as literature relating to less than optimal performance (e.g., Mahoney et al., 1987; Williams, 1986; Gould et al., 1990; Gould & Weinberg, 1985). The longitudinal intra-individual design of this investigation revealed that psychological characteristics of successful and less successful wrestlers are not mere artifacts of between subjects analyses. Rather, similar associations between performance level and psychological characteristics were demonstrated with wrestlers intra-individually over the course of a season. Given that the patterns identified across performance levels were

consonant with inferences made from cross-sectional or episodic investigations, increased confidence is warranted in pursuing studies designed to change ineffective psychological patterns. The assessment of the efficacy of such interventions in influencing performance could provide at least preliminary evidence for causal associations. This may be the best option for the pursuit of further understanding of such causal links in ecologically valid settings particularly because it appears on the basis of this study that difficulty may be encountered in obtaining and/or identifying wide array of distinctly different performance levels.

In summary, it is clear that more studies need to be conducted longitudinally to evaluate inferences based on cross-sectional or episodic findings as this is perhaps the only way that performance history can be controlled. Further, investigators should not be shy about addressing research issues from a qualitative perspective. A number of important issues have emerged in the richly detailed and contextualized data obtained in this investigation that could not have been obtained with quantitative methodologies. This is not to suggest that quantitative approaches should be abandoned. Rather, it seems that a comprehensive interplay between methodologies can only serve to enrich the knowledge base whereas neglecting either only serves to hinder the development of our understanding of the psychological aspects of sport.

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APPENDIX A
INSTRUMENTS

ATHLETE DEMOGRAPHICS

Name: _____ Age: _____

School Term Address: _____

School Term Phone Number: _____

Home Address (if different): _____

Weight Class: _____

Year in University: 1 2 3 4 5

Major: _____

How many years of university wrestling experience do you have?

How many years wrestling experience did you have in high school and where did you wrestle?

What is your university wrestling record?

What was your high school wrestling record?

What sort of wrestling honors have you won or received during your high school career? university career?

What sort of experience have you had in nonschool wrestling such as freestyle or greco roman wrestling?

WRESTLING STUDY
Interview Guide I

The following questions will be addressed during the first interview. This interview guide is to help facilitate the discussion. The space provided below the questions is for the purpose of jotting down any ideas or thoughts that you have to help prepare for the interview but the guide will not be collected from you after the interview so there is no need to fully answer the questions. The space is only provided to help you organize for the interview.

1. Many athletes develop mental skills, which together with their physical skills help them to maximize their wrestling performance. Some wrestlers teach themselves how to switch into the appropriate feeling states for optimal wrestling performance; some develop a way of talking to themselves to keep sharply focused; some continually daydream, visualize, or somehow mentally practice wrestling until it "appears" and even feels perfect before they actually step on the mat. There are many, many private strategies which seem to help performance. Please describe in detail your most useful mental skills.

2a. We hope that these next items will help you identify for me the important mental skills and strategies involved in your wrestling achievement. First, please tell me what was your all-time best performance in a match, the match that you wrestled the best ever regardless of outcome?

It was: _____

2b. Think back to how you felt just before your best all-time wrestling performance. How ready did you believe and feel you were at that moment? Circle a number from each of the scales below to represent the degree of your physical, technical and mental readiness.

	100% ready										0% ready											
Physical	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0
Technical	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0
Mental	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0

2c. If you didn't feel 100% ready; what was missing, what might have helped; what could you or others have done differently?

3a. Some wrestlers set only one goal for matches; for example, pinning their opponent, or winning on points, or achieving some other particular objective valuable for team points. Other wrestlers set a number of goals or a series of goals for a performance. Some had very realistic goals, while others set "dream goals" seemingly far beyond their current performance level. What were your goals for this match?

Realistic goals: _____ "Dream goals": _____

3b. Circle a number on the scale below to indicate how fully you achieved your realistic and dream goals in your best wrestling performance of all time.

	achieved goal(s) fully										totally failed to achieve goal(s)											
realistic goal	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0
dream goal	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0

- 4a. Think of your best all-time match and tell me what you were focused on, thinking about, saying to your self, and how you were feeling immediately before the start of the match.
- 4b. Tell me next, what you were paying attention to, and most aware of during that match.
- 4c. In comparison to your full wrestling ability **at the time of that match**, how would you rate your wrestling performance in your best match ever?

0% of my Ability		100% of my Ability
0	1 2 3 4 5 6 7 8	9 10

- 4d. What was the outcome of that match? Win or Loss?
- 5a. Did you feel that there were performance expectations or goals placed on you other than your own for this match. For example, expectations by coaches, family members, friends, or other wrestlers.

___YES ___NO

- 5b. If so, please share the expectations you felt were placed on you by others and describe how these affected you prior to and during this match.
- 5c. Did these expectations create extra incentive to succeed, extra unwanted pressures or were they completely neutral? Please explain.
- 6. Were there any special circumstances surrounding that particular match that had any bearing on the match that we have not discussed? If so what were these? Please Explain.
- 7a. Now please tell me, what was your all-time worst performance in a match, the match that you wrestled the worst ever **regardless of outcome**?

It was: _____

- 7b. Think back to how you felt just before your all-time worst wrestling performance. How ready did you believe and feel you were at that moment? Circle a number from each of the scales below to represent the degree of your physical, technical and mental readiness.

	100% ready		0% ready
Physical	10 9 8 7 6 5 4 3 2 1 0		10 9 8 7 6 5 4 3 2 1 0
Technical	10 9 8 7 6 5 4 3 2 1 0		10 9 8 7 6 5 4 3 2 1 0
Mental	10 9 8 7 6 5 4 3 2 1 0		10 9 8 7 6 5 4 3 2 1 0

- 7c. If you didn't feel 100% ready; what was missing, what might have helped; what could you or others have done differently?
- 8a. Some wrestlers set only one goal for matches; for example, pinning their opponent, or winning on points, or achieving some other particular objective valuable for team points. Other wrestlers set a number of goals or a series of goals for a performance. Some had very realistic goals, while others set "dream goals" seemingly far beyond their current performance level. What were your goals for this match?

Realistic goals: _____ "Dream goals": _____

8b. Circle a number on the scale below to indicate how fully you achieved your realistic and dream goals in your worst wrestling performance of all time.

	achieved goal(s) fully										totally failed to achieve goal(s)											
realistic goal	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0
dream goal	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0

9a. Think of your worst all-time match and tell me what you were focused on, thinking about, saying to your self, and how you were feeling immediately before the start of the match.

9b. Tell me next, what you were paying attention to, and most aware of during that match.

9c. In comparison to your full wrestling ability at the time of that match, how would you rate your wrestling performance in your worst match ever?

0% of my Ability											100% of my Ability
0	1	2	3	4	5	6	7	8	9	10	

9d. What was the outcome of that match? Win or Loss? Do you recall the score?

10a. Did you feel that there were performance expectations or goals placed on you other than your own for this match. For example, expectations by coaches, family members, friends, or other wrestlers.

YES NO

10b. If so, please share the expectations you felt were placed on you by others and describe how these affected you prior to and during this match.

10c. Did these expectations create extra incentive to succeed, extra unwanted pressures or were they completely neutral?
Please explain.

11. Were there any special circumstances surrounding that particular match that had any bearing on the match that we have not discussed? If so what were these? Please Explain.

WRESTLING STUDY
Interview Guide II
Name: _____

The following questions will be addressed in interviews following matches in which you have competed this season. This interview guide is to help facilitate the discussion. The space provided below the questions is for the purpose of jotting down any ideas or thoughts that you have to help prepare for the interview but the guide will not be collected from you after the interview so there is no need to fully answer the questions. The space is only provided to help you organize for the interview.

- 1a. The following questions are concerning the specific match that you wrestled just prior to this interview. Who was your opponent in this match and what school does he wrestle for?

Name: _____ School: _____

- 1b. Think back to how you felt just before this match. How ready did you believe and feel you were at that moment? Circle a number from each of the scales below to represent the degree of your physical, technical and mental readiness.

	100% ready										0% ready											
Physical	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0
Technical	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0
Mental	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0

- 1c. If you didn't feel 100% ready; what was missing, what might have helped; what could you or others have done differently?

- 2a. Some wrestlers set only one goal for matches; for example, pinning their opponent, or winning on points, or achieving some other particular objective valuable for team points. Other wrestlers set a number of goals or a series of goals for a performance. Some had very realistic goals, while others set "dream goals" seemingly far beyond their current performance level. What were your goals for this match?

Realistic goals: _____ "Dream goals": _____

- 2b. Circle a number on the scale below to indicate how fully you achieved your realistic and dream goals in this match.

	achieved goal(s) fully										totally failed to achieve goal(s)											
realistic goal	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0
dream goal	10	9	8	7	6	5	4	3	2	1	0	10	9	8	7	6	5	4	3	2	1	0

- 3a. Think of this specific match and tell me what you were focused on, thinking about, saying to your self, and how you were feeling immediately before the start of the match.

- 3b. Tell me next, what you were paying attention to, and most aware of during that match.

3c. In comparison to your all-time best and worst matches, how would you rate your wrestling performance in this particular match?

all time worst					all time best					
0	1	2	3	4	5	6	7	8	9	10

3d. How satisfied were you with your performance in this match?

totally dissatisfied					totally satisfied					
0	1	2	3	4	5	6	7	8	9	10

3e. How difficult or challenging of an opponent would you say this opponent was:

very easy not challenging					very difficult very challenging					
0	1	2	3	4	5	6	7	8	9	10

3d. What was the outcome of that match? Win or Loss? score?

4a. Did you feel that there were performance expectations or goals placed on you other than your own for this match. For example, expectations by coaches, family members, friends, or other wrestlers.

YES NO

4b. If so, please share the expectations you felt were placed on you by others and describe how these affected you prior to and during this match.

4c. Did these expectations create extra incentive to succeed, extra unwanted pressures or were they completely neutral?
Please explain.

5. Were there any special circumstances surrounding that particular match that had any bearing on the match that we have not discussed? If so what were these? Please Explain.

6. Do you have any additional comments or thoughts concerning your performance this week that we haven't discussed or you that think that should be discussed?

Coach Evaluation of Wrestler Performance

Wrestler A

In comparison to your opinion of (specific wrestler's) **full wrestling ability** at the time of (specific match), how would you rate his wrestling performance in that match (regardless of the outcome) on a 0 to 100% scale?

He wrestled at about ____ % of his ability in that match.

What sorts of things did you take into account or consider in making that rating? Please explain.

Wrestler B

In comparison to your opinion of (specific wrestler's) **full wrestling ability** at the time of (specific match), how would you rate his wrestling performance in that match (regardless of the outcome) on a 0 to 100% scale?

He wrestled at about ____ % of his ability in that match.

What sorts of things did you take into account or consider in making that rating? Please explain.

Wrestler C

In comparison to your opinion of (specific wrestler's) **full wrestling ability** at the time of (specific match), how would you rate his wrestling performance in that match (regardless of the outcome) on a 0 to 100% scale?

He wrestled at about ____ % of his ability in that match.

What sorts of things did you take into account or consider in making that rating? Please explain.

Wrestler D

In comparison to your opinion of (specific wrestler's) **full wrestling ability** at the time of (specific match), how would you rate his wrestling performance in that match (regardless of the outcome) on a 0 to 100% scale?

He wrestled at about ____ % of his ability in that match.

What sorts of things did you take into account or consider in making that rating? Please explain.

Wrestler E

In comparison to your opinion of (specific wrestler's) **full wrestling ability** at the time of (specific match), how would you rate his wrestling performance in that match (regardless of the outcome) on a 0 to 100% scale?

He wrestled at about ____ % of his ability in that match.

What sorts of things did you take into account or consider in making that rating? Please explain.

SAMPLE RANKING SHEET**Performance Rankings**
Subject Name

Below I have listed all of the matches for which I have interviewed you about. I have supplied your performance ratings from the interview concerning that match for your information. This rating was in response to the question:

In comparison to your all-time best and worst matches, how would you rate your wrestling performance in this particular match with 0 being like your worst all-time wrestling performance and 10 being like your all time best wrestling performance".

I would like you to order these matches from best to worst performance. Rank the match that you wrestled the closest to your potential as number 1 and the one in which you wrestled the furthest from your potential as number 9. **Please remember I am interested in the quality of the performance regardless of outcome.**

<u>Match</u>	<u>Rank Order</u>	<u>Performance Rating</u>
1. Best All-Time Match (H.S. Junior Year against an Oklahoma H.S.)	_____	_____
2. Worst All-Time Match (Sophomore Year Conference Semi-Final)	_____	_____
3. University	_____	_____
4. University	_____	_____
5. University	_____	_____
6. University	_____	_____

APPENDIX B
CONSENT TO ACT AS A HUMAN SUBJECT

THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
Consent to Act as a Human Subject

Subject's Name _____

Date of Consent _____

I hereby consent to participate in the research project entitled "A Longitudinal Assessment of Pre-competitive and Competitive Cognitive Content in Collegiate Wrestlers". An explanation of the procedures and/ or investigations to be followed and their purpose, including any experimental procedures, was provided to me by Robert Eklund. I was also informed about any benefits, risks, or discomforts that I might expect. I was given the opportunity to ask questions regarding the research and was assured that I am free to withdraw my consent to participate in the project at any time without penalty or prejudice. I understand that I will not be identified by name as a participant in this project.

I have been assured that the explanation I have received regarding this project and this consent form have been approved by the University Institutional Review Board which ensures that research projects involving human subjects follow federal regulations. If I have any questions about this, I have been told to call the Office of Research Services at (919) 334-5878.

I understand that any new information that develops during the project will be provided to me if that information might affect my willingness to continue participation in the project. In addition, I have been informed of the compensation/treatment or the absence of compensation/treatment should I be injured in this project.

Subject's
Signature _____

Date _____

APPENDIX C

ANONYMOUS RAW DATA THEMES ORGANIZED BY ANALYSIS, DIMENSION
AND HIGHER ORDER THEME

All-Time Best Performance Pre-Competitive Raw Data Themes Organized By Higher Order Theme and Dimension

PRE-COMPETITIVE AFFECT

EMOTIONAL ACTIVATION

- * I wanted ... I feel that it is one of my all-time best matches because I wanted to get out there so bad that I was almost crying I wanted to get out there and wrestle, which made it, made the nervousness, it was between 0 and nil, I wanted to go out and I was ready to go out and wrestle.
- * Right before the match I remember saying to myself, how can my coach not believe that I was going to win ... I felt really mad, like really angry and I was real pissed off. I was kind of talking to myself, swearing "how can he freekin think I am going to [lose]".
- * I was mad that [opponent] thinks he is going to beat me and I don't know, I was kind of, I didn't like this guy, I don't like anybody that is a rivalry. I kind of hated him for that reason you know.
- * Right before the match I just, I was just getting psyched up, I was just going, I am going to kill, going to kill, that kind of thing. That was what I used to do in junior high all the time. I just wanted to get really, just want to kill this kid you know.
- * I know that ... say you will be on the side, the guy just before you is wrestling, it was a pretty emotional match, I remember as a team, the team was real into it.
- * I was nervous, very nervous ... I was nervous but I felt good ... I knew I was in great shape and I was just in tune and psyched up, maybe just some butterflies but that went away right as soon as the whistle blew so it wasn't anything out of the normal, out of the ordinary.
- * There is a lot of anxiety and it comes to a point where you almost just want to get out there. Those last couple of minutes waiting, you almost just want to get it going, get out there and start it. Because you are picturing everything going in your head and everything and everything is flying through your head and you just want to get yourself ready and say OK lets do it, go out there.
- * I was getting you know a little nervous, just butterfly nervousness I think you know that you get before every match.

FEELINGS OF READINESS

- * I was just super ready for it. I couldn't have been more.
- *** I knew I was ready.
- * I was feeling fine.
- * I felt good physically and technically, I feel good all the way around.
- * Physically I knew I was in just great shape. Actually I had torn cartilage in my knee just like 5 days before that I ended up having to get operated on. But I had been working with this guy in Richmond and he is kind of like my guru, he was a martial arts expert, and a real mental case. But he had his own little gym and I used to go through workouts with him that just, I mean they were so intense and so, not physically abuse you but just get you so right mentally it was incredible. So that whole week, even with my knee banged up, I had been going though workouts with him that I knew I was in great shape and I had been running a lot and lifting and doing that kind of stuff so physically that was like the best thing, I knew I was ready.
- ** I felt good.
- * In high school I knew, there was no doubt in my mind that there was not another high school in the country or in the world that was working out as hard, drilling for an hour and a half, wrestling live for an hour and a half and then going home for a couple of hours and then having another drill practice at night. I knew there was no other high school program let alone may college programs that were working as hard as we were. So physically, I felt at a peak.
- * I knew myself it was going to be a tough match but I knew physically I was in better shape and I felt I was ready for it.

FOCUS

TOTAL FOCUS

- * I was totally focused into the match. There was people that were coming up talking to me, and saying things to me that I don't even remember. They were coming up and talking to me, people said they were saying things to me and I was just, I was so focused that I didn't even pay

attention, you know all I could think about was the match. So I was just really in tune and just really just more psyched up thinking about what was going to go on, going out there and taking it to him.

PRE-COMPETITIVE COGNITIVE CONTENT

TECHNICAL/TACTICAL THOUGHTS

- * I was just thinking about every step of the match, everything that was going to go on, everything I was going to do. Like I was saying before, all of the moves that were going through my head.
- * Oh I could see myself hitting different moves but whenever I went out there to wrestle, it was whatever was there, you know. It wasn't like I was going to force a duck, if it wasn't there I would hit a single or I would hit what ever was there right at that second.
- * I mean I was prepared, he had this one move, this duck under, everyone told me about it so I was ready for that but he still hit it on me twice in the first or second period.
- * I kept thinking about what his move was that he was going to try and hit, about this duck under. I wrestled him a long time ago, I mean I know what he looked like. I just kept picturing me wrestling him out on the mat, cause I saw him over on the other side of the mat.
- * I can visualize myself hitting the things that I want to hit and you know setting up my man and oh definitely.

PERFORMANCE PROCESS

- * [Thinking about] how tough I wanted myself to wrestle.
- * I just wanted to go out and wrestle well. I mean, that's just the way I look at it. I just want to go out and look good and wrestle well. I want my stuff to look good, feel good, when I was hitting it, I wanted to finish it well. I wanted it to look smooth.
- * I just wanted to go out and wrestle well. I wanted to, when I hit something, I wanted to finish it.
- * Just thinking what I had to do, I had to keep the pressure on and stay focused and not relax and tell myself I could do, I was going to do it.
- * I was thinking that if someone was going to beat me that I really wanted them to know who they had wrestled. So I was thinking if he is going to beat me, man I am going to try and get into a real fight with him kind of thing. That's what I was thinking.

CONFIDENCE BUILDING

- * Constantly pounding into my head, thinking about how much physically, how much better shape I was in, that I was doing and sacrificing more than this person and there is no way that he could or should be able to compete with me.
- * I was thinking he can't be better than me, not that much.
- * I was really more focused on believing, telling myself I am going to do it, I am going to do it.
- * I know that the biggest thing is that I can remember just is hey I can do it. And I belong in that type of class of wrestling ... Hey I belong here, I should win these type of matches.

CONFIDENCE

CONFIDENCE

- * I was going to win. There was no doubt. I was going to win ... From the time I stepped out on the mat, there was a little bit of doubt during the week practicing, practicing, practicing but there was 5 to 7000 people there watching and then there was TV cameras and everything and I got it into my head that I was going to win. I wasn't going to lose in front of all of these people.
- * Mentally, I knew it, I knew that I was going to go out and win that match. And I knew that he knew that I was going to beat him. I mean I didn't talk to him or say anything to him. I just knew it. I knew that there was nothing that he could do to beat me and I knew that I was going to beat him and he knew that he was going to lose that match. And it was just something I knew. I mean, no matter, anyone could have said anything, I mean, he could have said I am going to kill you, I am going to kick your butt, but I knew, I knew inside of him that he knew he was going to loose that match.
- * I don't know what it was. I just knew it. I mean, I have wrestled tougher kids than him and had to wrestle better but it was just something, it was a weird feeling that I had. I just thought, he knows he is going to loose this match and I know I am going to kick his butt.

- * I was pretty confident.
- * I was feeling great, cause I mean I had been wrestling good all day.
- * I felt confident, I was wrestling well in previous matches so, ... I still felt like I could beat him because one of my teammates had beat him earlier in the year and I was beating my teammate in practice so I mean I knew I could beat him.
- * I knew it was going to be a hard match but I can remember even before walking on the mat, knowing, you know the last thing I said to myself was yea I am going to do it. And that is kind of the attitude that you try to get every time before you get out on the mat ... And that is like I said, I think the last thing I can still remember thinking, yea I am going to, yea I am going to do it, I am going to win this match.

DOUBTS

- * The only reason I would have a bit of doubt in my mind because the person I was wrestling, his name was [Name], and his father was an assistant coach at [**] State University. And I remember that coming up in a couple of conversations and at the time a couple of interviews. You know, that his dad was [Name] and what not.
- * I didn't think, if I thought I would win, I thought it would be on a catching, a move that I caught him, but I mean I beat him just wrestling, I didn't think I would beat him just wrestling to tell you the truth, no. I doubted myself.
- * I mean I felt like I could beat him but I was still a little intimidated at first because he was like a lot stronger and you know I had just heard a lot about him and when I first went out there I was a little intimidated.
- * There was still a little bit of doubt though in myself because this was the defending champ ... and his build was a pretty intimidating.
- * Just probably do to the fact that this guy had beat me before in a close match and he had, he had been like undefeated that year, had pinned everybody he wrestled and just like tearing everybody up so, I mean I was very ready for the match but there might have been just a little bit of doubt. Just because of what he had been doing.

SOURCES OF MOTIVATION

COMMITMENT TO WINNING

- * Just about how bad I wanted to beat him and about getting to the finals.
- * I was thinking to myself just it was my turn ... because he had beat me in the previous match and then I was thinking that this was the sole purpose, this was my sole reason for coming down here was to wrestle this one match.
- * I was really mad, I was like, I wanted to beat him really bad ... Nobody thought that I would beat the guy and I was just so mad and so up for the match.
- * My goal for the whole year was to win nationals and to do that I had to beat him. So I figured I might as well beat him in the semi's, I am going to have to beat him if I wanted to win this, so it didn't matter if I wrestled him in the semi's or the finals.
- * Right before the match I would have to say, I was just saying to myself, I have got to win.

OTHER SOURCES OF MOTIVATION

- * I was defending state champion, so that was probably another thing that was subconsciously going through my mind. Not wanting to not repeat after winning in my Jr year. So that was probably a pretty big thing also. Cause my junior year I was pretty much, I was a nobody. Nobody knew who I was and I came from nowhere and beat all of these people that were supposed to just kill me. So everybody, a lot of people thought it was a fluke and I didn't want people to think that.
- * The only pressure I felt was what I put on myself, just from being you know college coaches being there recruiting, from wanting to repeat as state champion and not wanting to lose and have that doubt on me, I mean I just hated to lose.
- * I knew he had been, placed high in the junior nationals and he was a very capable wrestler. I knew that so I wanted to win the match for those reasons, to be able to scale myself in such way and make myself feel, put myself in the realm of things as far nationally.
- * I went there with the sole purpose to wrestle him again. You know I was thinking about how I was really focused and that was why I wanted to go.
- * I was going to kind of avenge a loss.

- * I wanted to prove everybody wrong in the stands. My goal was just to beat him, I think it was just to beat him at the time. Cause I remember nobody thought that I would win, everyone was just like try, and I was so mad at that. Even my coach said it to me. I was like real upset about that.

All-Time Worst Performance Pre-Competitive Raw Data Themes Organized By Higher Order Themes and Dimension

PRE-COMPETITIVE AFFECT

UNDERAROUSSED/LACK OF INTENSITY

- * I was kind of just there, you know, I wasn't aroused, I wasn't excited, ah didn't have any butterfly flies, no jump, no life, no life to me, no jump about me. I probably did have a few butterflies, just a nervous tendency but nothing really major ... it was a different relaxed, I mean it wasn't a wrestling relaxed, it was a laying in the stands relaxed, I was still kind of asleep it seemed like.
- * I was nervous for it but it was like, kind of hard to explain you know. It was a dulling feeling almost ... flat, I was like ho-hum ... It was like I was nervous but it wasn't like, I don't know it was hard to explain. You know it was a weird feeling.
- * I was just like, ho-hum, lets wrestle. Not overly excited, not overly dull just like great (sarcastic).
- * I went through the same superstitious junk, I just wasn't excited.
- * I just felt, I was almost ready for the season to be over with even though there was the rest of this tournament to wrestle and then the nationals to wrestle. I just had just, wanted to get the hell over with and start on my spring and work for next year kind of thing.
- * Almost rather wouldn't have been there it seemed like.
- * I took him extremely light.
- * I don't know, it wasn't the same type, of like a readiness. Like the adrenaline is flowing and you are ready to go and it almost gets you to the point where like I said you want to go on the mat. You are ready. OK this is it, lets do it. Where in that case it was more like Oh-Oh it's time. You know there is a big difference, between oh-oh I guess it is time to go and that is a big difference [flat feeling].
- * I didn't have that type of a killer instinct going out there thinking no matter what I am going to win this match. I can remember not having that. I can remember trying to get it and not being able to.

NORMAL NERVOUSNESS

- * a little bit of nervousness but nothing abnormal.

NEGATIVE PHYSICAL FEELINGS

- * I was experiencing some serious burnout ... just wrestling burnout.
- * Just the numbness in my legs that I feel every year when we get ready to wrestle the ACC's because of these damn sprints.
- * I remember I was thinking how tired I felt before the match even started. That is one thing, I was thinking I felt like shit, I can't believe how tired I feel, I haven't even wrestled yet, you know I had my arms, I felt like I had already wrestled a couple of matches. And I felt so weak that I was thinking man there is just no way. There is no way I'll last like a whole match. I felt so tired, mentally and physically.
- * I never really felt warm when I went out on the matches in high school, and never had a good warm-up or broke a good sweat before the match.

POSITIVE PHYSICAL FEELINGS

- * I felt pretty good physically, you know, I couldn't tell that I was affected a lot by cutting weight and I really got winded early and just really looked out of shape. But I didn't expect that to happen so I felt pretty good physically you know, I thought everything would be OK that way.

SCARED

- * There was a nervous scared feeling.

- * I was doubting myself, I didn't think, I was kind of scared. I lost, cause I had lost to the kid before that during the year.
- * I was thinking, "I couldn't believe that I was scared to wrestle."
- * I was trying to pretend that I'm not scared but I know I am. I was trying to trick myself, I'm not scared, yes I am, no I'm not, yes I am.

FOCUS

LACK OF FOCUS

- * It was the lack of focus and I think again that was experienced from the burnout feeling and the tedious practices and the double sessions that we had been having a couple of weeks before.
- * I just wasn't focused at all ... so you can't do anything with out your mind.
- * I wasn't thinking wrestling at all.

INJURIES AFFECTING MENTAL STATE

- * Physically I felt maybe like about 70%. I just, I was kind of banged up and I was letting, I guess, let it go with mentally, I was letting it get to me.
- * My back was hurt ... it was just hurting really bad over Christmas. And it was giving me a lot of problems and I've got bad feet, my feet were killing me you know, and I was thinking about it all, I didn't block it out.
- * I was letting my physical injuries get to my head. Uhm aches and pains, thinking aw I don't really want to be here.
- * I had a knee that was bothering me pretty bad, I had some ligament trouble. And I had a pinched nerve in my neck. It was one of those things where you just let everything build up on you, you know to the point, and I think it was just because mentally I wasn't strong enough in that area yet.

PRE-COMPETITIVE COGNITIVE CONTENT

WORRIED ABOUT LOSING

- * I was intimidated by coach. I was more worried about loosing than I was about winning.
- * Focus on what I needed to do rather than focusing on the fact that, you know, if I lose this match my ass is grass. I should have been more focused on thinking about what I need to do.
- * Not really doing my usual focus on what I was going to do in the match. But being more concerned about not going out there and messing up, which happened.
- * I was thinking more just about winning, getting the points for the team, not letting the team down ... it was a close team match and I didn't want to lose, lose for the team.

IRRELEVANT THOUGHTS

- * I was wrestling up a weight. I was normally [weight class] but I was wrestling at [weight class] ... I had lost like 14 pounds the night before so that was probably in the back of my mind ... I remember just actually kind of worrying about having to go up a weight and losing so much weight to get down to [weight class].
- * I was telling myself like, one more match and you'll be in the finals and you can take a break for a while, you can go back to the hotel.
- * I'm thinking that, like his accomplishments and I was like "man he is pretty good", like how everyone cheered when he went out there. A lot more people cheered when he went out there than when I went out there and stuff, when we shook hands at the beginning of the match kind of thing and stuff like that.
- * I can't say I wasn't out of it, I just, I wanted to win but I was just, it was like a dulling. I had lost the week before and I was just like, the whole world was still coming down around me. It was still like I was in a burning house and I was like shit, even if I win this I still can't get out of this place alive. It was just kind of like aaaaah. No matter what I did, even if I pinned [opponent], it wasn't going to matter because I had lost the week before. It was just like its pathetic, I can't change that one loss. I am still going to have 1 on the end of my record ... Somewhere in the back of my mind, that was still eating me away, eating away at me that I had lost ... I was flat because I was just so stressed, it was just like, aaaaah I've lost. And that was still just bothering me.
- * I was more worried about what people were going to think of me then what I was thinking of me.
- * I was thinking a lot about the team score.

- * [I wanted] to bang heads with him, I just wanted to bang him, to whack him, I wanted to beat him but I wanted to hurt him. I wanted to hurt him more than I wanted to beat him or maybe about the same. I was just, well actually not hurt him but in the sense that I wanted him to know that I wrestled pretty tough.
- * [Coach] put a lot of pressure on me personally for this individual because this individual was recruited here at [university] and decided to go to [university]. So there was a lot of pressure, don't lose to this guy, you know, son of a bitch didn't come to school here, we don't lose to people that don't come to school here kind of thing. So there was a lot of outside pressure coming in.

CONFIDENCE BUILDING

- * I was just saying to myself, you know, you worked hard all preseason, you are ready to go, just go out and hit your moves and I should be fine, there is no way that I should not win this match. I felt pretty good.

CONFIDENCE

DOUBTING OR LACK OF CONFIDENCE

- * I wasn't wrestling very well with a couple of guys that were not good wrestlers at all and I had trouble and so that brought me down mentally I would say that probably made me about 65-70% maybe.
- * I didn't think I was going to win in the final. That is like one of the only matches that I ever thought that.
- * I just wanted to do my best I know that. You know I remember telling myself "even if I lose I'll won't, I'll try not to feel bad as long as I know I tried my hardest". I was like planning for the worst.
- * I think one of my problems going into it was everything was real vague, like "man can I do it with this, am I going to be able to win even though this and that". And I think that is probably why I got into the biggest problem, biggest trouble ... I think I had a lot of uncertainty.

CONFIDENCE

- * The matches before that, I wrestled well, I mean I pinned one guy and I think I teched another guy so I felt good. All preseason I worked hard, you know I felt I was ready to go but I think it was, after weigh-ins I just ate so many like cookies and junk foods that they caught up to me in the overtime.
- * It's a weird feeling but I knew I was going to win but I knew I was going to wrestle shitty. I just knew I was going to win ... Mentally, it was weird, I knew I could win him. I knew I was going to win. I knew I could beat him but it was like ... it was like, "oh shit I am going to have to be pushed here". Like that sort of.

OTHER

NON-ADHERENCE TO ROUTINE

- * I didn't do my usual steps that I normally took [visualization and preparation].

All-Time Best Performance Competitive Raw Data Theme Organized By Higher Order Theme and Dimension

COMPETITIVE AFFECT

POSITIVE INTENSITY

- * [Feeling] Fired up.
 - * I always believe that I am in great shape and I think that the only time that I will get tired is if I lose that intensity. You know if you start losing that intensity in the match then I think that is when the fatigue you know kind of starts to nip at you. But like in that match, I think, there was never a thing of being tired. Never really came across your mind.
- DM If anything it turns you on even more, it gets you even more intense when you start to feel like that person is going to break on you.
- * I went out there relaxed, I was intense but I was real relaxed, it was kind of odd. I get like that every once in a while and I wrestle really good when I do it.

FOCUSABSORPTION INTO TASK

- * I had no conception of the time, it wasn't even a factor in my head. All I was thinking about was staying intense ... I didn't know, I had no idea. I had walked halfway back to the center of the mat and kind of looked up at the clock and realized that it was over.
- * I don't remember everything, I kind of remember the big things, mostly. And then a few others.
- * Just extremely focused and intense on the mat.
- * I think more than anything I was real into the match. I think it was just the opponent, I mean the guy I was wrestling, into that match. I was real, real focused in the match. About what was happening, the time, the score, man I had, I wasn't distracted I don't think. I don't think I had anything else on my mind. I was in that match.
- * I was just right into the match. You know I wasn't really watching anybody or thinking about anything else other than you know what I was doing.

PERFORMANCE AUTOMATIC

- * I think at this point it was more just reaction, I had been working for a while for this match ... Things came together, set-ups turned into shots, everything was happening on time.
- * You know I don't even know if it was thinking. It was like muscle reactions, it was just kind of like, boom, when he would pull, I would hit this, I'd hit that. It wasn't that I was thinking, it was a lot of muscle reaction, it was like what ever was there right at that split second, it was like almost, I couldn't really think about it, I just had to do it.
- * I remember doing what I wanted to do ... I remember when I was hitting it, I was like, that was good, that was nice, do it again, let him back up, hit something else.

COMPETITIVE COGNITIVE CONTENTTECHNICAL/TACTICAL THOUGHTS

- * This guy was a pretty good rider and turner and stuff and I knew in order to win this match I was going to have to get out.
- * One thing I was paying close attention to was, I got a couple of takedowns right on the edge of the match. The week before in practice, our coach went over that for about 10 minutes and you know I payed attention to that and that helped out a lot. And during the match there was 2 takedowns that I got right on the edge of the mat. I kept my feet in and I mean, that won the match for me.
- * During the last, the last half of the 3rd period ... And I was just kind of hanging out until over time. I didn't want to take any chances at the end of the match.
- * Just on what I was doing, what I was trying to accomplish ... He was really good on bottom so I was more conscious of trying to take him down and just stay, for me to win on my feet, when we were both on our feet, for me to get the takedowns so I was really trying to concentrate, put a lot of effort into taking him down when we were on our feet and not get reversed when we were down.
- * In the last period I was winning 6-4 and I remember not wanting to get up right away. Just so, maybe to waste time but after I did get up, there was probably 30 seconds left or a minute left and I just shot as soon as I turned around, I shot back in on him and I had a hold on his leg, and I remember then like counting the time out. Looking up and seeing the clock like 20 some seconds left and just holding on to his leg for dear life and thinking just not to let up, that I had won. That was going through my mind too.
- * I think my position. I think I wanted to keep good position the whole time and he really just had one real good shot and I just, I wouldn't let him have his tie where he would come from on that shot. I was thinking that. Basically on our feet.
- * In the third period I kinda started watching for the clock ... I was just, we had had a lot of action and I was a little winded and I didn't want to blow it. I was ahead 10-5 but you know anything can happen so I kind of concentrated on position a little bit more. I relaxed one time and almost got turned.
- * I remember it was really straining on my neck and stuff and it hurt really bad. I just told myself, I'm not going to go over, I'm not going to go over. And I remember really focusing on that.

AWARENESS OF COACH INPUT

- * It is kind of something where I block out the crowd or what is going on and I try and stay focused to the coach ... To the point where, I would be out there and wrestling, all these people screaming and yelling and the only voice I would hear is his. So I think, that was the only thing that I was really worried about was listening, hearing what he was saying.
- * I was just [paying attention to], actually to my coach on the sidelines. Just, just listening to him, he kept yelling stuff out to me, kept building my confidence up.
- * [I could hear] just my coach yelling like, don't turn, don't turn cause he was starting to turn me. Fight it, fight it, and I remember hearing that stuff.

AWARENESS OF CROWD

- * I could just hear in the background, all the cheers and stuff but, he wrestled for a high school which won the state championship that year and they had 5 guys in the semi-finals and he was the only one that didn't make it to the finals. So they had, we had probably 50 fans from my school, our wrestlers and that kind of thing and they probably had like 400. And we were wrestling right in front of their section and so there was like a huge noise from all of them. They would cheer a lot and when I would take him down there would be like silence you know so I kind of heard that and there points like he would almost get something where it would get really loud but it was kind of like a mumble in the background, you can't really tell what the sound is but you can tell that there is a lot of noise there. So I remember hearing that and I think I can remember hearing my dad and my dad was always the big supporter and he was always there to see me and stuff and then at one point him yelling something like not to let up or something like that.
- * It is funny because I, as a matter of fact, I could hear my brother [in crowd].
- * I remember kind of looking over at their stands and like they are kind of in dismay ... because he was like he captain of his team and he was like undefeated at the time. And his team, they were like he was a god for junior high you know. And I remember just everyone was like whoa, everyone is like quiet and everyone on my side is going crazy, there side is just quiet. I remember, I remember remembering that.

CONFIDENCECONFIDENCE

- * I was just thinking to myself that I want to get him in overtime because I know I in better condition and I know I will beat him if we get into over time, I was that confident in my conditioning ... deep down I knew I could beat him in overtime. That's what I wanted.
- * I mean it was just like, he knew, it just felt like he knew what I was going to hit but there was nothing in the world that he could do to stop it. That he knew I was going to hit a fireman's, he could have had a sledge hammer and still he wasn't going to stop it.
- * I don't think I ever doubted myself. I don't think I doubted myself as such but I felt that I had to work harder, keep moving, work harder ... maybe I was down points, I had to get it back, start doing stuff even better.
- * I didn't really [get bothered], a lot of times you can let [getting taken down right away] get to you right then, kind of put your head on the mat or something and but I didn't. I fought as soon as he was on top of me. And I came right out and reversed him. So it turned out pretty well. I didn't let it bother me.

DOUBT TURNS INTO CONFIDENCE AS MATCH PROGRESSES

- * When I first went out there I was a little intimidated. But then as the match progressed, I knew I could beat him.
- * I remember after the first takedown, saying to myself, I know I can beat him now. Cause I took him down and I knew if I could do it once I knew I could do it. The thought that, the doubt that maybe I had before, that little 5% doubt was gone.
- * [Coach] let me have it [during break before overtime], he said what are you waiting for, you are better than this guy, you know, you work out with tougher guys in the room. That made me think real hard, I was like yea I am better than this guy. I should beat him. And I mean that really did inspire me.
- * I can remember getting my first takedown in the match, boom I had a takedown and it was, pry almost surprised me.

BROKE OPPONENT

- * I just mentally broke him I think because I got a takedown at the end of the first overtime period .
- * I knew I had him even at the end of the second period of the overtime, I took him down, he took a real bad shot, he was, he took a desperate shot, dove at me, and I floated him for 2, I knew he was just gone then.
- * I can remember, well you can always, there is always a point where you feel like, I'm kind of, you are kind of breaking a person. And I think I definitely had that type of feeling in that match.
- * You can almost feel it to the point where the fight from his side kind of went down a little bit. Then you kind of get that taste that hey I got this guy, I got him, he is hurt. And I can still remember that, thinking OK, that is when you know you have it.

SOURCES OF MOTIVATIONCROWD INFLUENCES INTENSITY

- * In between periods, I remember my parents and family were there and I remember thinking, and I was down 2-1 and I remember thinking, and I was down on the mat, it was my choice, and I remember just before I got set thinking about not wanting to lose, embarrass myself in front of my family. I remember thinking that. And I was doing that I think, kind of fire myself up.
- * As the match was going on, I think the fans were starting to pull for me cause they wanted to see an upset, and as I got the first takedown I could hear the fans cheering for me, there was a lot of fans there and I could sense they were pulling on my side. And I guess that kind of pumped me up, wanted me to win even more ... after we went out of bounds after the first takedown I could hear the moaning of the fans, kind of like in shock, or sensing an upset, it was weird, it was a weird feeling, I could feel them rooting for me and wanting me to pull off the upset.
- * [I could hear] People screaming and stuff cause they didn't think I'd score or something. I remember that psyched me up a lot.

All-Time Worst Performance Competitive Raw Data Themes Organized By Higher Order Theme and Dimension

COMPETITIVE AFFECTLACK OF INTENSITY/LISTLESS

- * I am sure if I had put 2 and 2 together and just stopped and did it, I probably could have, but I guess I used it as a crutch, ah [like] "I'll just stay down here and let the time go by, I'll get my points later".
- * I just wanted to get off the mat it seemed like.
- * I just know that I wasn't real intense. I mean I can remember that.
- * It was just a dull, dull feeling you know. Just like a gloomy feeling like gray clouds sort of.
- * You know I was just like, bleh, everybody just shut up and leave me alone. You know, let me go home with my coach and my parents and I would have been happy.

TIRED

- * I just remember feeling how tired I was and that, just knowing how bad I looked and I didn't want to, I keep saying to myself that I want to, I need to do better, I need to do better but then it just wasn't happening.
- * I am usually in really good shape. I didn't really understand why I was, it hadn't happened before. I couldn't really understand why I was feeling that bad ... but I was so tired that, I wrestled, just the way I looked, like I wasn't even doing that.
- * I don't know, I couldn't believe it. I was just mad, I was just tired. I remember I was tired and I was thinking god this sucks. I remember I hated it ... I was also thinking man I am so tired I can't believe this, just like the worst.

FOCUSLACK OF FOCUS

- * There was a total lack of focus.

- * I know one thing is was I can just remember being not being real focused in the match. I think a lot of times your mind starts to wander and it seems odd that it could even in a match like that but it can. And not a great deal but just enough where you don't, just enough like I said where you start letting things like fatigue, like pain, things like that, start to nip away at you. I can't remember focusing on anything in particular.
- * It was kind of weird, I don't know what exactly I was thinking but it, it was kind of like I was thinking about other things when I was wrestling. You know about, I don't know exactly what ... my head was not there at all.
- * I was just letting these little things bother me.

REFOCUS

- * Then another point, he reversed me and at the time, it was 1-0 me. He reversed me and made it 2-1 him and as soon as he reversed me, it was like oh shit, chooo and I was kind of like a fire drill and I escaped and it was 2-2. And then I was kind of focused. OK here we go, I have got to take him down. And there was only 12 seconds left. So I was like oh got to go, got to do something and I took him down.

COMPETITIVE COGNITIVE CONTENT

NEGATIVE THOUGHTS TOWARD/ABOUT CROWD

- * The crowd was booing and I was like give me a break. I was, you want me to be honest, I was like, I was just like fuck you people. I was just kind of like, if I had a microphone right there, I would have been like, you can all go fuck yourselves
- * They had a really intimidating crowd, so I guess that had something to do with it. I tried to block'em out but every time there was a questionable call, they were just, yell stuff, even throughout the whole match they were yelling things and it was kind of frustrating.
- * I was frustrated, I was like ready to double pump the crowd off.

NEGATIVE THOUGHTS TOWARD/ABOUT COACH, REFEREE, OPPONENT

- * [I was feeling] Resentment toward [Coach], and I was so busy resenting him that I wasn't wrestling the match ... I was so busy thinking, "I wish this idiot would shut the hell up so I could wrestle".
- * I was just so annoyed by so many things at that time. It was hard to be focused because I was like, I wanted to just tell everybody off, I wanted to tell the crowd off, I wanted to tell his coach off, I wanted to tell him off, I was just irritated by everything ... I wanted to smack the official right in the head. I just wanted to punch him.
- * I felt that it was a hometown ref.
- * And I was just like, he just kept standing up and I was throwing legs in and I was trying to ride him and all he was doing was standing up and the ref hit me for stalling. I was like, this is a joke.
- * There were a couple of calls that could have went either way with the ref. And that was frustrating too.
- * I was just like at that point, [opponent] you ain't doing shit. All you are doing is standing up, you aren't trying to get out. Like I am really trying to keep you down and ride you and you are doing nothing but standing up. You ain't breaking my hand control. And I am trying to keep you down, you know.
- * I remember concentrating on trying to to kill him I guess or beat him up kind of thing, not like really but definitely in a sense. Like I wanted to crack his head and try to give him a couple of head butts and stuff.

AWARENESS OF BEING INEFFECTIVE

- * I can still picture it in my mind now, where man I should have had a takedown there, I can't believe I let him get away.
- * And I remember trying to fight it but I couldn't cause, technique-wise I was just totally outgunned.
- * Thinking how I got taken down, the way he was taking me down I guess. I remember concentrating damn what is he doing and I remember I couldn't stop it ... I remember thinking, "man he got in there so quick, I don't know how, I can't stop it."

* It just seemed like the harder I tried, the worse I was doing, just like nothing was going right ... It was like, I got, I got to try harder, but when you try harder, it doesn't always work to your advantage, I mean you don't work smarter, wrestle smarter, so I was maybe taking stupid shots, trying things that I wouldn't normally try, maybe trying too hard.

* I couldn't come off bottom. I couldn't clear my hands for anything.

CONCERN ABOUT LOSING

* I was down and I had been getting ridden for a little bit and I wasn't getting away, and it gets to a point of frustration. And I think that was the point where I started to lose it, like "man I am not going to win this match". And I think once that happens, that is when you have been broke. That doubt, that "Oh-Oh". As soon as that happens, you just made it so much tougher, it is tough to ever win it. And I think that is when it happened.

* Just like before the match, I was thinking "man I might lose, no I'm not". I was thinking, "man I can't believe I'm losing" and "I let him score", and I'm thinking how am I going to get back and if I will get it back, the points, stuff like that.

* I was cautious, I wasn't taking chances ... I think I was just afraid of losing.

CONCERNS ABOUT EVALUATIVE OTHERS

* I could see my coach was just extremely disappointed in me. ... I felt terrible, I mean it is not fair for you to feel bad for yourself but I felt bad more for him than for me cause I kind of felt like I kind embarrassed him, you know, as well as my self ... my family, my team.

* I remember that a couple of my friends, they were around like 30, they had come to [city] to see the match and I remember thinking about how crappy I was feeling with them in the stands and that bothered me. Knowing that they were up there and I was wrestling so poorly.

* Coach screaming and yelling at me. He was screamin and yelling at me telling me I wasn't doing things right during the middle of the match which mentally, "Oh my god coach is already mad at me, the match isn't even over and he is already screaming."

* I'm thinking this in my head in the middle of a match, whistle blows and I am still thinking about, "oh shit if I don't hit a shot right here [Coach] is going to scream and yell at me". Wrestling to satisfy him instead of satisfying my own requirements to myself.

* Well every time I turned, I was, every time I got taken down or if I wasn't doing something that, sometime you look over to the side to see what your coach is thinking, and he, he was yelling and bitching and he has this look that he gets on his face sometimes that you just, kind of like a death look ... just kind of like an eat shit look. Like I am going to kick your ass when you get off the mat you know type of thing. So he was giving me that look ... And every time I looked over there, it was just the same look from him, just kind of made things worse.

SOURCES OF MOTIVATION

COMMITMENT TO WINNING

* Just winning. My whole focus was just, I got to win, no matter what happens here, I have got to win. But if he takes me down or not, I have got to win.