THE RELATIONSHIP OF PRE-GAME AROUSAL ASSESSMENTS TO SELF-PERCEIVED PERFORMANCE COMPETENCIES IN MALE COLLEGIATE BASKETBALL PLAYERS

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In Partial Fulfillment

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Master of Arts

in the

Theory of Coaching

by

Anthony Michael Fiorini

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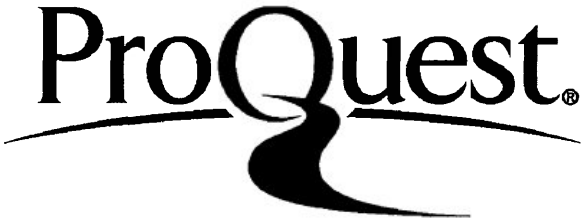

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ABSTRACT

Title of Thesis: The Relationship of pre-game Arousal Assessments to Self-perceived Performance Competencies in Male Collegiate Basketball Players

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This study used the technique of self-reporting to examine the relationship of pre-competition arousal symptoms to specific grades of performance. Four dependent variables were observed for 11 male varsity basketball players. Each subject reported his pre-game arousal symptoms, his pre-game excitedness level, his estimation of winning, and his post-game assessment of his own performance for each game. Data were inspected to determine 1) the existence of any patterns of arousal symptoms that were performance specific, 2) arousal (excitedness)-performance level relationships, 3) estimation of winning-performance relationships, and 4) arousal (excitedness)- estimation of winning relationships. Patterns of arousal that are performance specific were exhibited by the more competent, experienced members of the starting lineup. Inexperienced players, substitutes, and players of lower ability levels generally did not exhibit patterns of arousal that are performance specific. No obvious results were obtained for the arousal(excitedness)- estimation of winning relationship, the estimation of winning-performance relationship, or the interaction between arousal (excitedness), performance, and estimation of winning.

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Chapter 1

INTRODUCTION

Purpose

The purpose of this study was to examine the relationship of pre-competition arousal symptoms to self-perceived performance competencies in male collegiate basketball players.

Significance

There is widespread agreement among sports psychologists that a significant relationship exists between an athlete's level of arousal and the quality of his/her performance in competition. If arousal could be controlled then its effect on an athlete's performance could also be controlled. Pre-competition psychological checklists have been developed that may make it possible to identify arousal patterns for individual athletes. Through the careful use of consistent and reliable self-reporting procedures, certain indicators of pre-competition arousal could be identified for each athlete. It is expected that many athletes will exhibit patterns of arousal that are specific to a grade or category of performance. In other words, the individual athlete experiences different feelings, emotions and expectations prior to different qualities of performance. After having established patterns of reaction for an individual over many performances, it should be possible to predict the level of performance that the individual is about to produce in an ensuing competition based on the arousal symptoms recorded prior to that competition. If a good pre-competition reaction is indicated in an athlete's arousal pattern then a good performance would be more likely to occur than if it was not. With the establish-

ment of individual patterns of arousal it should be possible to employ last minute strategies designed to alter the arousal pattern of the athlete, when it is perceived to be unsuitable for a good performance, in order to make him/her better prepared for the ensuing competition.

The literature reveals some dilemma as to the nature of the relationship between arousal and motor performance. This thesis will attempt to clarify the nature of the arousal-performance relationship and examine the possible interactions of these two concepts with pre-competition estimates of winning.

Cratty (1973) emphasized the need for valid research to further the understanding of the many aspects of athletic performance under stress. Harmon and Johnson (1952) in their summary and conclusions of a report on emotional reactions of college athletes stated:

> Future studies in which measures of pre-game emotional reactions are correlated with evaluations of "quality of performance" in subsequent competition may provide a valuable coaching tool for ascertaining psychological "readiness" to compete. (p. 398)

Pre-event tests of a psychological nature are an important part of the success story of Soviet and Eastern European countries in the field of amateur sports (Vanek and Cratty, 1970). Western countries have not been committed to the extensive use of scientific support services for athletes. Rather, coaches have tended to rely solely on experience, tradition,and intuition in handling the psychological preparation of athletes for competition. In team sports particularly, individualized preparation is sacrificed too often in favor of emotional

"pep" talks in the pre-game setting. For some individuals this may have a debilitating effect on their performance. Conclusive results illustrating the value of individualized psychological support services in team sports in the North American environment are badly needed.

In summary then, this thesis will attempt to discover if individual patterns of pre-competition arousal exist in male collegiate basketball players. It will examine the nature of the relationship between arousal level and performance and whether or not there exists any interaction between these two concepts and the player's pre-competition estimation of the chances of winning. It will attempt to provide information that will lead to a further understanding of the many aspects of athletic performance. Finally, it could provide coaches with a valuable tool for the management of individual athletes in the competitive environment.

Delimitations

This thesis is concerned with the arousal produced by an impending competitive situation and more specifically the resulting pattern of arousal symptoms exhibited by each subject prior to that competition.

The subjects studied comprised the Men's Intercollegiate Varsity Basketball Team at Lakehead University for the 1977-78 season. Over a 34 game competitive schedule lasting from October to early March, data were collected on four dependent variables for each subject for each game. These included pre-competition symptoms of arousal, pre-competition level of excitedness, pre-competition estimation of winning, and a post-competition assessment of performance.

The research tool selected for data collection was a modified

version of Rushall's (1977) Pre-race Psychological Checklist. This modified version became the Pre-competition Psychological Checklist (PCPC) and consisted of

i) a twenty-four item checklist designed to indicate self-perceived arousal symptoms,

ii) a numerical self-appraisal of pre-event excitedness level on a scale ranging from minus ten to plus ten,

iii) a numerical estimation of the probability of winning the game on a scale ranging from zero to ten, and

iv) a performance rating scale with five distinct grades of performance including great, good, normal, poor, and very poor.

Since the sample chosen is a convenient, intact group no attempt will be made to generalize the results of this study. All discussion will be confined to individual observations interpreted as case studies.

Limitations

Many factors will interact to affect the athlete's arousal level prior to the start of the competition. Individuals react differently when placed in identical situations. The problem that arises then is one regarding the measurement of arousal. The measurement tool selected for this study is based on the technique of self-reporting. The reliability and validity of the results will depend, to a large measure, on the degree to which each subject is motivated to respond honestly as well as the amount of self-awareness that each individual possesses. The self-rating of game performances may present problems for the following reasons:

i) Substitute players may not get the chance to perform.

ii) A player perceives that he has played a bad first half but a good second half or vice versa.

iii) A single "good" or "bad" play that has a direct effect on the outcome of the game may weight a player's rating excessively in the wrong direction.

iv) The effect of losing the game may weight a player's rating excessively in the wrong direction.

The degree to which these limitations prevail depends upon the effectiveness of the control factors designed to minimize them.

The PCPC used in this study has no published, empirical validity but it is reported and reputed to be a reliable tool for any sport in assessing pre-competition arousal levels (Rushall, 1975). Also in comparing PCPC to other checklists that have been validated, (Spielberger, Gorusch, and Lushene , 1970; Thayer, 1967; Zuckerman, 1960) it is apparent that the PCPC is high in face validity.

Definitions

Performance. Performance is defined as the self-perceived execution of all of the physical skills, tactics and maneuvers that are required in a competitive basketball game as reported by the individual on the PCPC.

Arousal Symptoms. These are defined as the self-perceived presence of certain feelings, internal emotional behaviours, external emotional behaviours,and performance expectations as reported on the PCPC.

Arousal. Arousal is defined as the self-perceived level of excitedness that an individual experiences when faced with all the interacting variables of an impending basketball game as reported

on the PCPC.

Estimation of Winning. This is equated with confidence level and is defined as the self-perceived probability of winning the impending competition as reported by the individual on the PCPC. This estimation is reported on a continuum ranging from "no chance of winning" through "50-50 chance" to "no chance of losing".

Chapter 2

REVIEW OF LITERATURE

Arousal

The Concept. Korman (1974) discussed the possibility that more than one type of arousal exists. He referred to a general type of arousal that affects behaviour in a consistent manner regardless of the source of arousal or how it is measured. Berlyne (1967), in reviewing the arousal literature, concluded that a concept of general arousal is worth retaining. Malmo (1959) referred to the positive correlation of different physiological measures of arousal as being an argument in favor of the notion of a general arousal factor. Duffy (1957), while recognizing arousal to be a multi-dimensional concept, supported the idea of a general arousal level of the organism as a whole. This general arousal level varies along a continuum that ranges from one extreme of deep sleep to another extreme of great excitement. Lacey (1967) interpreted the low level of correlation among physiological indicators of arousal as evidence supporting the concept of more than one type of arousal.

The individual and arousal. Optimal arousal levels for each task may vary from person to person depending on the individual's trait anxiety, level of experience, degree of extroversion, ability to co-ordinate responses and other variables (Carron, 1971; Genov, 1970; Klavora, 1975; Oxendine, 1970). Arousal level may be related to the task expectation of the individual. The more demanding the individual perceives a task to be, the higher will be his/her arousal level (Cratty, 1973; Genov, 1970).

Superior athletes are able to control their arousal levels better than less experienced athletes (Cratty, 1973; Fenz and Jones, 1972; Genov; 1970). Sullivan (1964) reported that veteran wrestlers experienced low arousal levels the night before the match which peaked immediately prior to the match. He observed that the inexperienced wrestlers had high arousal levels the night before the match which dropped sharply immediately prior to the match. In commenting on the individual's ability to control arousal, Duffy (1957) stated:

> A high degree of activation may, I suggest, lead to impulsive, disorganized behavior or to sensitive, alert, vigorous,and coordinated responses to the environment. (p. 274)

Individuals who are high in trait anxiety will develop higher levels of arousal under stressful conditions than will individuals who are low in trait anxiety (Duffy, 1962; Spence, 1971; Spielberger, 1971). Arousal is contagious. Highly aroused individuals can increase the arousal levels of other individuals who are close to them (Cratty, 1973). This effect can be generated by individual team members, the coach, the spectators,and significant others. The level of arousal for each individual is affected by his/her self-assessment of the adequacy of preparation for the impending competition and hence his/her level of confidence (Genov, 1970).

In summary, arousal has been recognized as a multi-dimensional concept. It must be considered here in terms of a general level for the organism as a whole. The key to a more effective management of this construct is in the understanding that arousal levels are highly individualized. They may be stimulated to different levels of intensity

for different individuals by a variety of stressors acting in a variety of environments. It is important to note that superior and experienced athletes possess the ability to cope with or adapt to high levels of arousal. Arousal level is related to the confidence level of the individual. The total competitive environment (teammates, opponents, and spectators) combines to affect an athlete's level of arousal.

The Measurement of Arousal in the Competitive Environment

The competitive environment is an evaluative one which introduces threats to self-esteem and a fear of failure (Martens, 1977; Vladescu, 1975). As such, this environment has the potential to evoke increased arousal levels within the participants (Klavora, 1975). Precise measurement of these levels would greatly facilitate management of athletic performance (Martens, 1977; Oxendine, 1970).

The highly individualized nature of arousal has made it difficult to measure subtle differences in the arousal level of athletes preparing for competition. Certain researchers have called for the development of a specific test of trait anxiety that will predict the level of arousal that an individual will develop in response to a particular competitive situation (Martens, 1977; Spence, 1971). At present, the general nature of trait anxiety tests has rendered them ineffective in predicting the outcome of motor task performances (Carron, 1975; Kroll, 1970; Martens, 1977; Rushall, 1973).

Physiological measurement of arousal. Physiological measures of arousal present some problems in that the different physiological indicators are rarely found to correlate highly with one another or from individual to individual (Cratty, 1973; Lacey, 1950, 1967). Duffy (1962) presented similar conclusions and suggested several reasons why

these correlations are low. Thayer (1967) concluded that simple self-reports are more representative of arousal than any single physiological measure.

Self-report of arousal. Dermer and Berscheid (1972) reported the successful use of self-report as an indicant of arousal. The tool used in this study was a scale ranging from -10 to indicate extreme boredom or fatigue to +10 to indicate extreme alertness or excitement.

Several self-report checklists were reviewed by Martens (1977). He stated:

> Evidence indicates that a general self-report measure of arousal is a better predictor of theoretically related constructs than physiological variables. (p. 104)

He concluded that a self-report inventory is an extremely sensible approach that has fewer faults than any other available measure.

Arousal patterns. Mandler and Sarason (1952) claimed that anxiety is a learned response to various situations. In other words, an individual displaying anxiety in one environment or situation may not become anxious in a different type of environment. Arousal patterns then, would be meaningful only if they have been established using situation specific measures. Lacey and Lacey (1958) presented a concept of arousal patterns similar to Spielberger's (1971) notion of state-trait anxiety. They claimed that similar patterns of response tend to be reproduced for a variety of stressful situations of differing psychological and physiological demands. Rushall (1977) demonstrated successful results in determining patterns of arousal symptoms using specific competition histories of self-report for elite free-style

wrestlers.

In summary, attempts have been made to measure arousal levels by the use of general trait anxiety tests, physiological indicators, self-report excitedness scales, and self-report checklists. The subjective self-report method has been shown to be a reliable indicator of arousal level. Arousal patterns have been discovered in the pre-competition symptoms of Olympic wrestlers.

Arousal and Performance

General principles. Several principles that deal with arousal-performance relationships have been suggested in the literature. A slightly above average level of arousal is preferable to a normal or subnormal level for the performance of all motor tasks (Genov, 1970; Oxendine, 1970; Sage, 1971). High levels of arousal facilitate the performance of skills involving strength, speed, and endurance (Cratty, 1973; Oxendine, 1970). Over-arousal can debilitate the performance of complex or newly learned skills (Cratty, 1973; Duffy, 1957; Oxendine, 1970). Over-arousal results in a diminished ability to respond to various environmental cues (Easterbrook, 1959; Sage, 1971). Different physical tasks require different levels of arousal for optimal performance (Cratty, 1973; Oxendine, 1970).

Klavora (1975) conducted a study with over 300 high school football and basketball players in the Edmonton, Alberta school system. He administered Spielberger's (1970) trait anxiety test to determine anxiety proneness and used Spielberger's state anxiety test to indicate pre-competition arousal states. Oxendine (1970) postulated that, for the game of football, field goal kicking demands low levels of arousal for optimal performances, playing quarterback requires moderate

levels of arousal, and playing guard requires high levels of arousal for optimal performance. Klavora (1975) reported no significant differences in optimal pre-competition arousal level in football players playing different positions. The study illustrated that a guard can produce an optimal performance at low levels of arousal if he is characteristically low in anxiety proneness. Similarily, a quarterback can perform well at high levels of arousal if he is characteristically high in anxiety proneness. These results indicate that it is not the nature of the task that determines what the optimal level of arousal should be but the nature of the individual that determines the level.

The arousal-performance relationship hypotheses. Two basic hypotheses constantly reappear in the literature that deals with the relationship of arousal and performance.

The drive theory, illustrated by Spence and Spence (1966), postulates that increases in drive (arousal) increase the likelihood that the dominant response will be emitted and when the dominant response is the correct response, arousal and performance have a positive, linear relationship. In other words when a skill has been well-learned, increases in arousal will facilitate performance. Conversely if the skill has not been well-learned, (for example, in the early learning stages) the dominant response will not be the correct response and performance of the skill will be impaired by increases in arousal.

The second hypothesis is based on the Yerkes-Dodson law and is often referred to as the inverted-U hypothesis. This hypothesis, illustrated by Fisher (1976), Korman (1974), and Sage (1971), postulates that a curvilinear relationship exists between arousal level and performance. In other words, there is an optimal level of arousal for

the performance of each task and levels of arousal that are too high or too low may result in impaired performance.

Drive-Theory hypothesis tested. Martens (1971) conducted an extensive review of the anxiety literature to examine the credibility of the drive-theory hypothesis. He used the study of Farber and Spence (1953) as a typical example of 28 studies that he reviewed. In this study 40 high anxious and 40 low anxious college undergraduates performed a stylus maze task with 10 T choice points of varying difficulty. The subjects were assigned to their group using Taylor's Manifest Anxiety Scale (1953). The study showed that the high anxious group, especially in the more difficult situations, performed reliably poorer than the low anxious group. Although 12 additional reviews by Martens supported the findings of Farber and Spence, 15 did not. Twenty-one other studies using MAS plus the introduction of a stressor were reviewed by Martens (1971) and produced equally perplexing results in terms of substantiating the drive-theory hypothesis.

The basic limitation in all of these studies, according to Martens, was the lack of methodological evidence to show that arousal levels were indeed ever changed by the stressors used. Also there is a major limitation in the drive theory hypothesis itself when related to motor tasks. In order to prove that performance = habit X drive (arousal) it becomes necessary to establish whether or not the dominant habit is the correct response or the incorrect response. To date, no one has been able to do this for complex motor tasks.

Rushall (1977) appears to have overcome these limitations by the use of the individual case study approach and the technique of self-reporting. A selected Canadian Olympic wrestler was observed for a

total of 21 matches. Prior to each match the wrestler was asked to mark his self-estimated level of arousal on an excitedness scale ranging from -10 to +10. Following each match he rated his own performance. The results of the observations demonstrated that the relationship between arousal level and performance was positive and linear.

The inverted-U hypothesis tested. Fenz and Jones (1972) carried out a successful replication of the earlier findings of Fenz and Epstein (1967). This field study compared the arousal levels and jump performances of experienced and novice parachutists. Arousal was measured by heart rate and respiration at various stages throughout the entire jumping sequence. The measurements showed consistent patterns within the subjects that were related to experience and performance. An overall comparison between the two groups revealed an adaptive process that was characterized by a high arousal level early in the jump sequence followed by a sharp decrease just prior to the jump itself. This adaptation was used by the experienced parachutists and was accompanied by superior performances. The novice jumpers as a group did not show similar adaptation to arousal and similarly their performances were relatively poorer. Within the novice group it was observed that subjects who did manage to perform relatively good jumps showed an adaptive control of arousal on those occasions that was similar to the experienced jumpers' adaptation. Within the experienced group, poor performances were accompanied by a failure to control the high arousal level prior to the jump. These results provide strong support for the hypothesis that high levels of arousal impair performance.

In another field study on the arousal-performance relationship, Lowe (cited in Martens, 1977) used the hitting performance of Little

League baseball players as the measure of performance and situation criticality as an operational indicator of arousal. Criticalness was determined by the competitiveness of the game (its effect on league standings) and by situations within the game itself (closeness of score, men on base, lateness of the inning). Heart rate and respiration rates as well as observational records were used to substantiate the criticalness factor as a valid measure of arousal. Statistics were recorded for an entire season. Lowe concluded that an inverted-U relationship existed when arousal and task difficulty were varied simultaneously. He left some doubt as to whether or not this relationship would hold independently of the task difficulty variable.

Lowe's study was replicated by two further field studies using basketball free throw shooting and situation criticality as indicators of performance and arousal level respectively. These studies had the advantage of maintaining a constant difficulty factor. In the first of these studies Giambrone (cited in Martens, 1977) using Big Ten basketball teams for the 1969 season was unable to discover any relationship between arousal and performances. In the second study, Ahart (cited in Fisher, 1976) was able to detect an inverted-U relationship between arousal and performance for group scores but intra-group scores revealed conflicting results. Some subjects shot better in high critical situations while others shot better in low critical situations.

Summary

The literature reveals some conflicting evidence in terms of the nature of the arousal-performance relationship. Is it a positive linear function or a curvilinear one or could it be some combination of the two as postulated by Singer (1977)? Support for the drive

theory hypothesis is provided by Farber and Spence (1953), Klavora (1975), and Rushall (1977). Support for the inverted-U hypothesis is provided by Fenz and Jones (1972) and Lowe (cited in Martens,1977). Self-reports have been reported to be a valid technique in the measurement of arousal levels (Thayer, 1967).

Arousal patterns have been discovered in the reporting of pre-match arousal symptoms by Olympic wrestlers (Rushall, 1977). Arousal level can be reported in terms of a general activation concept for the organism as a whole (Duffy, 1957). Arousal level is highly individualized (Cratty, 1973) and is situation specific (Mandler and Sarason, 1952).

Chapter 3

METHODOLOGY

Research Design

The research design selected for this thesis was individual case study.

The Subjects

One subject was an 'A' carded Canadian athlete who competed in the World Student Games during the summer of 1977 and is presently a member of the Canadian National Basketball Team. Another of the subjects gained international experience as a member of the Australian University All-star Team which toured Canada in 1976 and the United States in 1972. A third subject received honorable mention as an All-Canadian forward during the 1976-77 season. The remainder of the team comprised two fifth year players, two third year players, a second year player, two freshmen from the provincial high school championship basketball team in Manitoba, and a third freshman.

The Environment

Observations were conducted during the competitive season. The team competed in the Great Plains Athletic Conference (GPAC) which is a division of the Canadian Intercollegiate Athletic Union (CIAU). A total of 37 games were included in the pre-season, regular season and post-season competitive schedules. These schedules included 16 conference matches, three national tournaments, five international matches against intercollegiate teams from Wisconsin and Minnesota, two exhibition games against another Canadian university, two exhibition games against Canadian senior men's teams, and two playoff matches to

determine the GPAC entry into the CIAU National Championship. The team finished with an overall record of 22 wins and 15 losses.

Data Collection

The pre-game reporting process occurred within 10 minutes of the starting time for the game and usually required from one to two minutes for completion. The post-game reporting occurred within 30 minutes of the completion of the game and usually required less than one minute for recording.

Controls

Several control factors were implemented to ensure the validity and reliability of the data collected. These are discussed below.

Subject preparation. The subjects were told that the PCPC was a valid service designed to help their game preparation. They also were informed that the PCPC was not a compulsory service. Individual interviews were conducted by the writer to impress upon the subjects the necessity of honest and conscientious self-reporting. All subjects agreed to participate freely and honestly.

Near the end of the pre-season training program the team was assembled for the purpose of explaining and reviewing all of the procedures to be followed in using the PCPC. Definitions for all PCPC items were carefully read and reviewed. Two pilot tests of PCPC were conducted with the subjects prior to the start of actual data collection. The results of these tests were reviewed and discussed with the subjects to eliminate confusion and to ensure proper procedures in future PCPC administration.

Data collection control. The pre-competition checklist was designed so that the time taken to administer it, is kept to a minimum.

Once the data collection process began, it was continued prior to and following each competition. Thus, the players became familiar with a regular but fairly brief period of self-analysis and awareness prior to each game.

The timing factor for data collection for each game was standardized. The pre-competition section of the PCPC was completed within 10 minutes of the start of the actual competition and following a 20 minute pre-game warm-up on the playing surface. This procedure allowed the players to experience such variables as the audience effect, the presence of significant others, the enthusiasm and arousal of team-mates, the opponents, the coach's pre-game instructions, and the players' own game expectations. These factors may have influenced the self-reports on the PCPC. By keeping the timing factor constant and as close to game time as possible, many of the extraneous contributions to the subjects' arousal levels and levels of confidence were controlled.

During the self-reporting of pre-game symptoms, arousal levels, and confidence levels, the players were isolated from one another in the dressing room. They were asked to remain silent and maintain a serious, quiet atmosphere until each subject had completed the PCPC. This procedure facilitated concentration and self-analysis.

Post-competition analysis of performance was delayed for approximately 15 minutes to allow for the subjects a cooling-off and readjustment period. Hopefully, this time lapse allowed the players time to place their entire game performance in perspective and tended to reduce the effect of single isolated plays on their game rating. Post-competition ratings were always completed privately to eliminate inhibitions and group opinions.

Reliability checks. The reliabilities of the pre-competition checklist items and the level of excitedness scale have been discussed in the Review of Literature. Three reliability checks on the estimation of winning scale were carried out at various times during the competitive season. The subjects were asked to complete the estimation of winning scale 30 minutes prior to the competition and again 10 minutes prior to the competition. These two independent ratings showed product-moment correlations of $r = .98$ on one occasion, $r = .81$ on another comparison, and $r = .95$ on a third occasion.

Intermittent reviews of definitions for all PCPC items were conducted from time to time in order to assist the subjects in maintaining a reliable self-analysis for each game.

As a further method of ensuring the reliability of PCPC preparation and completion, all players including substitutes were asked to complete the PCPC for all games. Subjects not entering the actual competition for a particular game were asked to rate their performance in terms of team support from the bench. For these cases, the data were not included in the analysis of results.

Data Analysis

Psychological checklist summary. The arousal symptoms that each subject reported for each game were summarized under the various performance categories of the PCPC. Data from the 23 PCPC diagnostics were used to prepare frequency tables for each performance category for each subject. These summmary tables were examined to determine the occurrence or non-occurrence of specific response patterns of arousal for each category of performance. A pattern was considered to be reliable if three arbitrarily determined conditions were satisfied.

First, the frequency of occurrence within a specific performance category for any diagnostic was set at 64 percent or better. This value was selected since it is equivalent to the amount of common variance between two distributions with a correlation of .80. The figure .80 was considered to be the lower limit for a diagnostic to have significance as a pattern indicator. Second, the frequency of occurrence for the diagnostic, taken as a percentage of the total number of occurrences across all performance categories had to equal or exceed 50 percent in order to be considered a performance discriminator. Third, a diagnostic required a minimum of three performance category checks in order to have reliability as a pattern indicator or performance discriminator. This summary provided a clear method of determining whether or not the subject exhibited a reliable pattern of arousal symptoms specific to each performance grade or category.

Arousal estimate and performance relationship. Summary graphs were constructed for each subject with performance along the horizontal axis and arousal estimates along the vertical axis. Points were plotted for each game using the excitedness scale and the subjective game rating of the PCPC. The mean arousal level for each performance category was calculated from this summary. For the analysis of all relationships, a minimum of two data points were required to calculate factor averages. An arbitrarily defined appreciable change, from one factor level to another, was set at one whole unit on either the "excitedness scale" or the "estimation of winning scale". If these minimum levels were not manifest in the data, for any of the dependent variable relationships, then the factor variation involved was not considered to be of significance. These graphs made it possible

to analyze the arousal-performance relationship for each subject.

Estimation of winning (level of confidence) and arousal level relationship. Scattergrams for each subject were constructed with the level of confidence along the vertical axis and arousal level along the horizontal axis. Points were plotted for each game using the estimation of winning and excitedness scales of the PCPC. The mean arousal level was recorded and significant changes were noted for each level of confidence. These graphs were used to examine the relationship of arousal level and estimation of winning.

Estimation of winning (level of confidence) and performance relationship. Summary graphs were constructed for each subject with performance along the horizontal axis and level of confidence along the vertical axis. Points were plotted for each game using the estimation of winning scale and the subjective performance rating of the PCPC. The mean level of confidence was calculated and significant changes were noted for each performance category. These graphs made it possible to examine the estimation of winning to performance relationship.

Arousal, performance, and confidence interaction. Graphs were constructed for each subject with the mean arousal level along the vertical axis and mean level of confidence along the horizontal axis. Points were plotted using the mean scores for arousal level and estimation of winning that were obtained for each performance category from earlier graphs. These graphs were used to examine any patterns that occurred in the interaction of arousal level, performance, and level of confidence.

Objective performance ratings. A reliability check on each

subject's performance rating was conducted using a game rating scale based on individual game statistics. Not all statistical items were available for every game; therefore, three different rating scales were used. The "A" rating scale contained eleven items and was obtained by assigning a numerical value to each occurrence of the various activities listed below. The values were given plus or minus characteristics depending upon the contribution of the activity to the success of the team. The A scale items and their numerical values are: field goals made +2, field goals missed -1, free throws made +1, free throws missed -1, assists +2, rebounds +1, personal fouls -1, turn overs -2, steals or recoveries +2, blocked shots +1, and draw the charging foul +2. Definitions for each of the "A" scale items are included in the appendix to this thesis. The "B" scale rating was made up of only the first eight items of the "A" scale. The "C" scale rating was identical to the "B" rating scale but did not include assists.

All games were categorized according to the available statistics and the scales by which they were rated. The scales were not designed to be used as an absolute measure that allowed one player's game performance to be compared with that of another player. Each player was considered separately and the nominal category rating for each game was derived relative to that player's total performance for all games played.

In each of the three categories, numerical ratings for each subject for each game were calculated and averaged. The numerical game ratings were converted to nominal performance categories corresponding to those of the PCPC by the following method. The mean numerical rating for each category was assigned the verbal classification

"Normal". The high score for each category was assigned the verbal classification "Great". The low score for each category was assigned the verbal classification "Very Poor". A classification of "Good" was obtained by averaging the mean and the high rating for each of the game categories A, B, and C. A classification of "Poor" was obtained by averaging the mean and the low rating for each of the game categories.

The individual game ratings for each subject were assigned nominal ratings based on their numerical proximity to the performance classification derived above. In the event that a numerical rating was equidistant from two classifications the highest performance classification was used. For future reference these derived performance categories will be referred to as objective reports (OR) and distinguished from the PCPC subjective reports (SR) of game performances.

Subjective reports related to objective reports. For the purpose of determining the degree of similarity between the subjective reports and the derived objective ratings of performance, the categories were assigned the following values: "great" 5, "good" 4, "normal" 3, "poor" 2, and "very poor" 1. Rank order correlations were then calculated for each subject based on a game by game pairing of the two performance values. Scattergrams were constructed for each subject with objective report (OR) categories along the vertical axis and subjective reports (SR) along the horizontal axis. Points were plotted using the data gathered from game statistics and the PCPC reports. These scattergrams made it possible to examine the overall degree of similarity of the two reports. The diagonal intersections from bottom left to top right in the scattergram represent the exact agreements between the OR and

the SR. Points to the left of this diagonal will represent SR's that were underrated in terms of the objective reports, while points to the right of the diagonal will represent SR's that were overrated. In comparing the two rating methods for all games, the total number of agreements was divided by the total number of disagreements plus the total number of agreements. This figure was multiplied by 100 to give the percentage agreement of the two methods.

Re-examination of the data. The PCPCs for each player for each game were assigned an objective nominal rating based on the various scales derived from game statistics. All of the above summaries, relationships, and interactions were re-examined using the objective rating as the indicator of game performance.

Summary. A checklist summary was compiled for each of the subjects in an attempt to discover reliable patterns of arousal symptoms specific to a grade or category of performance. Graphs were constructed for each subject to examine the nature of the arousal-performance relationship, the relationship between estimation of winning and arousal, and the relationship between estimation of of winning and performance. Graphs were constructed for each subject in an attempt to discover patterns in the interaction of arousal, performance, and estimation of winning. The subjective ratings of the PCPC were compared to objective game ratings and rank order correlations and percentage agreements for each subject were computed. Lastly, the data for each subject was re-examined using the objective rating of game performance in place of the subjective PCPC rating.

Chapter 4

RESULTS

Psychological Checklist Summaries

PCPC summary tables for all subjects are included in Appendix D. Arousal patterns were discovered in five of the eleven case studies. Tables 1 and 2 show a comparison of the arousal patterns exhibited by each subject with his college experience, playing status, and performance rating. Of the seven experienced players, four of them exhibited arousal patterns specific to a performance category. These four players were all members of the starting lineup. Subjects 1 and 11 had decidedly good performance ratings and exhibited typical patterns of arousal for these performances. Subjects 8 and 9 performed relatively poorly throughout the season and exhibited typical patterns for the "normal" performance category. The remaining three experienced players who failed to exhibit specific arousal patterns, were all substitutes with limited amounts of actual playing time.

In the inexperienced group, subject 2, who was a substitute player, had normal performance ratings and exhibited a typical arousal pattern for these performances. Subject 10, who was a starter, had poor performance ratings and exhibited no typical arousal patterns. Subject 3, a substitute, had poor performance ratings and exhibited no arousal patterns. Subject 4, a substitute for most of the year, became a starter late in the season. He had a very good performance rating but failed to exhibit any typical arousal patterns.

The above results suggest a possible relationship between experience, competence, and the development of patterns of arousal that are indicative

of a grade or category of performance.

Table 1

A Comparison of Exhibited Patterns of Arousal with Playing Status and Performance among the Experienced Players

Subject	College experience in years	Arousal patterns exhibited for a performance grade	Subject's playing status
1	5	good	starter
11	5	good	starter
8	5	normal	starter
9	4	normal	starter
5	5	none	substitute
6	3	none	substitute
7	3	none	substitute

Table 2

A Comparison of Exhibited Patterns of Arousal with Playing Status and Performance among the Inexperienced Players

Subject	College experience in years	Arousal patterns exhibited for a performance grade	Subject's playing status
2	1	normal	substitute
10	2	none	starter
3	1	none	substitute
4	1	none	substitute

Arousal Estimate and Performance Relationship

Table 3 presents a summary of mean arousal levels for each performance grade for all subjects. The mean arousal levels that represent a significant change with performance are indicated. An examination of Table 3 reveals no consistent trend between arousal level and performance grades. Arousal-performance graphs for all subjects are included in Appendix E.

Table 3

A Summary of Mean Arousal Levels for Each Performance Category Indicating the Appreciable Changes in Arousal from Category to Category

Subject	Performance Categories				
	very poor	poor	normal	good	great
1		4.0	3.6	3.8	
2		4.2	2.7*	2.1	
3	.5	4.3**	2.0*	.5*	
4		6.4	6.0	6.1	
5		3.0	2.8	2.4	
6	0	.3	2.6**	4.3**	-.5*
7	.5	3.0**	1.4*	1.5	
8		2.9	4.2**	3.0*	3.5
9	-1.0	2.0**	3.0**	1.3*	
10		1.8	2.4	3.2	
11	1.5	2.8**	2.3	2.6	

** appreciable increase from the preceding category
* appreciable decrease from the preceding category

Estimation of Winning and Arousal Level Relationship

Table 4 presents a summary of mean arousal levels for each level of confidence for all subjects. The mean arousal levels that represent a significant change with confidence level are indicated. An examination of Table 4 reveals that the changes in arousal are not of sufficient magnitude to indicate, with any degree of reliability, the nature of the relationship between estimation of winning and arousal level. Arousal-estimation of winning graphs for all subjects are included in Appendix E.

Table 4

A Summary of Mean Arousal Levels for Each Level of Confidence from 4 to 10 Indicating the Appreciable Changes in Arousal with Increases in Confidence

Subject	Confidence Level						
	4	5	6	7	8	9	10
1		3.0	3.3	3.5	3.6	4.0	5.2**
2			4.0	3.3	4.3**	3.0*	2.4
3		1.0				4.5**	4.0
4				5.0	6.2**	6.5	6.6
5					3.0	2.7	2.6
6					3.7	2.3*	1.4
7						3.3	1.0*
8				3.8	3.8	3.3	3.0
9			2.5	2.5	2.2	2.1	1.5
10			2.0	2.0	2.1	2.8	
11							2.4

** appreciable increase from the preceding confidence level
* appreciable decrease from the preceding confidence level

Estimation of Winning and Performance Relationship

An examination of Table 5, which presents a summary of mean confidence levels for each performance grade for all subjects, reveals very few significant changes and no consistent relationship between confidence level and performance from grade to grade. Performance-estimation of winning graphs for all subjects are included in Appendix E.

Table 5

A Summary of Mean Estimations of Winning for Each Performance Category Indicating the Appreciable Changes in Confidence from Category to Category

Subject	Performance Categories				
	very poor	poor	normal	good	great
1		8.0	8.3	6.8*	
2		8.8	9.0	9.0	
3	7.5	8.3	8.2	10.0**	
4		9.5	9.2	9.3	
5		9.1	9.7	9.4	
6	9.5	9.3	9.3	9.5	8.5*
7	10.0	9.3	9.3	10.0	
8		8.6	8.1	8.0	9.0**
9	9.5	7.9*	8.3	8.2	
10		7.3	6.8	7.1	
11	10.0	10.0	10.0	10.0	

** appreciable increase from preceding category

* appreciable decrease from preceding category

Arousal, Performance, and Confidence Interaction

Figure 1 illustrates a typical example of the results obtained for all subjects. Similar graphs for each subject are included in Appendix E. In all cases it was not possible to detect any consistent or significant relationships between arousal, performance, and confidence.

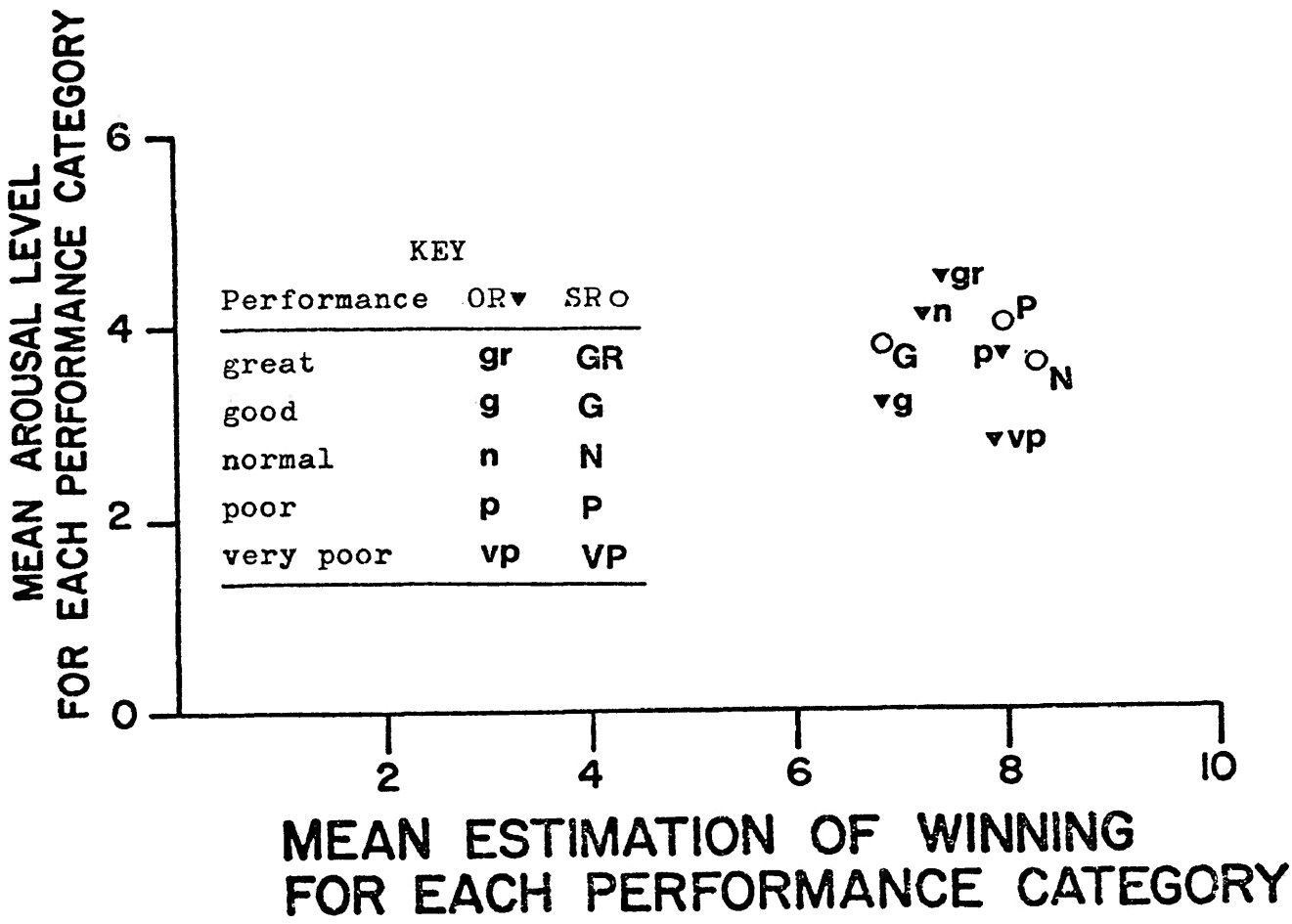

Figure 1. The interaction of arousal, performance, and confidence taken from the data of subject 1. For a relationship to be evidenced the data points on such a graph should be ordered by performance quality. An order is not exhibited here.

Subjective Reports Related to Objective Reports

The game statistics summary for subject 9 is illustrated in Figure 2 and is typical of those compiled for each subject (see Appendix C). These statistics provided the basis for the development of objective ratings of performance for each game.

INDIVIDUAL DATA SUMMARY SHEET

9 SUBJECT	RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
	FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	C1
A MANITOBA (H) #1	16	-9			4	4	-2			2		15	Gr	G	3	6
A MANITOBA (H) #2	4	-5		-1		5		-2				1	P	G	-1	8
B NORTHLAND (A) #1	4	-5	3	-1	8	2	-5	-8				-2	N	G	0	8
B NORTHLAND (A) #2	4	-7	2			1						0	N	VP	-2	9
B LAURIER (A)	4	-5	2		4	3	-1	-4				3	G	P	2	8
B DALHOUSIE (A)	4	-5			4	5	-1	-4				3	G	P	1	10
B INT. FALLS (H)	14	-5	1	-2	2	4		-2				12	Gr	G	-1	9
B BRANDON (H) #1	6	-8			2		-4	-2				-6	VP	N	3	8
B BRANDON (H) #2	4	-4	2			4	-2	-12				-8	VP	N	2	9
A NICOLLETT (H)	8	-4				2	-2	-2				6	G	N	2	7.5
A WINDSOR (H)	4	-3	4	-1	4	2	-2	-6				4	N	N	2	7
A REGINA (H) #1	2	-3			4	1	-1	-2	2			3	N	N	3	9.5
A REGINA (H) #2		-1			4		-1	-2	2			2	P	N	2	10
A WINNIPEG (H)#1	4	-2			2	4	-3	-2				3	N	N	6	8.5
A WINNIPEG (H) #2	2	-2			2	3	-1	-2				2	P	N	4	9
C ALBERTA (A) KLO	16	-1	4	-1		1	-4	-4				11	Gr	G	3	9
C LAURENTIAN (A) KLO	8	-6	2			6	-1	-6				3	G	G	2	7.5
C YORK (A) KLO	2	-1	2				-4	-3				-4	P	P	1	8
C ALBERTA (A) KLO	8	-4				2	-2	-12				-8	VP	N	2	10
B ALBERTA (A) DIN	4	-4			6	4	-3	-6				1	N	VP	1	10
B VICTORIA (A) DIN		-4			12	2	-6					4	G	N	1	5
B GUELPH (A) DIN	2	-8		-1	8	3	-1	-6				-3	P	P	2	8.5
C REGINA (A) #1	8	-5	1	-1		5	-2	-4				2	N	N	4	8.5
C REGINA (A) #2	4	-3				6	-3					4	G	N	2	9.5
C WINNIPEG (A) #1	2	-2				2	-2					0	N	N	4	8.5
C WINNIPEG (A) #2	4	-1					-2	-4				-3	P	N	1	8.5
C MANITOBA (A) #1	2	-2						-6				-6	VP	P	3	7
C MANITOBA (A) #2												0	N	N	2	7
C BRANDON (A) #1	2					1	-1					2	N	G	3	9
C BRANDON (A) #2	8	-4	3	-1		3		-4				5	G	G	1	9
C MANITOBA (A) GPAC	6	-2				1		-4				1	N	N	6	9
A MANITOBA (A) GPAC												0	VP	N	5	7
C HAMLINE	6	-1				1		-2				4	G	P	3	6
C CONCORDIA	4	-3				2	-1	-4				-2	N	P	2	7

Figure 2. The individual data summary sheet for subject 9.

Table 6 illustrates the numerical standards that were used in converting objective game ratings of the PCPC. This conversion table is typical of the ones used for all subjects. All of these tables are included in Appendix F.

Table 6

The Numerical Conversions for Game Statistics Totals to Nominal Performance Ratings (Objective Reports) for Subject 9

Subject: 9

Performance category	Rating Scale A	B	C
great	15	12	9
good	9	6	5
normal	3	0	0
poor	2	-4	-4
very poor	0	-7	-7

Rank order correlations between the two methods of rating performance are presented in Table 7. The subjective reports and objective ratings for six of the subjects showed significant correlations at the .01 level of confidence. The reports and ratings of two other subjects showed significant correlations at the .05 level of confidence. The reports and ratings of the remaining subjects showed no significant correlation between performance reports and objective game rating.

Table 7

Rank Order Correlations between Subjective Reports and Objective Reports for All Subjects

Subject	Sum of d^2	N	df	r'	t
1	1862.5	32	30	.66	4.79***
2	4455.3	32	30	.18	1.02
3	235.5	15	13	.57	2.50**
4	2386.8	33	31	.60	4.18***
5	4006.5	34	32	.39	2.39**
6	1387	28	26	.62	4.03***
7	2582	29	27	.36	2.01
8	2505.5	31	29	.49	3.03***
9	4335.5	34	32	.32	1.98
10	3109	34	32	.52	3.46***
11	3481	34	32	.47	3.02***

*** significant for p = .01

** significant for p = .05

Table 8 was constructed from the scattergrams included in Appendix F. This table summarizes the characteristics of the subjective reporting of all subjects and illustrates the reliability of their self-reports in terms of the nominal objective game ratings.

Table 8

A Comparison of the Characteristics of the Subjective Reporting of All Subjects

Subject	Subjective Reporting			
	Underrated	Agreement	Overrated	% agreement
1	9	12	11	40.6
2	9	11	12	34.4
3	7	5	3	33.3
4	9	11	13	33.3
5	7	13	14	38.2
6	9	13	6	46.4
7	10	8	11	27.6
8	16	7	8	22.6
9	11	11	12	32.4
10	18	5	11	14.7
11	7	17	10	47.1

Re-examination of the Data

The use of objective game ratings for data analysis did not provide any reliable replication of the arousal patterns exhibited by the experienced players in their subjective reports of performance. Appendix D contains a review of the checklist data using the objective rating method for all subjects. Tables 9 and 10 summarize these results and compare them to those obtained for the subjective reports of performance. Subjective performance ratings are related to arousal patterns in five athletes whereas objective performance ratings relate in only two athletes.

Table 9

A Comparison of Arousal Patterns Specific to Performance Grades Exhibited by the Experienced Players Using the Objective and Subjective Ratings of Performance

Subject	Arousal patterns exhibited for a performance grade	
	objective	subjective
1	normal and very poor	good
11	none	good
8	none	normal
9	none	normal
5	none	none
6	none	none
7	none	none

Table 10

A Comparison of Arousal Patterns Specific to Performance Grades Exhibited by the Inexperienced Players Using the Objective and Subjective Ratings of Performance

Subject	Arousal patterns exhibited for a performance grade	
	objective	subjective
2	normal	normal
10	none	none
3	none	none
4	none	none

Table 11 presents a summary of mean arousal levels for each performance category of the objective rating method for all subjects. The mean arousal levels that represent a significant change with performance are indicated. An examination of Table 11 reveals no consistent relationship between arousal level and objective ratings of performance.

Table 12 presents a summary of mean confidence levels for each performance category of the objective rating method for all subjects. An examination of Table 12 reveals very few significant changes and no consistent relationships between confidence level and performance from grade to grade.

An examination of the interaction of arousal, performance and confidence, using the objective rating data, provided no clear patterns or relationships.

Table 11

Mean Arousal Levels for Each Performance Category of the Objective Rating Method for All Subjects Indicating the Appreciable Changes in Arousal with Performance

Subject	Performance Categories				
	very poor	poor	normal	good	great
1	2.8	3.7	4.1	3.3	4.5**
2	4.2	3.7	2.2*	2.5	1.7
3	5.3		1.2*	1.7	3.3**
4	5.7	5.0	6.3**	6.3	7.2
5	3.3	2.9	2.6	4.0**	1.0*
6	1.0	1.9	2.7	1.7*	2.2
7	2.3	1.0*	1.3	2.1	.8*
8	4.3	4.8	2.2*	3.4**	3.4
9	3.0	1.5*	2.6**	1.8	1.7
10	2.3	2.3	1.8	2.3	2.4
11	2.8	2.7	2.3	2.0	2.8

** appreciable increase from the preceding category
* appreciable decrease from the preceding category

Table 12

Mean Confidence Levels for Each Performance Category of the Objective Rating Method for All Subjects Indicating the Appreciable Changes in Confidence with Performance

Subject	Performance Categories				
	very poor	poor	normal	good	great
1	7.9	8.0	7.2	6.8	7.4
2	9.1	8.2	8.9	9.3	10.0
3	9.3		7.2*	8.3**	10.0**
4	9.8	8.9	9.4	9.4	9.2
5	9.7	9.4	9.3	9.8	9.8
6	8.8	9.2	10.0	9.5	8.7
7	9.7	9.9	9.5	9.5	10.0
8	9.0	8.4	8.5	7.8	8.5
9	8.2	8.7	8.4	7.8	8.0
10	7.2	7.0	7.5	6.8	7.0
11	10.0	10.0	10.0	10.0	10.0

** appreciable increase from the preceding category
* appreciable decrease from the preceding category

Chapter 5

DISCUSSION

Psychological Checklist Summaries

The PCPC summary tables for subject 11 are presented in Figure 3. An analysis of the data reveals a specific pattern of arousal for this subject's good performance.

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 11 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	0	17	11	4	2
1. Can't be bothered.					
2. Drowsy, sleepy.			1		
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.		(94.1) 16	(100) 11	(100) 4	1
7. Aggressive feelings.					
8. Cried.					
9. Shaking, trembling.		(23.5) 4	(27.2) 3	1	
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.		1	1	2	
15. Frequent bowel movements.		(23.5) 4	(36.3) 4	2	1
16. Nervous.		(88.2) 15	(90.9) 10	(100) 4	1
17. Butterflies.			1		
18. Lack of confidence.			1		
19. Did not feel well.					
20. Thinks will not perform well.			1		
21. Very confident.		(94.1) 16	(81.8) 9	(100) 4	2
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.					

Figure 3. Frequency tables for the percentage occurrence of arousal diagnostics within each performance category derived from the PCPC summaries of subject 11.

The diagnostics which stand out as the pattern indicators are "impatient", "nervous", and "very confident". For the 17 good performances that were reported by this subject, "impatient" and "very confident" appeared 16 times (94.1%) and "nervous" appeared 15 times (88.2%). All three of the pattern indicators were also performance discriminators. "Impatient" and "very confident" were reported by the subject 31 times. Out of this total, 16 of the reports were checked for good performances. Both of these diagnostics have across-category percentages of 51.6 for the "good" performances. "Nervous" was reported 50 percent of the time under the category of good performance.

The pattern for subject 1 is very similar to that of subject 11. Although "nervous" was clearly a discriminator for subject 1's good performances (87.5%), it appeared for only 46.6 percent of the total number of good performances and therefore cannot be included as a pattern indicator. "Impatient" and "very confident" both stood out as pattern indicators and performance discriminators for subject 1.

Subjects 1 and 11 were the most experienced, in terms of actual CIAU playing time, as well as the best two players on the team. Both received "player of the month" awards on more than one occasion and were the two leading candidates for the team's most valuable player award. Both players were GPAC all-stars and one was selected to the All-Canadian team for the 1977-78 season.

Consistent patterns of arousal, reported prior to a specific grade of performance on several separate occasions, can be considered to be strong evidence that some form of arousal control is occurring within the subject for these performances. Comparisons drawn between the

experienced and inexperienced players in Tables 1 and 2 indicate that three factors are involved in determining a player's ability to exhibit patterns of arousal that are performance specific. These factors are experience, competence, and playing status. The better players can control arousal more effectively than the less competent ones and as a result, exhibit arousal patterns at higher levels of performance. The possibility exists that subjects 8 and 9 were not able to control their pre-game arousal as effectively as subjects 1 and 2; consequently, their performances were at a lower level. In the case of the substitute players, their failure to exhibit arousal patterns could be due to their limited amounts of playing experience and their limited status. A substitute entering the game may become highly aroused if the situation is critical. On the other hand, his arousal level may be very low if the situation is not critical. In either case his performance is likely to be impaired unless some form of arousal control is achieved to bring it to the optimal level. Most of the substitute players exhibited no control of arousal and as a result, their performances suffered. The inexperienced substitute, subject 2, who did manage to exhibit a pattern for his normal performances, showed an adaptive control of arousal similar to that of the experienced starters and had average performance ratings.

The above interpretations are consistent with the results obtained by Fenz and Jones (1972). Two of the substitutes had good performance ratings and yet exhibited no obvious evidence of arousal level control. This apparent lack of effective control of arousal level could be due to the fact that their experience level was not great enough to allow for a complete self-awareness of their adaptation characteristics to

changing arousal levels. These subjects were managing to control their arousal level without being aware of it.

Arousal Estimate and Performance Relationship

The arousal-performance graph for subject 2 is presented in Figure 4 as a typical example of the results obtained for all subjects. There were insufficient data points for the categories "very poor" and "great"; therefore, it was not possible to arrive at a mean arousal level for these categories. When the available mean arousal levels were plotted for each performance grade, the curve appeared to be a linear one representing a decrease in arousal level as performance improved. Although the direction of change in arousal is consistent, the magnitude of the change is not significant for all performances; consequently, the findings cannot be considered conclusive. It is not clear whether these findings are the result of the excitedness scale not being an appropriate pre-game tool for lengthy team competitions, where emotions can change abruptly, or the athletes themselves not possessing a degree of self-awareness which would allow them to make significant distinctions between their arousal level symptoms prior to different grades of performance. The lack of consistent and significant data for all of the subjects supported neither of the two major hypotheses concerning the arousal-performance relationship.

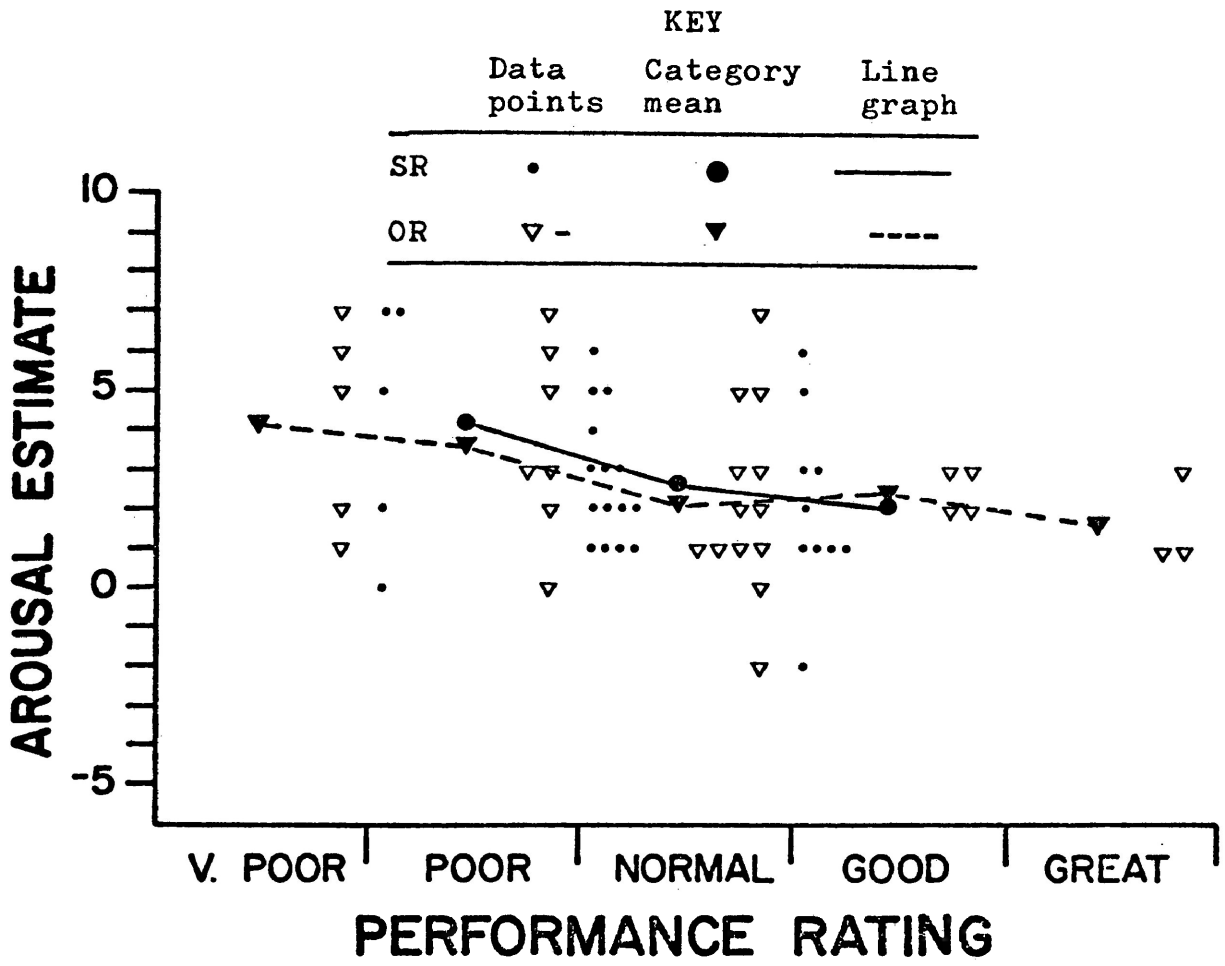

Figure 4. The relationship between arousal level and performance derived from the PCPC reports of subject 2.

Estimation of Winning and Arousal Level Relationship

The arousal-estimation of winning graph for subject 4 is presented in Figure 5 as a typical example of the results obtained for all subjects. When the mean arousal levels were plotted for each level of confidence, the curve appeared to be quasi-linear with a positive slope, indicating an increase in arousal level with increasing confidence levels. Of these increases, only one proved to be a significant change. The lack of consistent and obvious results for all subjects suggested no relationship between arousal and estimation of winning.

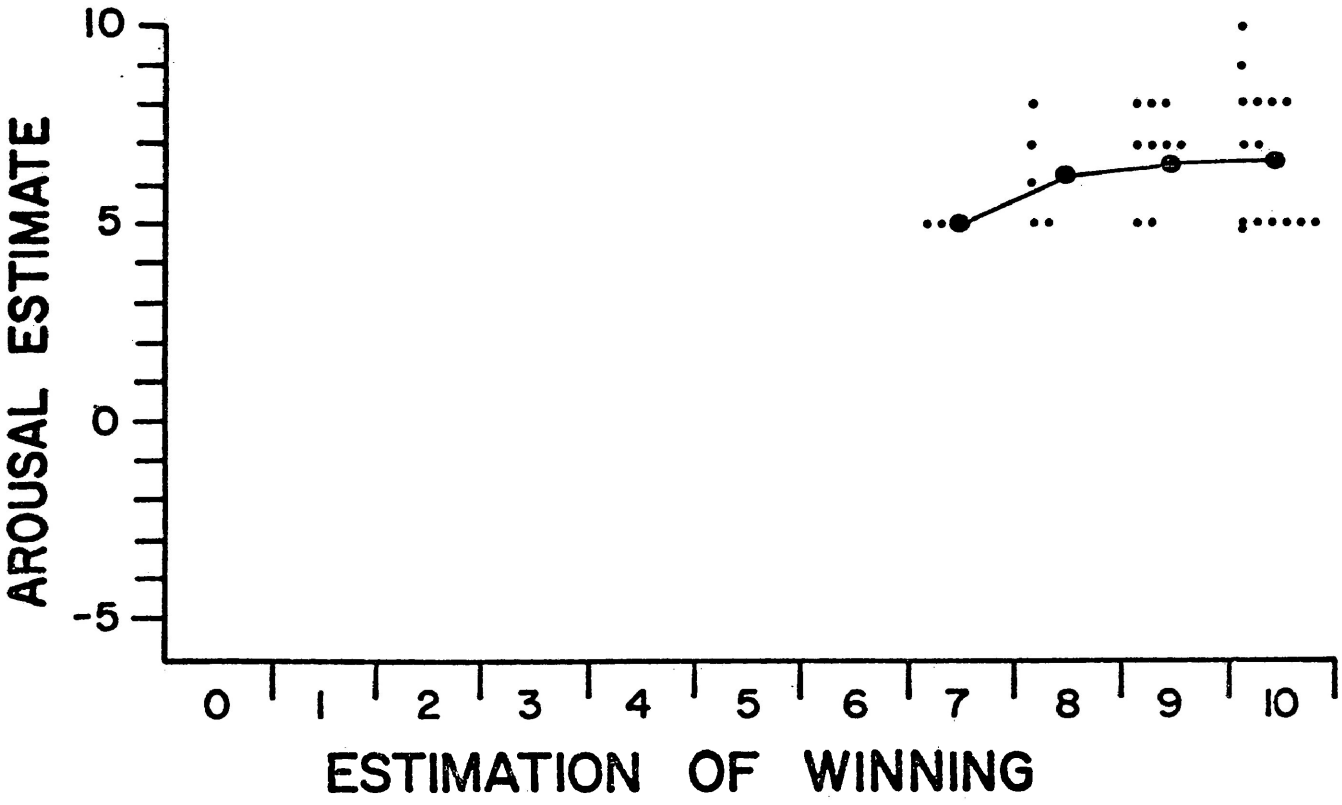

Figure 5. The relationship between estimation of winning and arousal derived from the PCPC reports of subject 4.

Estimation of Winning and Performance Relationship

Figure 6 illustrates the relationship between estimation of winning and performance for subject 8. When the mean confidence levels were plotted for each grade of performance, the resulting curves showed no consistent relationships. These results were typical of those obtained for all subjects.

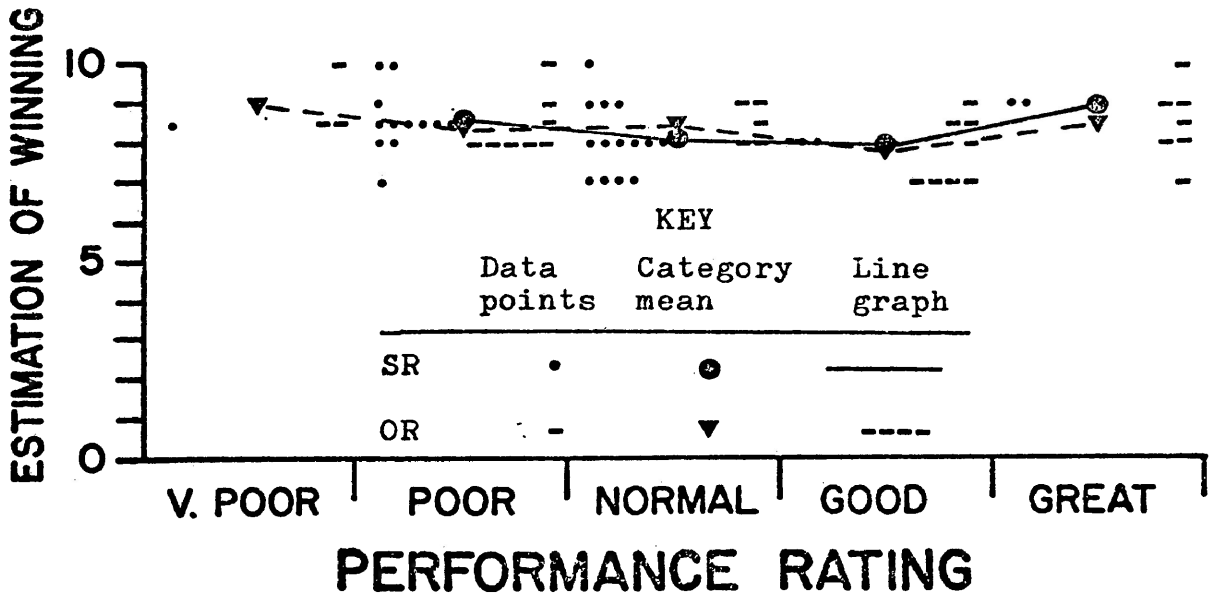

Figure 6. The relationship between the estimation of winning and performance derived from the PCPC reports of subject 8.

Subjective Reports Related to Objective Reports

The rank order correlations for the two methods of rating performance illustrated that the objective ratings and the subjective reports were measuring similar constructs in most of the subjects. In terms of exact ratings of performance however, the two methods did not show very high percentage agreements. Since the results of this study are highly sensitive to precise grades of performance,

and the percentage agreements of the two rating methods were very low, the results obtained using subjective reports of performance could not be replicated by applying the objective performance ratings.

The objective ratings proved to be useful in establishing the reliability of the self-rating of performance by eight of the eleven players. Also, a comparison of the results of all graphed relationships shows a high degree of similarity between the objective rating and the subjective reporting of performance.

Further Considerations

The use of self-reporting appeared to be a manageable and reliable technique. None of the subjects experienced difficulty in reporting pre-game excitedness levels. In most cases the subjective reports of performance showed significant correlation with objectively assessed performance ratings. The more experienced and more competent players exhibited pre-game arousal symptoms that were specific to their good performances while the substitutes and low level players did not. These findings are consistent with the present trends of current literature. No relationship was observed between the athlete's task expectation (estimation of winning) and his arousal level. Most of the subjects reported above normal levels of arousal for their good performances. No significant relationship was discovered between pre-game arousal level and performance.

The degree to which the above considerations can be generalized is limited to several factors. The number of subjects was small and the sample was an intact group. Not all of the subjects could be considered to be high level athletes. The PCPC does not appear to be an appropriate tool for detecting an arousal-performance relationship

in the competitive basketball setting. The constantly changing levels of arousal that a player experiences during a lengthy basketball game combine to effect that individual's total performance. As an aid to assessing the effect of pre-game arousal levels on performance, the PCPC rating of performance could be modified to include an interim performance rating by each subject at the first opportunity for rest that the player receives once the competition has started. The methodology employed in this study could have been a confounding variable. The timing factor for pre-game reporting enabled the players to engage in a physical, team warm-up prior to the start of the game. The warm-up may have served to dissipate some of the subjects' arousal. Decreased pre-game arousal levels would reduce the sensitivity of the PCPC excitedness scale. Completing the pre-game reporting prior to the team warm-up might be a more productive method of PCPC administration.

Implications for Theory and Practice

Playing experience is a key factor in a basketball player's adaptation to increased levels of pre-game arousal. Subjective pre-game reporting could be an effective way of increasing the self-awareness of experienced athletes. An increased awareness of internal emotional behaviors, external emotional behaviors, feelings, and expectations could help players to make intelligent decisions regarding their game preparation to maximize their performance. The PCPC could be a valuable aid to coaches in that it might help elite players to recognize their own arousal symptoms and to eventually determine over a period of time, which symptoms precede good performances. Substitute players and low level players may not possess the ability to control

their pre-game arousal levels. The PCPC may not be an effective tool for this type of athlete.

Chapter 6

CLOSURE

Summary

This study used the technique of self-reporting to examine the relationship of pre-competition arousal symptoms to specific grades of performance.

Four dependent variables were observed for 11 male varsity basketball players for a total of 34 competitions during the 1977-78 season. The tool used for the collection of data was the PCPC. The PCPC was administered 10 minutes prior to and completed 30 minutes following each competition. Each subject reported his pre-game arousal symptoms, selected from the 23 diagnostics of the PCPC, his pre-game excitedness level, his estimation of winning, and his post-game assessment of his own performance.

Data were inspected to determine 1) the existence of any patterns of arousal symptoms that were performance specific for each subject, 2) arousal (excitedness)-performance level relationships, 3) estimation of winning-performance relationships, and 4) arousal (excitedness)-estimation of winning relationships. The data were further examined to determine the presence of any patterns of interaction between arousal, performance, and estimation of winning.

Individualized objective ratings of performance were established for each subject using game statistics. These objective ratings were used to determine the reliability of the subjective reports of performance. All previous relationships and interactions involving subject performance were re-examined using the objective ratings as

the operational indicant of performance.

Conclusions

1. Patterns of arousal that are performance specific were exhibited by the more competent, experienced members of the starting lineup. The presence of arousal patterns suggests that some form of arousal control is taking place within the subject. The better players appear to be able to control arousal levels more effectively than the less competent players and therefore, exhibit arousal patterns at higher levels of performance. Inexperienced players, substitutes, and players of low ability generally do not exhibit patterns of arousal that are performance specific.

2. Pre-game assessments of arousal level are not the only factors that contribute to a player's total-game arousal level. Consequently, the use of the excitedness scale data in conjunction with total game performance ratings is not sufficiently sensitive to provide a significant picture of the arousal-performance relationship in varsity basketball settings.

3. No significant results were obtained for the arousal (excitedness)-estimation of winning relationship, the estimation of winning-performance relationship, or the interaction between arousal (excitedness), performance, and estimation of winning.

Recommendations

1. This study should be replicated using high level athletes for a variety of team sports.

2. The dynamics involving the use of the PCPC should be investigated to reassess its validity for team-game situations.

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APPENDIX A

About the Pre-Competition Psychological Checklist

These checklists require you to assess how you feel prior to competition. They should be completed just prior to an event or game.

The information that is provided should be the most truthful and accurate that you can provide. Some of the descriptions are very personal but remember your answers will remain private, being only known to you and the coach. The reason that this information needs to be obtained is that depending on how you answer, the coach will be able to make very important last-minute coaching decisions. These decisions should help you to perform even better than you normally would expect.

WHAT TO DO

1. Fill in your name, the date, and the event or game that you are about to contest.
2. Check "yes" for the descriptions or feelings that are applicable. If you have other feelings that are not listed write them briefly in the "24. Other (describe)" section.
3. On the numbered excitedness scale indicate where you feel you are in terms of your arousal (excitedness). Note that the -10 end is complete inactivity and lack of excitedness whereas the +10 end is an extremely aroused feeling, something like how you would feel if you were about to make your first parachute jump or you had just been involved in a fight. The zero entry is what would be normal for you. Mark where you think you would be considering how you now feel by putting an "X" on the scale line.
4. On the numbered estimation of winning scale, indicate your level

of confidence in terms of how you think the team will do in the competition.

5. After the competition indicate how you feel about your performance in the "Rate how you performed" section.

Definitions for the Pre-competition Psychological Checklist

These definitions should be read to, discussed and clarified with the users of the checklist.

1. Can't be bothered attitude. The athlete cannot get excited or interested in the competition. He/she feels it is not important. If the competition was missed, the athlete would not care one way or the other.

2. Drowsy, sleepy feeling. The athlete feels sleepy. His/her eyelids are heavy. He/she would prefer to sit down and doze or take a nap.

3. Feeling of being alone. The athlete would like to have someone to keep him/her company. He/she feels unsure of what is expected of him/her or of what to do. He/she would like to have some other person to talk to.

4. Feeling of weakness. The athlete feels weak all over. His/her arms feel heavy. His/her knees are hard to keep straight. The athlete feels that he/she could just crumple up on the floor. The feeling of being strong does not exist.

5. Inadequate attention to preparation. The athlete has not had time nor been able to prepare himself/herself physically and mentally for the event. This produces a feeling of "something missing" in the event preparation procedures and consequently, the athlete has some doubts about his/her readiness to compete.

6. Impatient feeling. The athlete wishes the event would occur sooner than it is scheduled. The time to be spent waiting is frustrating. The athlete feels that he/she is ready to compete at the time of completing the checklist.

7. Aggressive feeling towards others. The athlete dislikes the other competitors. In the event that is to come it will be this athlete that dictates what will happen. There is no feeling of friendship with or like for the other competitors.

8. I have cried a little. The athlete has shed some tears while preparing for the competition. The amount of crying is not important just the fact the some crying has occurred.

9. Some shaking and trembling. The athlete has noticed his/her hands, legs, or some part of the body shaking or trembling. He/she has been able to see the shaking occurring.

10. Poor movement coordination. The athlete feels awkward and different. The activities followed in warm-up have not felt normal. The athlete is concerned about this unusual and distracting occurrence.

11. Trouble seeing and remembering. The athlete has occasional bursts of blurred vision. He/she cannot focus on anything for a long time. His/her mind is in a turmoil. It is difficult to concentrate on any one thing for any appreciable length of time.

12. I have vomited. This has occurred at least once.

13. I have diarrhea. The athlete has been to the toilet frequently and his/her bowel movements are like liquid.

14. I have urinated several times. The frequency of urination is more noticeable than usual.

15. I have had frequent bowel movements. The athlete has been to the toilet frequently but the bowel movements are not like diarrhea.

16. Nervous. The athlete feels nervous all over. Tingling, jittery feelings occur everywhere and are noticeable. It is hard to locate where the exact feelings occur.

17. Butterflies in the stomach. The athlete's stomach feels like it is moving or churning inside. The nervous feeling is decidedly more evident in the stomach than in any other part of the body.

18. Lack of confidence. The athlete feels that he/she is not prepared or does not have the ability to perform to expectations in the forthcoming event.

19. Do not feel well. The athlete feels ill or slightly ill. He/she could become sick if the feeling got worse.

20. I do not think that I will be able to perform well. The athlete believes that he/she will do a poor performance in the forthcoming event.

21. Very confident. The athlete is sure that he/she will be able to perform at least to expectations. He/she also feels that there is a good chance of performing even better than is expected.

22. Can't take the competition seriously. The athlete is not able to concentrate on the forthcoming event. It is hard to get ready or even be serious about preparing for it. The game will be played but the athlete does not care about the result.

23. Frightened. The athlete is afraid of the experiences that will occur in the forthcoming event. He/she has some hesitancy about competing. It would be nice to be able to withdraw from the event at the stage of completing the checklist.

24. Other (describe). Indicate any other feelings or sensations which exist but have not been described above.

Pre-competition Psychological Checklist.

PRE-COMPETITION PSYCHOLOGICAL CHECKLIST

NAME_____

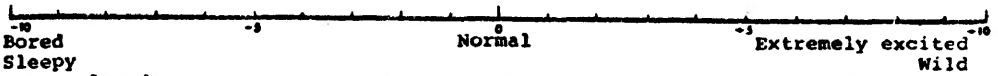
DATE_____

EVENT_____

If any of the following descriptions apply to you as you feel now mark them "yes." If not, then answer "no." Complete this form before you see your coach prior to the race.

	YES	NO
1. Can't be bothered attitude	___	___
2. Drowsy, sleepy feeling	___	___
3. Feeling of being alone	___	___
4. Feeling of weakness	___	___
5. Inadequate attention to preparation	___	___
6. Impatient feeling	___	___
7. Aggressive feeling towards others	___	___
8. I have cried a little	___	___
9. Some shaking and trembling	___	___
10. Poor movement coordination	___	___
11. Trouble seeing and remembering	___	___
12. I have vomited	___	___
13. I have diarrhea	___	___
14. I have urinated several times	___	___
15. I have had frequent bowel movements	___	___
16. Nervous	___	___
17. Butterflies in the stomach	___	___
18. Lack of confidence	___	___
19. Do not feel well	___	___
20. I do not think that I will be able to perform well	___	___
21. Very confident	___	___
22. Can't take the competition seriously	___	___
23. Frightened	___	___
24. Other (describe)_____	___	___
TOTAL NUMBER OF EACH	_____	_____

Excitedness Scale

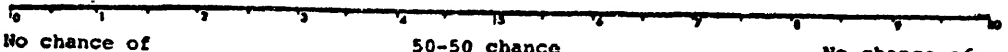


Bored
Sleepy
Very relaxed

Normal

Extremely excited
Wild
Raging mad

Estimation of Winning



No chance of winning

50-50 chance

No chance of losing

Event or game result _____

Rate how you performed: Great__ Good__ Normal__ Poor__ Very poor__

APPENDIX B

OBJECTIVE GAME RATINGS

Clarification of Rating Factors

Field goal attempt. Any attempt to make a basket, including controlled tips and blocked shots, is a field goal attempt. An attempt does not occur when a player is charged with a violation or a foul is called unless the basket is allowed (NAIA).

Free throw attempts. An attempt is not charged when a lane violation occurs unless the basket is allowed (NAIA).

Rebounds. A rebound is credited to a player who recovers a live ball which has missed scoring a field goal or free throw. The recovery may be accomplished: (1) by gaining control of the ball; or (2) by tipping or batting the ball in an attempt to score a goal; or (3) by tipping or batting the ball to a teammate so that teammate or another teammate of his/her team is the first to gain control of it (NAIA).

Assist. An assist is a pass made to a teammate who makes a try and scores directly or who does not dribble more than twice before making a try and scoring (NAIA).

Turn over. Turn overs include all those incidents other than rebounds which result in the opposition gaining possession of the ball. These include all ball handling errors (travelling, double dribble, fumbles lost, back over center line, stepping out of bounds, intercepted passes), violations of time limits (on throw-ins, three seconds in the key, 10 seconds in the back court, and being closely guarded for five seconds), and losses of possession after having been tied up for a jump ball and losing the ball on the jump (GPAC).

Steals. A steal occurs when a player recovers a loose ball, other than from a rebound, directly from an opponent's fumble, pass attempt, or dribble; or having tied up an opponent for a jump ball, wins the jump.

Blocked shots. A blocked shot is awarded when a player deflects an opponent's try for goal, without committing a violation or a foul, so that the ball does not enter the goal.

Draw the charge. A player draws a charge by establishing a fixed court position so that an opponent in possession of the ball creates contact with him/her and is charged with an offensive, personal foul.

Personal foul. A personal foul is charged by the referee against a player making illegal contact with an opponent which causes the opponent to be placed at a disadvantage.

APPENDIX C

INDIVIDUAL DATA SUMMARY

Legend for the Individual Data Summary Sheets

RS	-	Rating Scale
FGM	-	Field Goals Made
FGA	-	Field Goals Attempted and not made
FTM	-	Free Throws Made
FTA	-	Free Throws Attempted and not made
A	-	Assists
R	-	Rebounds
PF	-	Personal Fouls
TO	-	Turn Overs
S	-	Steals
BS	-	Blocked shots
DC	-	Draw the charge
OR	-	Objective Rating (game statistics)
SR	-	Subjective Rating (PCPC reports)
Ar	-	Arousal level estimated prior to game
Cl	-	Confidence level. Estimation of winning reported prior to the game.
Gr	-	Great performance category
G	-	Good performance category
N	-	Normal performance category
P	-	Poor performance category
VP	-	Very poor performance category

INDIVIDUAL DATA SUMMARY SHEET

1 SUBJECT		RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
		FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS	GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A	MANITOBA (H) #1	22	-14	2	-3	8	9	-3	-4	2			19	N	G	5	6
A	MANITOBA (H) #2	12	-8	2	-2	6	7	-4	-8	4			9	P	VP	2	6.5
B	NORTHLAND (A) #1				Did	not	play										
B	NORTHLAND (A) #2				Did	not	play										
B	LAURIER (A)	12	-9	3	-1	4	4	-4	-2	4			11	N	G	2	7.5
B	DALHOUSIE (A)	16	-7	3	-2	4	5	-2	-6	4			15	G	G	5	8
B	INT. FALLS (H)	8	-6				8	-1	-6				3	VP	N	2	8
B	BRANDON (H) #1	14	-8	4	-2	6	6		-6				14	G	N	3	8
B	BRANDON (H) #2	10	-8	5	-1		8		-2				12	N	N	3	9
A	NICOLLETT (H)	22	-13	2	-1	6	7		-4				19	N	N	3	5
A	WINDSOR (H)	30	-13	3	-2	2	12	-1	-2				29	Gr	G	5	5
A	REGINA (H) #1	22	-9		-1	4	6	-3					19	N	N	7	10
A	REGINA (H) #2	12	-6	4	-2		5	-4	-4				5	VP	P	3	10
A	WINNIPEG (H)#1	24	-7	4	-2	2	8	-1		2			30	Gr	G	7	8
A	WINNIPEG (H) #2	20	-2	1	-3	4	3		-6				17	N	G	2	7.5
C	ALBERTA (A) KLO	18	-5		-4		7	-2					14	G	G	5	8
C	LAURENTIAN (A) KLO	12	-14	1	-1		4	-2	-2				-2	VP	P	5	7.5
C	YORK (A) KLO	12	-18	3	-2		8	-1	-4				-2	VP	P	2	6
C	ALBERTA (A) KLO	26	-11	1	-1		8	-2	-2				19	G	G	3	8
B	ALBERTA (A) DIN	18	-8	7	-3	6	6	-2	-4				20	Gr	G	3	8.5
B	VICTORIA (A) DIN	26	-12	2	-1	2	5	-2	-4				16	G	G	1	5
B	GUELPH (A) DIN	22	-16	3	-1	4	9		-2				19	Gr	G	2	5
C	REGINA (A) #1	14	-6				7	-4	-6				5	P	P	5	9
C	REGINA (A) #2	18	-8	4			14	-1	-4				23	Gr	G	7	10
C	WINNIPEG (A) #1	26	-11	4			8	-2	-2				23	Gr	Gr	3	8
C	WINNIPEG (A) #2	16	-9	8	-1		7	-5	-6				10	N	N	2	8
C	MANITOBA (A) #1	18	-7	6	-1		3	-4	-6				9	N	P	7	7
C	MANITOBA (A) #2	24	-7	1			3	-1	-4				16	G	G	3	4
C	BRANDON (A) #1	20	-16	6	-2		8	-1	-14				1	P	P	4	10
C	BRANDON (A) #2	20	-12	2	-4		8	-2	-10				2	P	N	5	10
C	MANITOBA (A) GPAC	12	-6	3	-1		8	-3	-6				7	N	P	4	5
A	MANITOBA (A) GPAC	14	-11	9	-4	2	5	-1					14	P	G	4	5
C	HAMLINE	12	-5	4	-1		4	-3	-6				5	P	P	2	7.5
C	CONCORDIA	20	-9	2			2	-1	-4				10	N	G	3	7

INDIVIDUAL DATA SUMMARY SHEET

2 SUBJECT	RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
	FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A MANITOBA (H) #1							-2					-2	P	P	7	7
A MANITOBA (H) #2		-1						-2				-3	VP	N	1	7.5
B NORTHLAND (A) #1							-1					-1	N	G	5	7.5
B NORTHLAND (A) #2							-4					-4	P	G	3	6.5
B LAURIER (A)				Did not play												
B DALHOUSIE (A)							-2	-2				-4	P	P	0	10
B INT. FALLS (H)				-1		1	-3	-2				-5	Vp	N	5	10
B BRANDON (H) #1		-1			2	2	-2					1	G	N	3	10
B BRANDON (H) #2		-1	2	-2	1	1	-3					-2	N	N	2	10
A NICOLLETT (H)	2	-2			1	1	-1	-2				-1	P	G	3	9
A WINDSOR (H)	2	-3			8	3	-4	-8				-2	P	N	5	8
A REGINA (H) #1	4			-2	4	2	-1		2			9	Gr	G	1	10
A REGINA (H) #2	2	-3			2	2	-1	-2				0	N	N	1	10
A WINNIPEG (H)#1	2				2	1	-2	-2			2	3	G	N	2	10
A WINNIPEG (H) #2	4	-2			2		-1	-4	2			1	N	G	1	10
C ALBERTA (A) KLO						2	-1	-4				-3	N	P	7	10
C LAURENTIAN (A) KLO				Did not play												
C YORK (A) KLO	2	-1		-1		1	-1	-2				-2	N	N	3	6
C ALBERTA (A) KLO		-2				1	-1					-2	N	N	1	10
B ALBERTA (A) DIN							-1					-1	N	N	2	10
B VICTORIA (A) DIN	2				6		-3	-6				-1	N	G	-2	7
B GUELPH (A) DIN		-1		-2	6	1	-1					3	G	G	1	10
C REGINA (A) #1	6	-2		-1			-2	-6				-5	P	G	6	10
C REGINA (A) #2	2	-1	1	-1		1	-2	-2				-2	N	N	3	10
C WINNIPEG (A) #1			3	-1				-8				-6	VP	G	2	10
C WINNIPEG (A) #2	2					1		-6				-3	N	P	5	10
C MANITOBA (A) #1		-2				1	-1	-4				-6	VP	N	6	8
C MANITOBA (A) #2								-2				-2	N	VP	0	5
C BRANDON (A) #1							-2					-2	N	N	1	10
C BRANDON (A) #2	2	-2					-2	-4				-6	VP	G	1	10
C MANITOBA (A) GPAC	4						-1					3	Gr	Gr	3	10
A MANITOBA (A) GPAC							-1					-1	P	P	2	7
C HAMLINE				-1		1						0	G	N	2	8
C CONCORDIA				-1								-1	G	N	3	9

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3 SUBJECT	RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
	FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A MANITOBA (H) #1				Did	not	play										
A MANITOBA (H) #2					4		-3	-4				-3	N	G	2	8
B NORTHLAND (A) #1							-1	-2				-3	N	P	3	5
B NORTHLAND (A) #2						2	-1					1	Gr	Gr	5	10
B LAURIER (A)				Did	not	play										
B DALHOUSIE (A)							-3	-4				-7	VP	VP	4	9
B INT. FALLS (H)	8	-4	3	-3	2	5	-4	-8				-1	G	N	2	10
B BRANDON (H) #1				-1		1		-6				-6	VP	P	7	10
B BRANDON (H) #2	2	-2	2			3	-3					2	Gr	N	2	10
A NICOLLETT (H)				Did	not	play										
A WINDSOR (H)				Did	not	play										
A REGINA (H) #1				Did	not	play										
A REGINA (H) #2				Did	not	play										
A WINNIPEG (H)#1				Did	not	play										
A WINNIPEG (H) #2				Did	not	play										
C ALBERTA (A) KLO	2	-2					-2	-6				-8	VP	N	5	9
C LAURENTIAN (A) KLO				Did	not	play										
C YORK (A) KLO		-1		-1			-1	-2				-5	N	VP	-3	6
C ALBERTA (A) KLO	4	-2				1		-2				1	Gr	G	3	10
B ALBERTA (A) DIN		-1										-1	G	P	3	10
B VICTORIA (A) DIN							-1	-2				-3	N	N	0	5
B GUELPH (A) DIN												0	G	N	0	5
C REGINA (A) #1				Did	not	play										
C REGINA (A) #2				Did	not	play										
C WINNIPEG (A) #1				Did	not	play										
C WINNIPEG (A) #2				Did	not	play										
C MANITOBA (A) #1				Did	not	play										
C MANITOBA (A) #2				Did	not	play										
C BRANDON (A) #1				Did	not	play										
C BRANDON (A) #2				Did	not	play										
C MANITOBA (A) GPAC				Did	not	play										
A MANITOBA (A) GPAC				Did	not	play										
C HAMLINE							-1	-4				-5	N	N	2	9
C CONCORDIA						1	-2	-2				-3	N	N	3	10

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4 SUBJECT	RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
	FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A MANITOBA (H) #1		-2							4			2	P	N	8	9.5
A MANITOBA (H) #2	4	-1				3		-2	4		4	12	G	G	7	9.5
B NORTHLAND (A) #1	2	-2	2		2	3	-2	-2				3	G	N	6	8.5
B NORTHLAND (A) #2	4					3	-2					5	Gr	N	8	10
B LAURIER (A)							-1					-1	N	Gr	5	9.5
B DALHOUSIE (A)		-4		-1			-2	-4				-11	VP	P	5	10
B INT. FALLS (H)	2	-4			4	3	-1	-4				0	N	G	5	10
B BRANDON (H) #1	6	-2			2	3	-2	-4				3	G	G	8	9.5
B BRANDON (H) #2	10	-6		-3	6	4	-3	-6				2	G	G	3	9
A NICOLLETT (H)	2				4		-2	-4				0	P	N	5	8
A WINDSOR (H)	2	-3	4		2	2	-3	-2				2	P	G	-5	6
A REGINA (H) #1	6	-4				3	-2					3	P	N	5	9.5
A REGINA (H) #2	10	-1	3			2	-1	-16	4			1	VP	N	5	10
A WINNIPEG (H) #1	6	-5	2		12	2	-5	-8	4			8	N	G	8	10
A WINNIPEG (H) #2	12	-3			14	6	-2	-14		2		15	Gr	G	5	7.5
C ALBERTA (A) KLO		-3				1	-2	-2				-6	P	P	7	9
C LAURENTIAN (A) KLO				Did	not	play										
C YORK (A) KLO	4	-3	1			3	-1					4	Gr	G	10	10
C ALBERTA (A) KLO						1	-1	-6				-6	P	P	5	10
B ALBERTA (A) DIN	4	-2			6	3	-4	-6				1	N	G	5	10
B VICTORIA (A) DIN												0	N	N	5	7.5
B GUELPH (A) DIN	2	-1				1	-2					0	N	G	9	10
C REGINA (A) #1	6	-2				2	-1	-2				3	Gr	G	8	10
C REGINA (A) #2	2	-1	4	-1			-1					3	Gr	N	5	10
C WINNIPEG (A) #1						2	-1					1	G	N	5	10
C WINNIPEG (A) #2	4	-4	2	-1		2	-3					0	G	P	7	10
C MANITOBA (A) #1	2	-4	1	-1		3	-1					0	G	G	5	8.5
C MANITOBA (A) #2	2	-3	4			2	-2	-4				-1	N	G	7	9
C BRANDON (A) #1	2	-3	2			4	-1	-4				0	G	G	8	10
C BRANDON (A) #2		-2		-1		3	-3	-4				-7	P	N	7	10
C MANITOBA (A) GPAC	6	-7				5	-2	-8				-6	P	P	8	8.5
A MANITOBA (A) GPAC	8	-6	2		10	6	-2	-6	4			16	Gr	N	7	8
C HAMLINE		-1					-5	-4				-10	VP	VP	7	9.5
C CONCORDIA												0	G	G	8	9.5

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5 SUBJECT	RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
	FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	C1
A MANITOBA (H) #1	2				2	5	-1	-2				6	N	G	2	8
A MANITOBA (H) #2	2	-3	3	-1		9	-2	-4				8	N	G	2	9
B NORTHLAND (A) #1	4	-5	2		2	4	-4	-6				-3	P	P	2	8
B NORTHLAND (A) #2	2	-1				4						5	N	P	0	7.5
B LAURIER (A)		-2				1		-2	2			-1	P	N	3	9
B DALHOUSIE (A)	4	-2				4	-1	-4	2			3	N	N	4	8.5
B INT. FALLS (H)	2	-3				6	-2	-2				1	N	N	1	10
B BRANDON (H) #1		-2				2	-2	-2				-4	P	P	5	10
B BRANDON (H) #2	14	-2	7	-3		10	-2	-2				22	Gr	G	1	10
A NICOLLETT (H)	12	-9			4	5	-3	-2	2			9	N	G	5	9
A WINDSOR (H)	20	-3				8	-2			2		25	Gr	G	1	9.5
A REGINA (H) #1	8	-5	2			6	-3	-4		2		6	P	G	1	10
A REGINA (H) #2	6	-5	5	-1		7	-2	-4		4		1o	N	G	2	10
A WINNIPEG (H)#1	4	-2			2	5				2		11	N	N	2	10
A WINNIPEG (H) #2	8	-1	2			7		-10	2			8	N	N	1	10
C ALBERTA (A) KLO		-1				1	-1					-1	N	G	3	9.5
C LAURENTIAN (A) KLO	8	-3					-1	-2				2	N	G	2	9
C YORK (A) KLO	4	-1				1	-1	-4				-1	P	G	5	8
C ALBERTA (A) KLO	2	-9	2			3	-1	-2				-5	P	N	3	10
B ALBERTA (A) DIN	4	-5	2		2	4	-1					6	N	N	4	10
B VICTORIA (A) DIN	4	-6			2		-4	-2				-6	VP	G	2	9
B GUELPH (A) DIN	2	-4			4		-2	-2				-2	P	P	4	10
C REGINA (A) #1		-2	2			3	-1	-2				0	N	P	4	10
C REGINA (A) #2		-1	1	-1		3		-4				-2	P	N	0	10
C WINNIPEG (A) #1	6	-4	1			8	-2	-2				7	G	G	4	10
C WINNIPEG (A) #2		-3				2	-4	-2				-7	VP	P	3	10
C MANITOBA (A) #1	12	-5				2	-1					8	G	P	4	9.5
C MANITOBA (A) #2	2											2	N	P	2	9
C BRANDON (A) #1	12	-5	1	-1		6	-1					12	Gr	G	1	10
C BRANDON (A) #2	4	-3				2	-2	-2				-1	N	N	3	10
C MANITOBA (A) GPAC	4	-2	1	-1			-1					1	N	N	4	10
A MANITOBA (A) GPAC	2	-1	1	-1			-1					0	VP	N	5	10
C HAMLINE	2					2	-1					3	N	N	2	8.5
C CONCORDIA						1		-2				-1	N	N	4	10

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6 SUBJECT		RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
		FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS	GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A	MANITOBA (H) #1				Did	not	play										
A	MANITOBA (H) #2		-4				4	-2	-4				-6	VP	P	0	6
B	NORTHLAND (A) #1	4		1	-1	2	1		-2				5	Gr	N	5	8.5
B	NORTHLAND (A) #2	2	-3	1	-1		2	-2					-1	N	P	0	10
B	LAURIER (A)				Did	not	play										
B	DALHOUSIE (A)							-1		2			1	G	N	2	9
B	INT. FALLS (H)		-4			2	2	-1	-8				-9	VP	VP	0	9
B	BRANDON (H) #1	2	-3				1	-2					-2	N	N	7	10
B	BRANDON (H) #2	2	-3			2	2	-1					2	G	P	0	10
A	NICOLLETT (H)	8	-1			2	3	-3	-2				7	Gr	Gr	0	7
A	WINDSOR (H)		-3		-1		1						-3	P	N	5	9
A	REGINA (H) #1		-2				2		-2				-2	P	P	-1	10
A	REGINA (H) #2	4	-2			6	2	-2					8	Gr	Gr	0	10
A	WINNIPEG (H)#1		-2					-1	-2				-5	VP	P	2	10
A	WINNIPEG (H) #2	2					1		-2				1	N	N	-5	10
C	ALBERTA (A) KLO	2			-1		3	-1					3	Gr	G	6	9
C	LAURENTIAN (A) KLO				Did	not	play										
C	YORK (A) KLO	2	-1	1	-1		1						2	Gr	N	0	9
C	ALBERTA (A) KLO		-3				3	-1	-2				-3	P	P	0	9.5
B	ALBERTA (A) DIN												0	N	N	3	10
B	VICTORIA (A) DIN		-2						-2				-4	P	G	3	9
B	GUELPH (A) DIN	2	-6				4		-2				-2	N	N	6	10
C	REGINA (A) #1	2	-1		-1		2	-1					1	G	G	5	10
C	REGINA (A) #2								-4				-4	VP	N	2	10
C	WINNIPEG (A) #1		-1						-2				-3	P	P	-2	10
C	WINNIPEG (A) #2							-1					-1	N	VP	0	10
C	MANITOBA (A) #1		-1						-2				-3	P	N	6	8
C	MANITOBA (A) #2				Did	not	play										
C	BRANDON (A) #1	1											1	G	G	0	10
C	BRANDON (A) #2		-3				4						1	G	N	3	10
C	MANITOBA (A) GPAC				Did	not	play										
A	MANITOBA (A) GPAC				Did	not	play										
C	HAMLINE		-3										-3	P	P	2	9
C	CONCORDIA												0	G	N	0	8

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7 SUBJECT		RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
		FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS	GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A	MANITOBA (H) #1		-2			4	2	-1	-2				1	G	G	5	9.5
A	MANITOBA (H) #2				Did	not	play										
B	NORTHLAND (A) #1					2		-2	-6				-6	VP	P	5	9
B	NORTHLAND (A) #2		-2				2	-2					-2	P	N	2	10
B	LAURIER (A)					2		-3	-2				-3	P	N	2	9.5
B	DALHOUSIE (A)				Did	not	play										
B	INT. FALLS (H)	10	-4				3	-1	-4				4	G	G	2	10
B	BRANDON (H) #1				Did	not	play										
B	BRANDON (H) #2				Did	not	play										
A	NICOLLETT (H)	2	-3			2		-2	-2				-3	N	G	1	10
A	WINDSOR (H)		-1	2	-2	6		-2				2	5	Gr	N	1	10
A	REGINA (H) #1		-2			2		-1					-3	N	N	1	10
A	REGINA (H) #2	2				2		-1					3	G	G	2	10
A	WINNIPEG (H)#1							-2	-8				-10	VP	P	1	10
A	WINNIPEG (H) #2							-4	-8	4			-8	P	N	0	10
C	ALBERTA (A) KLO		-1				3	-4	-4				-6	N	G	1	10
C	LAURENTIAN (A) KLO							-1					-1	G	G	3	10
C	YORK (A) KLO	2					1	-3	-6				-6	N	G	1	10
C	ALBERTA (A) KLO		-2										-2	G	N	1	10
B	ALBERTA (A) DIN								-2				-2	P	N	0	10
B	VICTORIA (A) DIN					10	2	-1	-6				5	G	G	1	10
B	GUELPH (A) DIN	2		2	-2	4	1						7	Gr	G	0	10
C	REGINA (A) #1	8	-6				1	-3					0	Gr	G	1	10
C	REGINA (A) #2		-5				2	-1	-4				-8	P	N	1	10
C	WINNIPEG (A) #1	2	-6				2	-3	-10				-15	VP	G	1	10
C	WINNIPEG (A) #2	6	-2	2			3	-4	-6				-1	G	N	1	10
C	MANITOBA (A) #1		-3				1	-2	-2				-6	N	N	3	9
C	MANITOBA (A) #2		-1				1	-1	-6				-7	N	N	1	7.5
C	BRANDON (A) #1								-6				-6	N	VP	1	10
C	BRANDON (A) #2						1		-2				-1	G	VP	0	10
C	MANITOBA (A) GPAC		-2				1	-1					-2	G	N	4	6
A	MANITOBA (A) GPAC				Did	not	play										
C	HAMLINE	2		1	-3		3	-2	-2				-1	Gr	G	1	10
C	CONCORDIA												0	Gr	G	1	10

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8 SUBJECT	RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
	FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A MANITOBA (H) #1	2	-6			6	7	-2	-8	6	2	2	9	Gr	P	3	8.5
A MANITOBA (H) #2	4	-7	2	-1	4	5	-4	-4		2		1	VP	P	3	8.5
B NORTHLAND (A) #1	2	-4	4	-1		11	-3					9	G	P	2	8.5
B NORTHLAND (A) #2	8	-5				5	-2					6	N	P	-1	8.5
B LAURIER (A)	8	-7	2		2	10	-3	-4				8	G	N	3	9
B DALHOUSIE (A)	18	-3	1			5	-4	-10				7	G	P	3	8.5
B INT. FALLS (H)	6	-3		-1		3	-1	-2				2	P	P	1	10
B BRANDON (H) #1	4	-4		-1	4	5	-1	-8				-1	P	N	5	8
B BRANDON (H) #2	8	-2	2	-2	6	3	-3	-4				8	G	P	4	7
A NICOLLETT (H)				Did not play												
A WINDSOR (H)				Did not play												
A REGINA (H) #1	2	-6		-1	6	7		-6				2	P	P	5	8.5
A REGINA (H) #2	4	-4			6	4	-2	-2	2			8	Gr	Gr	0	9
A WINNIPEG (H)#1	2	-8	1	-2	6	11	-3	-2				5	N	Gr	7	9
A WINNIPEG (H) #2	8	-9			14	16	-2	-14				3	P	N	5	8
C ALBERTA (A) KLO	6	-4	3			7	-1					11	Gr	N	4	7
C LAURENTIAN (A) KLO	10	-4		-2		7	-1	-6				4	G	N	4	7
C YORK (A) KLO	10	-7	3			4	-1	-4				5	G	N	4	7
C ALBERTA (A) KLO	10	-8	2	-1		4	-3	-4				0	N	N	2	8
B ALBERTA (A) DIN	4	-15		-2	18	6	-2	-14				-5	VP	P	4	10
B VICTORIA (A) DIN	8	-3	2		12	5	-3	-12				9	G	N	3	7
B GUELPH (A) DIN	6	-6			16	4	-3	-6				11	Gr	N	4	9
C REGINA (A) #1	12	-2				9		-10				9	Gr	N	5	8
C REGINA (A) #2	8	-8	1			8	-3	-4				2	G	N	4	8
C WINNIPEG (A) #1		-2						-4								
C WINNIPEG (A) #2				Did not play												
C MANITOBA (A) #1	4	-3	3	-1		4	-5	-10				-8	P	P	5	8
C MANITOBA (A) #2	4	-4	1			3	-2	-4				-2	N	G	2	8
C BRANDON (A) #1		-5				5	-1	-8				-9	P	P	5	8
C BRANDON (A) #2	8	-5				6	-5	-12				-8	P	N	5	9
C MANITOBA (A) GPAC	2	-3				2	-2	-18				-19	VP	VP	6	8.5
A MANITOBA (A) GPAC	10	-5		-1	4	6	-5	-4	4			9	Gr	G	4	8
C HAMLINE		-1				4		-4				-1	N	P	1	9
C CONCORDIA	12	-5	3	-1		7	-4	-4				8	Gr	N	4	10

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9 SUBJECT		RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
		FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS	GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A	MANITOBA (H) #1	16	-9			4	4	-2			2		15	Gr	G	3	6
A	MANITOBA (H) #2	4	-5		-1		5		-2				1	P	G	-1	8
B	NORTHLAND (A) #1	4	-5	3	-1	8	2	-5	-8				-2	N	G	0	8
B	NORTHLAND (A) #2	4	-7	2			1						0	N	VP	-2	9
B	LAURIER (A)	4	-5	2		4	3	-1	-4				3	G	P	2	8
B	DALHOUSIE (A)	4	-5			4	5	-1	-4				3	G	P	1	10
B	INT. FALLS (H)	14	-5	1	-2	2	4		-2				12	Gr	G	-1	9
B	BRANDON (H) #1	6	-8			2		-4	-2				-6	VP	N	3	8
B	BRANDON (H) #2	4	-4	2			4	-2	-12				-8	VP	N	2	9
A	NICOLLETT (H)	8	-4				2	-2	-2				6	G	N	2	7.5
A	WINDSOR (H)	4	-3	4	-1	4	2	-2	-6				4	N	N	2	7
A	REGINA (H) #1	2	-3			4	1	-1	-2	2			3	N	N	3	9.5
A	REGINA (H) #2		-1			4		-1	-2	2			2	P	N	2	10
A	WINNIPEG (H) #1	4	-2			2	4	-3	-2				3	N	N	6	8.5
A	WINNIPEG (H) #2	2	-2			2	3	-1	-2				2	P	N	4	9
C	ALBERTA (A) KLO	16	-1	4	-1		1	-4	-4				11	Gr	G	3	9
C	LAURENTIAN (A) KLO	8	-6	2			6	-1	-6				3	G	G	2	7.5
C	YORK (A) KLO	2	-1	2				-4	-3				-4	P	P	1	8
C	ALBERTA (A) KLO	8	-4				2	-2	-12				-8	VP	N	2	10
B	ALBERTA (A) DIN	4	-4			6	4	-3	-6				1	N	VP	1	10
B	VICTORIA (A) DIN		-4			12	2	-6					4	G	N	1	5
B	GUELPH (A) DIN	2	-8		-1	8	3	-1	-6				-3	P	P	2	8.5
C	REGINA (A) #1	8	-5	1	-1		5	-2	-4				2	N	N	4	8.5
C	REGINA (A) #2	4	-3				6	-3					4	G	N	2	9.5
C	WINNIPEG (A) #1	2	-2				2	-2					0	N	N	4	8.5
C	WINNIPEG (A) #2	4	-1					-2	-4				-3	P	N	1	8.5
C	MANITOBA (A) #1	2	-2						-6				-6	VP	P	3	7
C	MANITOBA (A) #2												0	N	N	2	7
C	BRANDON (A) #1	2					1	-1					2	N	G	3	9
C	BRANDON (A) #2	8	-4	3	-1		3		-4				5	G	G	1	9
C	MANITOBA (A) GPAC	6	-2				1		-4				1	N	N	6	9
A	MANITOBA (A) GPAC												0	VP	N	5	7
C	HAMLINE	6	-1				1		-2				4	G	P	3	6
C	CONCORDIA	4	-3				2	-1	-4				-2	N	P	2	7

INDIVIDUAL DATA SUMMARY SHEET

10 SUBJECT		RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
		FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS	GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A	MANITOBA (H) #1	4	-2			4	1	-1	-2				4	P	N	3	6.5
A	MANITOBA (H) #2	14	-4			6	3	-3	-12	2			6	P	N	2	7
B	NORTHLAND (A) #1	8	-7		-3	4	3	-3	-8				-6	VP	N	4	7
B	NORTHLAND (A) #2	6	-3	2									5	P	P	2	7.5
B	LAURIER (A)	10	-10	6		14	5	-2	-2				21	Gr	G	1	7
B	DALHOUSIE (A)	10	-8	2		2	2	-2	-8				-2	VP	N	2	7.5
B	INT. FALLS (H)	12	-7			10	2	-1	-2				14	G	P	2	7
B	BRANDON (H) #1	10	-8	3	-1	8	3	-1					14	G	N	2	5.5
B	BRANDON (H) #2	4	-7	1	-1	2	1	-3					-3	VP	P	2	8
A	NICOLLETT (H)	6	-10	1		6	1	-2	-2	2			2	VP	P	1	7
A	WINDSOR (H)	8	-6	5	-3		2		-4	2			4	P	N	1	6
A	REGINA (H) #1	12	-3			6	1	-1					15	Gr	G	4	8.5
A	REGINA (H) #2	14	-9			2	4	-2	-4			2	7	N	G	4	8.5
A	WINNIPEG (H)#1	10	-6	3	-1	6	4	-1	-16	6			5	P	N	4	8
A	WINNIPEG (H) #2	6	-6			6	5	-1	-6	4			8	N	P	0	8.5
C	ALBERTA (A) KLO	6	-13	4	-1		2	-2	-10				-14	VP	N	3	7.5
C	LAURENTIAN (A) KLO	10	-10				2	-4	-12				-14	VP	P	2	6
C	YORK (A) KLO	4	-6					-1	-2				-5	N	VP	1	6.5
C	ALBERTA (A) KLO	10	-7				2		-4				1	G	N	3	6
B	ALBERTA (A) DIN	6	-7			6	4	-2	-6				1	P	P	3	8
B	VICTORIA (A) DIN	14	-3			6	3		-2				18	Gr	N	1	6
B	GUELPH (A) DIN	14	-4			6	7		-8				15	G	N	2	7.5
C	REGINA (A) #1	10	-3	1	-2		3		-2				7	Gr	N	2	8
C	REGINA (A) #2	12	-3				2	-4	-4				3	G	N	2	8.5
C	WINNIPEG (A) #1	16	-6		-1		5	-2	-6				6	Gr	N	2	7
C	WINNIPEG (A) #2	4	-5	4			2	-5	-4				-4	N	P	2	7
C	MANITOBA (A) #1	12	-6	5			1	-1	-8				3	G	N	2	6
C	MANITOBA (A) #2	6	-9				2	-3	-4				-8	P	P	2	5.5
C	BRANDON (A) #1	4	-5				1	-4	-6				-10	P	P	1	7.5
C	BRANDON (A) #2	8	-6				5	-1	-2				4	G	P	4	8
C	MANITOBA (A) GPAC	14	-2	1	-2		3	-3	-6				5	Gr	G	4	6.5
A	MANITOBA (A) GPAC	12	-7	3	-1	4	3	-4		6			16	Gr	G	3	6
C	HAMLINE	10	-2				1	-4	-6				-1	N	P	2	7
C	CONCORDIA	14	-7				3	-3	-6				1	G	G	2	6

INDIVIDUAL DATA SUMMARY SHEET

11 SUBJECT		RATING FACTORS											TOTAL	VERBAL RATINGS		PCPC	
		FGM	FGA	FTM	FTA	A	R	PF	TO	S	BS	DC					
RS	GAME	+2	-1	+1	-1	+2	+1	-1	-2	+2	+1	+2		OR	SR	Ar	Cl
A	MANITOBA (H) #1	16	-12	3	-3	4	17	-2	-2	2	3	2	28	N	N	3	10
A	MANITOBA (H) #2	18	-10	1	-2	4	14	-2	-4		4		23	P	P	0	10
B	NORTHLAND (A) #1	28	-7	5	-4	2	17	-2	-4				35	Gr	G	5	10
B	NORTHLAND (A) #2	18	-6		-2		7						17	P	P	5	10
B	LAURIER (A)	22	-5	9	-4		18	-1	-6	6			33	Gr	G	2	10
B	DALHOUSIE (A)	16	-9	1			12	-5	-4	2			11	VP	G	5	10
B	INT. FALLS (H)	10	-3	5	-1	4	12	-2	-6				19	N	N	0	10
B	BRANDON (H) #1	22	-6	5	-2	2	17	-4	-8				26	G	G	2	10
B	BRANDON (H) #2	8	-4	2	-3		13		-2				14	P	G	2	10
A	NICOLLETT (H)	20	-7			4	11	-3	-6		8		22	P	G	3	10
A	WINDSOR (H)	18	-11			2	16	-4	-6	2	5		22	VP	G	3	10
A	REGINA (H) #1	20	-8	4	-2	4	11	-3	-4		4		26	P	P	2	10
A	REGINA (H) #2	20	-7	5	-1	6	14	-3	-4		9		39	G	N	2	10
A	WINNIPEG (H)#1	24	-10	2	-3	6	21	-2	-12	2	2		30	N	N	2	10
A	WINNIPEG (H) #2	28	-7	3	-3	4	23	-1	-6	2	7		50	Gr	G	2	10
C	ALBERTA (A) KLO	22	-11	2	-4		14	-3	-6				14	N	N	5	10
C	LAURENTIAN (A) KLO	16	-12	3	-1		14	-3	-2				15	N	N	2	10
C	YORK (A) KLO	2	-9				6	-5	-4				-10	VP	VP	1	10
C	ALBERTA (A) KLO	20	-6	1	-2		11	-4	-4				16	N	N	2	10
B	ALBERTA (A) DIN	24	-8	4	-2		19	-4	-14				19	N	G	1	10
B	VICTORIA (A) DIN	14	-5	5	-3	6	11	-5	-10				13	VP	G	2	10
B	GUELPH (A) DIN	16	-4	5	-1	4	13	-4	-6				23	N	G	2	10
C	REGINA (A) #1	12	-2	2			14	-3	-8				15	N	N	2	10
C	REGINA (A) #2	18	-8		-1		16	-4	-6				15	N	G	3	10
C	WINNIPEG (A) #1	18	-10	5			13	-5	-4				17	N	N	3	10
C	WINNIPEG (A) #2	34	-10	4	-2		19	-1	-8				36	Gr	G	3	10
C	MANITOBA (A) #1	10	-7	1	-1		11	-5	-4				5	P	P	4	10
C	MANITOBA (A) #2	28	-8	1			14	-2	-8				25	G	G	2	10
C	BRANDON (A) #1	16	-12	3			17	-2	-6				16	N	N	2	10
C	BRANDON (A) #2	22	-8	4	-1		15	-3	-6				23	G	N	2	10
C	MANITOBA (A) GPAC	16	-12	6	-2		16	-3	-4				17	N	VP	2	10
A	MANITOBA (A) GPAC	10	-9	2		10	17	-4	-4	2	2	2	28	N	G	2	10
C	HAMLINE	16	-2	3	-2		9	-3	-4				17	N	G	2	10
C	CONCORDIA	10	-5				16	-4	-8				9	N	G	3	10

APPENDIX D

PSYCHOLOGICAL CHECKLIST SUMMARY

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: _____

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
1. Can't be bothered.					
2. Drowsy, sleepy.					
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.					
7. Aggressive feelings.					
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.					
15. Frequent bowel movements.					
16. Nervous.					
17. Butterflies.					
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.					
22. Can't be serious.					
23. Frightened.					

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 1 Rating Criteria: (SR) PCPCreports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	1	15	7	8	1
1. Can't be bothered.		1			
2. Drowsy, sleepy.		2	1	(37.5) 3	
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.		1			
6. Impatient.	1	(75) 12**	(57.1) 4	(62.5) 5	1
7. Aggressive feelings.	1	(26.6) 4	(57.1) 4	(62.5) 5	
8. Cried.					
9. Shaking, trembling.		1			
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.					
15. Frequent bowel movements.	1	1	(42.8) 3	(50) 4	
16. Nervous.		(46.6) 7		1	
17. Butterflies.					
18. Lack of confidence.					
19. Did not feel well.			1		
20. Thinks will not perform well.					
21. Very confident.		(66) 10**	1	(50) 4	
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.			2		

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 1 Rating Criteria: (OP) game ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	6	6	10	6	4
1. Can't be bothered.	1				
2. Drowsy, sleepy.	1		1	1	(75) 3 **
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.	1				
6. Impatient.	(80) 5	(66.6) 4	(30) 3 *	(66.6) 4	2
7. Aggressive feelings.	(50) 3		(70) 7**	(50) 3	1
8. Cried.					
9. Shaking, trembling.		1			
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.					
15. Frequent bowel movements.	2		(40) 4	2	1
16. Nervous.	1	(57.1) 4	1	1	1
17. Butterflies.					
18. Lack of confidence.					
19. Did not feel well.			1		
20. Thinks will not perform well.					
21. Very confident.	2	(57.1) 4	(40) 4	2	2
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.				2	

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 2 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	1	10	15	5	1
1. Can't be bothered.					1
2. Drowsy, sleepy.		(30) 3	(66.6) 10	(60) 3	1
3. Feels alone.	1	(50) 5	(60) 9	1	1
4. Feels weak.	1	(30) 3	2	1	
5. Inadequate preparation.		1	(20) 3		
6. Impatient.		4	(40) 2	1	1
7. Aggressive feelings.	1	(40) 4	(40) 6	1	
8. Cried.					
9. Shaking, trembling.	1	(60) 6	(80) 12 **	(100) 5	
10. Poor coordination.		1	1		
11. Trouble seeing, remembering.	1	(70) 7	(93.3) 14 **	(100) 5	
12. Vomited.					
13. Diarrhea.		2	1		
14. Urinated frequently.	1	(50) 5	(40) 6	2	
15. Frequent bowel movements.		2	1	1	
16. Nervous.	1	2	1	(60) 3	
17. Butterflies.				1	
18. Lack of confidence.		1	1	2	
19. Did not feel well.					
20. Thinks will not perform well.		1			
21. Very confident.					
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.					

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 2 Rating Criteria: (OR) game ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	3	4	13	7	5
1. Can't be bothered.			1		
2. Drowsy, sleepy.	1	(75) 3	(76.9) 10 **	2	2
3. Feels alone.	(100) 3	2	(53.8) 7	(42.8) 3	2
4. Feels weak.	2	1	1	1	2
5. Inadequate preparation.		2	2		
6. Impatient.		1	2	(42.8) 3	1
7. Aggressive feelings.	2	1	(46.2) 6		(20) 3
8. Cried.					
9. Shaking, trembling.	2	(75) 3	(76.9) 10 *	(100) 7	(60) 3
10. Poor coordination.					
11. Trouble seeing, remembering.	(100) 3	(100) 4	(76.9) 10 *	(100) 7	(80) 4
12. Vomited.					
13. Diarrhea.			1	1	2
14. Urinated frequently.	1	1	(41.6) 5	(71) 5	(60) 3
15. Frequent bowel movements.			2	1	1
16. Nervous.	1	1	2	(42.8) 3	
17. Butterflies.			1		
18. Lack of confidence.			1	(42.8) 3	
19. Did not feel well.					
20. Thinks will not perform well.					1
21. Very confident.					
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.					

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 3 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	2	3	7	2	1
1. Can't be bothered.					
2. Drowsy, sleepy.					
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.	1	1		1	1
7. Aggressive feelings.	1	1		1	
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.	1		1	2	
15. Frequent bowel movements.	1		1	1	
16. Nervous.			1	1	
17. Butterflies.					
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.	1	2	(71.4) 5	2	1
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.			1		

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 3 Rating Criteria: (OR) game ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	3	3	6	0	3
1. Can't be bothered.					
2. Drowsy, sleepy.					
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.	1		1		2
7. Aggressive feelings.	1		1		2
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.	2		1		1
15. Frequent bowel movements.	2		1		1
16. Nervous.					2
17. Butterflies.					
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.	(100) 3	2	(83.5) 5		2
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.		1			

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 4 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	1	16	11	5	1
1. Can't be bothered.					
2. Drowsy, sleepy.		1			
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.	1	(62.5) 10	(100) 11	(100) 5	1
7. Aggressive feelings.					
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.			1		
14. Urinated frequently.					
15. Frequent bowel movements.					
16. Nervous.		(18.7) 3	(27.2) 3	2	1
17. Butterflies.					
18. Lack of confidence.		1			
19. Did not feel well.					
20. Thinks will not perform well.		(18.7) 3	1		
21. Very confident.	1	(56.2) 9	(63.6) 7	(60) 3	
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.			1		

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 4 Rating Criteria: (GR) game ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	6	9	7	8	3
1. Can't be bothered.					
2. Drowsy, sleepy.		1			
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.	(83.3) 5	(77.8) 7	(71.4) 5	(87.5) 7	(100) 3
7. Aggressive feelings.	1				
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					1
14. Urinated frequently.					
15. Frequent bowel movements.					
16. Nervous.	1	4	1	2	1
17. Butterflies.					
18. Lack of confidence.				1	
19. Did not feel well.					
20. Thinks will not perform well.		2		2	
21. Very confident.	(50) 3	(77.8) 7	(71.4) 5	(37.5) 3	2
22. Can't be serious.	1				
23. Frightened.					
24. No Diagnostic checked.			1		

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 5 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	0	13	13	8	0
1. Can't be bothered.					
2. Drowsy, sleepy.	1	2		2	
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.		(61.5) 8	(30.7) 4	(75) 6	
7. Aggressive feelings.			1	1	
8. Cried.					
9. Shaking, trembling.		(30.7) 4	2	2	
10. Poor coordination.					
11. Trouble seeing, remembering.			1	1	
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.		(76.9) 10	(61.5) 8	(75) 6	
15. Frequent bowel movements.		(30.7) 4	(30.7) 4	2	
16. Nervous.		(38.4) 5	(30.7) 4	(75) 6	
17. Butterflies.		2	(23.0) 3	2	
18. Lack of confidence.				1	
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.			1		
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.					

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 5 Rating Criteria: (GR) game ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	3	2	18	8	3
1. Can't be bothered.					
2. Drowsy, sleepy.			(22.2) 4	1	
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.	1	2	(50) 9	(37.5) 3	(100) 3
7. Aggressive feelings.		1	1		
8. Cried.					
9. Shaking, trembling.	1	1	(27.7) 5	1	
10. Poor coordination.					
11. Trouble seeing, remembering.			1	1	
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.	(100) 3	(100) 2	(55.5) 10	(75) 6	(100) 3
15. Frequent bowel movements.	1	2	(22.2) 4	2	1
16. Nervous.		2	(33.3) 6	(50) 4	(100) 3
17. Butterflies.			(33.3) 6	1	
18. Lack of confidence.			1		
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.			1	1	
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.		2			

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 6 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	2	4	12	8	2
1. Can't be bothered.	1		1		
2. Drowsy, sleepy.			1		
3. Feels alone.					
4. Feels weak.				1	
5. Inadequate preparation.	1				
6. Impatient.		(75) 3	(58.3) 7	(50) 4	
7. Aggressive feelings.			2		
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.			1		
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.					
15. Frequent bowel movements.			1		
16. Nervous.					
17. Butterflies.					
18. Lack of confidence.	1				
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.	1	(100) 4	(91.6) 11	(75) 6	1
22. Can't be serious.	1		2	1	
23. Frightened.					
24. No Diagnostic checked.					1

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 6 Rating Criteria: (SR) game ratin

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	5	6	6	7	4
1. Can't be bothered.	1		1		
2. Drowsy, sleepy.					1
3. Feels alone.					
4. Feels weak.		1			
5. Inadequate preparation.	1				
6. Impatient.	2	(83.3) 5	3	2	1
7. Aggressive feelings.	1	1		1	
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.	1				
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.					
15. Frequent bowel movements.		1			
16. Nervous.					
17. Butterflies.					
18. Lack of confidence.	1				
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.	(60) 3	(100) 6	(66) 4	(85.7) 6	(75) 3
22. Can't be serious.	2		1		1
23. Frightened.					
24. No Diagnostic checked.			1		

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 7 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	0	13	12	2	2
1. Can't be bothered.					
2. Drowsy, sleepy.		1	2	1	
3. Feels alone.		1			
4. Feels weak.		1			
5. Inadequate preparation.		1			
6. Impatient.					
7. Aggressive feelings.					
8. Cried.					
9. Shaking, trembling.		1		1	
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.		(61.5) 8	(66.6) 8	1	
15. Frequent bowel movements.		2	(33.3) 4	1	
16. Nervous.		1	1	1	
17. Butterflies.		(38.4) 5	(50) 6	1	
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.		1			
21. Very confident.		(92.3) 12	(100) 12	2	2
22. Can't be serious.					
23. Frightened.		1		1	
24. No Diagnostic checked.					

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 7 Rating Criteria: (SR) game ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	5	9	7	5	3
1. Can't be bothered.					
2. Drowsy, sleepy.		1			
3. Feels alone.		2	1		1
4. Feels weak.		1			
5. Inadequate preparation.	1				
6. Impatient.					
7. Aggressive feelings.					
8. Cried.					
9. Shaking, trembling.	1				1
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.	2	(66.6) 6	(42.8) 3	(80) 4	2
15. Frequent bowel movements.		(33.3) 3		(60) 3	1
16. Nervous.	1	1			1
17. Butterflies.	1	(44.4) 4	(42.8) 3	(60) 3	1
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.		1			
21. Very confident.	(100) 5	(88.8) 8	(85.7) 6	(100) 5	(100) 3
22. Can't be serious.					
23. Frightened.		1			1
24. No Diagnostic checked.					

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 8 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	2	2	14	12	1
1. Can't be bothered.	1			1	
2. Drowsy, sleepy.					
3. Feels alone.			1		
4. Feels weak.					
5. Inadequate preparation.		2	1	2	
6. Impatient.	1	1	(50) 7	(58.3) 7	1
7. Aggressive feelings.	2				
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.					
11. Trouble seeing, remembering.			1		
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.					
15. Frequent bowel movements.					
16. Nervous.	1			1	1
17. Butterflies.					
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.		1			
21. Very confident.	1		(85.7) 12**	(75) 9	1
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.			2		

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 8 Rating Criteria: (GP) game ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	7	8	5	3	3
1. Can't be bothered.	1			1	
2. Drowsy, sleepy.					
3. Feels alone.	1				
4. Feels weak.					
5. Inadequate preparation.	1	1	2		1
6. Impatient.	(57.1) 4	(37.5) 3	(60) 3	(75) 6	1
7. Aggressive feelings.	1		1	1	
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.					
11. Trouble seeing, remembering.				1	
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.					
15. Frequent bowel movements.					
16. Nervous.			1	1	1
17. Butterflies.					
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.	1				
21. Very confident.	(71.4) 5	(75) 6	(80) 4	(75) 6	(100) 3
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.		2			

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 9 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	0	8	17	7	2
1. Can't be bothered.		1			
2. Drowsy, sleepy.		1			
3. Feels alone.		(37.5) 3	(23.5) 4	2	
4. Feels weak.			3		
5. Inadequate preparation.		1			
6. Impatient.		(62.5) 5	(100) 17**	(71.4) 5	
7. Aggressive feelings.		1	(29.4) 5		
8. Cried.					
9. Shaking, trembling.				1	
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					1
14. Urinated frequently.					
15. Frequent bowel movements.		1			
16. Nervous.		2	(35.2) 6	1	
17. Butterflies.					
18. Lack of confidence.				1	
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.		1	2	1	2
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.					

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 9 Rating Criteria: (OR) game ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	3	8	12	6	5
1. Can't be bothered.	1				
2. Drowsy, sleepy.		1			
3. Feels alone.	2	1	2	1	(60) 3
4. Feels weak.			1	1	1
5. Inadequate preparation.	1				
6. Impatient.	1	(71.4) 5	(83.3) 10	(83.3) 5	(100) 5
7. Aggressive feelings.		1	(33.3) 4		1
8. Cried.					
9. Shaking, trembling.					1
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.			1		
14. Urinated frequently.					
15. Frequent bowel movements.			1		
16. Nervous.	1	2	(33.3) 4		2
17. Butterflies.	2	(62.5) 5	(66.6) 8	(71.4) 5	(80) 4
18. Lack of confidence.		1			
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.		2	2	1	1
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.					

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 10 Rating Criteria: (SR) PCPC reports

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	0	6	15	12	1
1. Can't be bothered.					
2. Drowsy, sleepy.			1		1
3. Feels alone.					
4. Feels weak.		1		(25) 3	
5. Inadequate preparation.		2		2	
6. Impatient.		(50) 3	(26.6) 4	(41.6) 5	
7. Aggressive feelings.			2		
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.			1	1	
15. Frequent bowel movements.		(100) 6	(26.6) 4	(50) 6	1
16. Nervous.		2	(33.3) 5	(25) 3	
17. Butterflies.		(66.6) 4	(66.6) 10	(91.6) 11	1
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.		(50) 3	(86.6) 13	(91.6) 11	1
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.					

PSYCHOLOGICAL CHECKLIST SUMMARY

Athlete: S 10 Rating Criteria: (OR) game ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	7	8	5	8	6
1. Can't be bothered.					
2. Drowsy, sleepy.			1	1	
3. Feels alone.					
4. Feels weak.	1	1	1		1
5. Inadequate preparation.	1	1	1		1
6. Impatient.	2	2	2	(50) 4	2
7. Aggressive feelings.	1				1
8. Cried.					
9. Shaking, trembling.					
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.		1			1
15. Frequent bowel movements.	(57.1) 4	2	(80) 4	(37.5) 3	(66.6) 4
16. Nervous.	2	1		2	(50) 3
17. Butterflies.	(71.4) 5	(75) 6	(100) 5	(87.5) 7	(83.3) 5
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.					
21. Very confident.	(71.4) 5	(75) 6	(80) 4	(100) 8	(83.3) 5
22. Can't be serious.	1				
23. Frightened.					
24. No Diagnostic checked.					

PSYCHOLOGICAL CHECKLIST SUMMARY

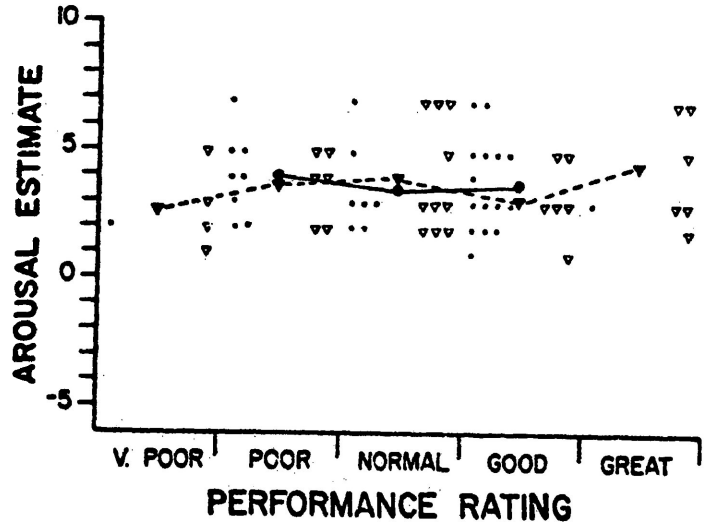
Athlete: S 11 Rating Criteria: (SR) PCPC reports

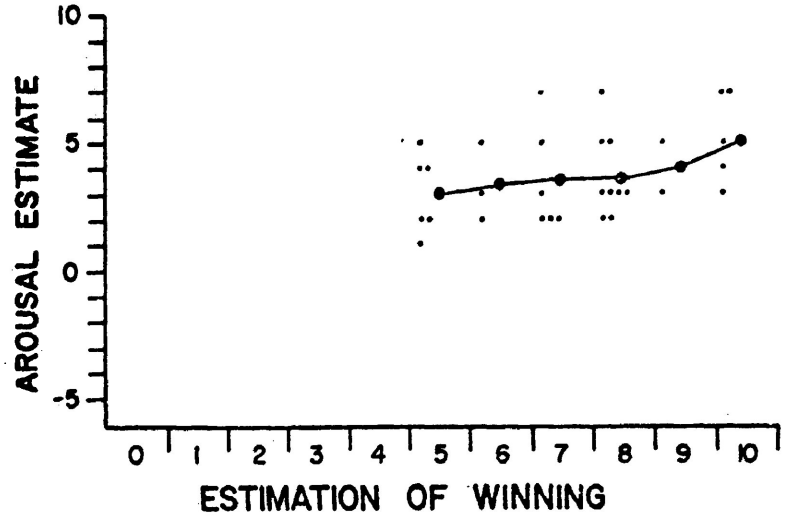
DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	0	17	11	4	2
1. Can't be bothered.					
2. Drowsy, sleepy.			1		
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.		(94.1) 16 **	(100) 11	(100) 4	1
7. Aggressive feelings.					
8. Cried.					
9. Shaking, trembling.		(23.5) 4	(27.2) 3	1	
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.		1	1	2	
15. Frequent bowel movements.		(23.5) 4	(36.3) 4	2	1
16. Nervous.		(88.2) 15 **	(90.9) 10	(100) 4	1
17. Butterflies.			1		
18. Lack of confidence.			1		
19. Did not feel well.					
20. Thinks will not perform well.			1		
21. Very confident.		(94.1) 16 **	(81.8) 9	(100) 4	2
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.					

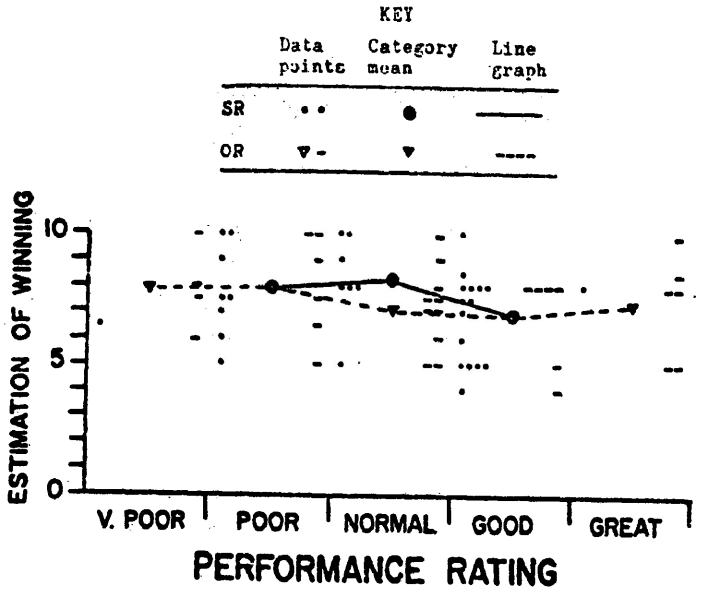
PSYCHOLOGICAL CHECKLIST SUMMARY

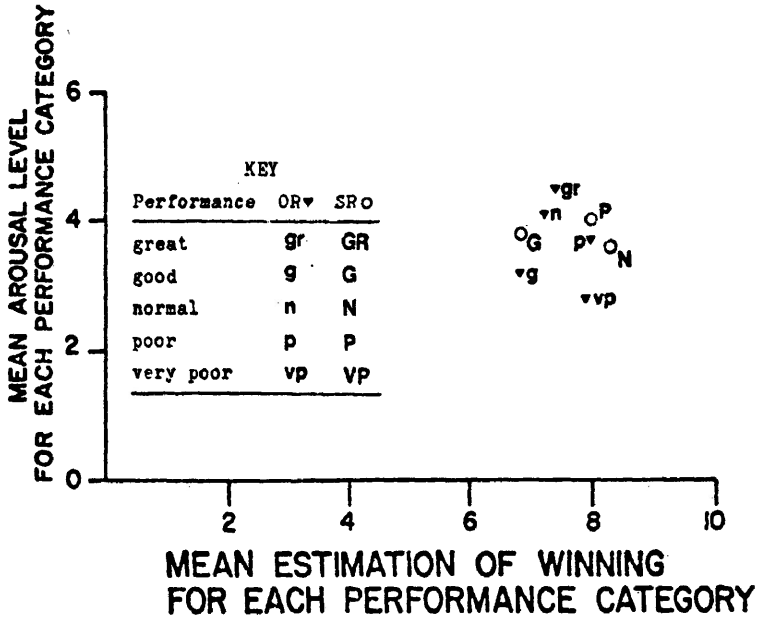
Athlete: S 11 Rating Criteria: (OR) face ratings

DIAGNOSTIC	PERFORMANCE RATING				
	Great	Good	Normal	Poor	Very Poor
	4	4	16	6	4
1. Can't be bothered.					
2. Drowsy, sleepy.			1		
3. Feels alone.					
4. Feels weak.					
5. Inadequate preparation.					
6. Impatient.	(100) 4	(100) 4	(100) 16	(100) 6	(75) 3
7. Aggressive feelings.			1		
8. Cried.					
9. Shaking, trembling.	2		(25) 4	1	1
10. Poor coordination.					
11. Trouble seeing, remembering.					
12. Vomited.					
13. Diarrhea.					
14. Urinated frequently.	1		1	2	
15. Frequent bowel movements.	2	1	(31.2) 5	(50) 3	
16. Nervous.	(75) 3	(100) 4	(93.7) 15	(100) 6	(75) 3
17. Butterflies.			1		
18. Lack of confidence.					
19. Did not feel well.					
20. Thinks will not perform well.			1		
21. Very confident.	(100) 4	(100) 4	(93.7) 15	(100) 6	(100) 4
22. Can't be serious.					
23. Frightened.					
24. No Diagnostic checked.					

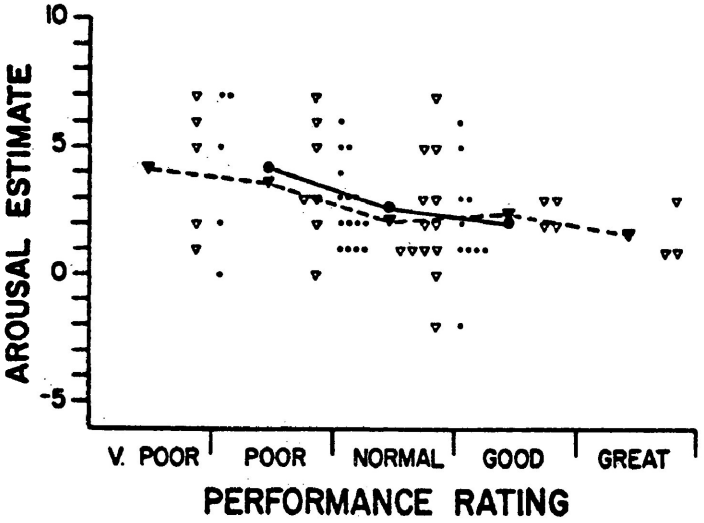


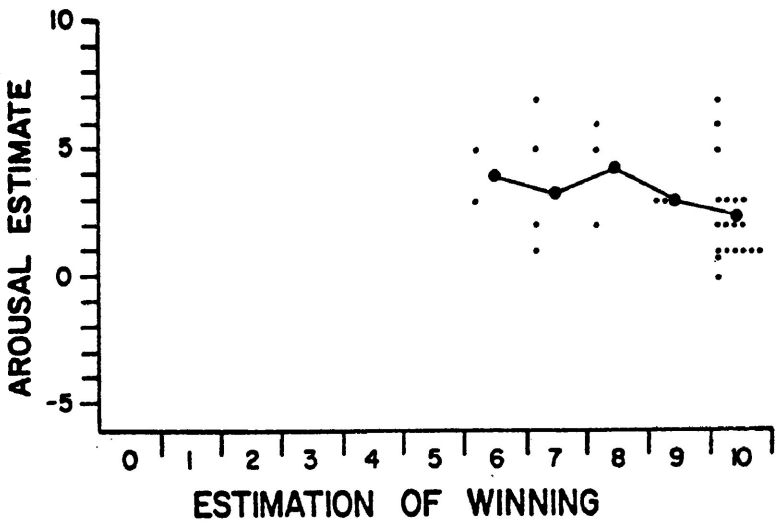


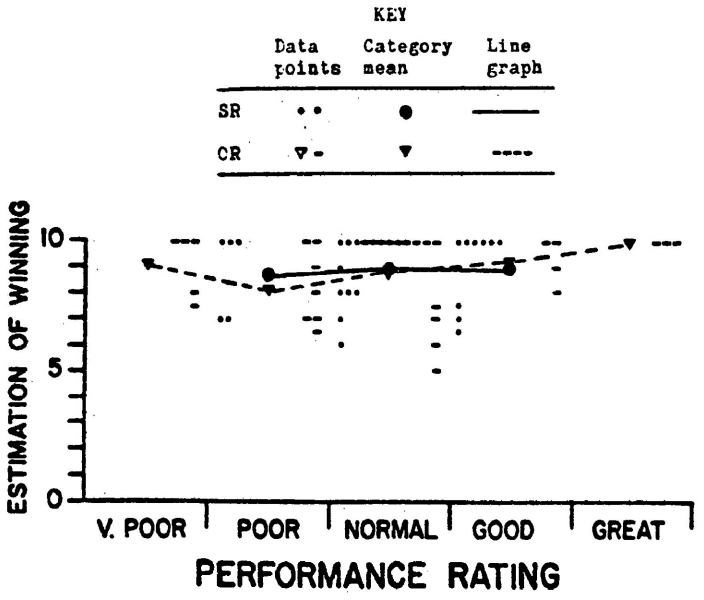


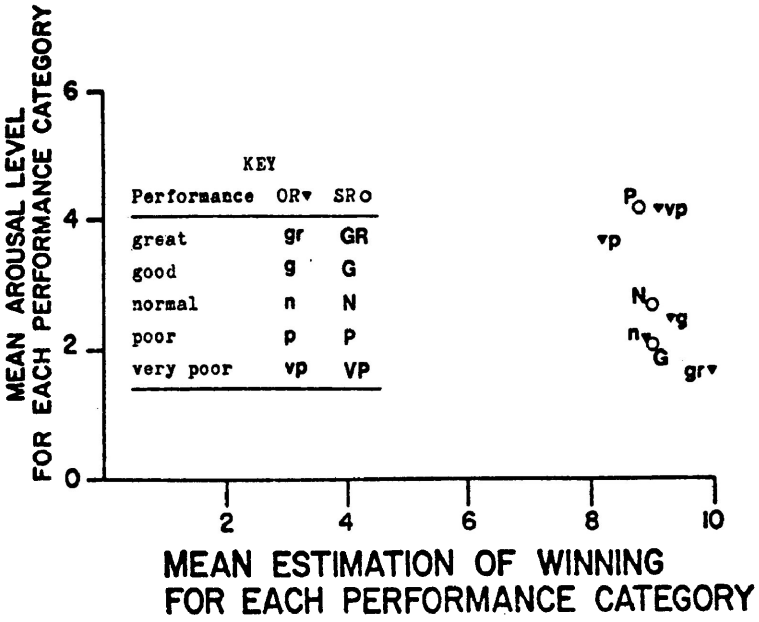


Appendix E Subject 1









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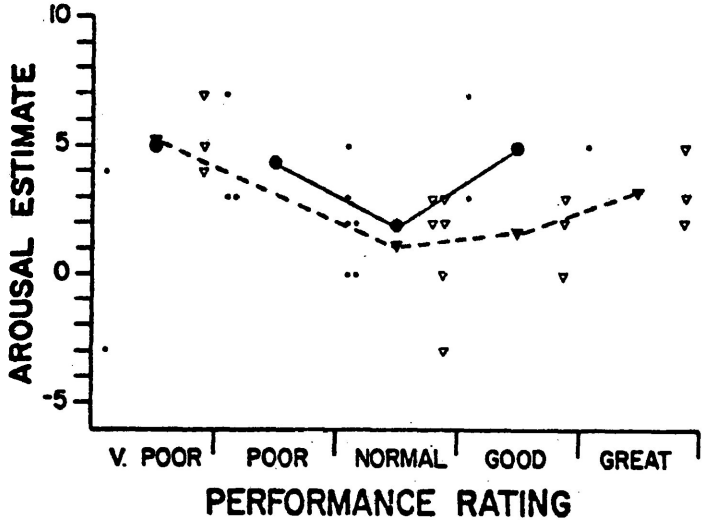

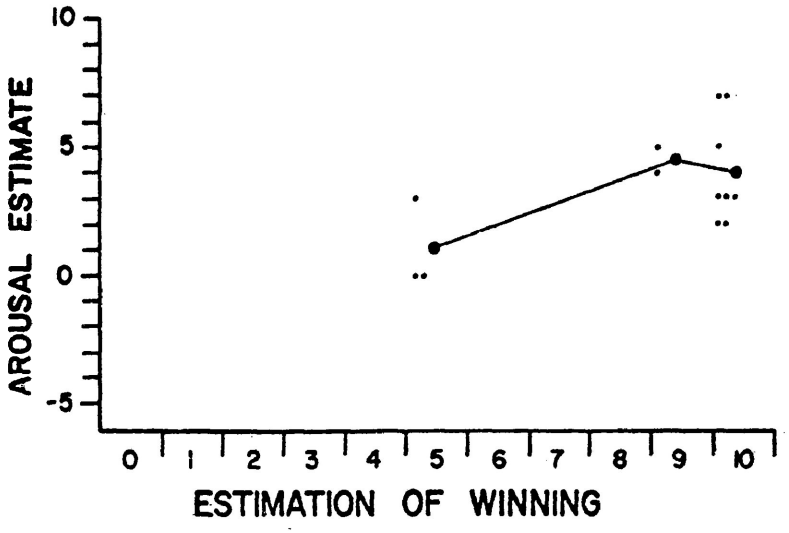

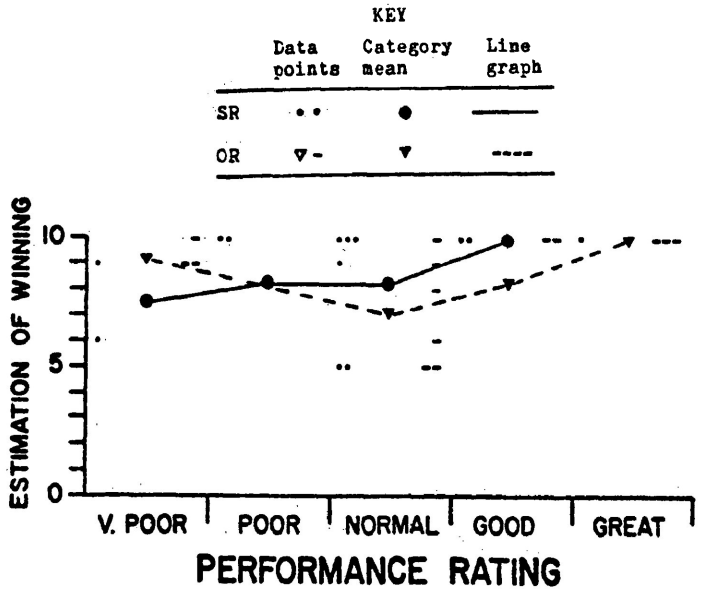

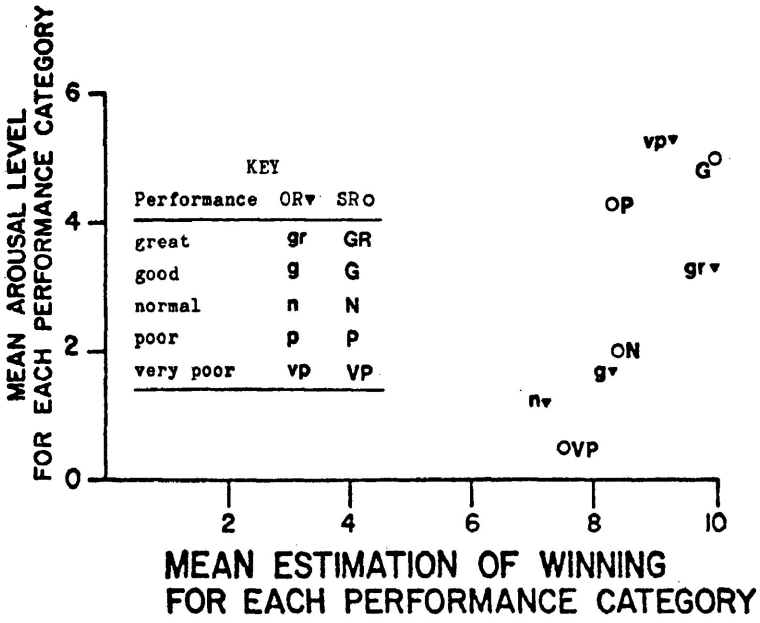

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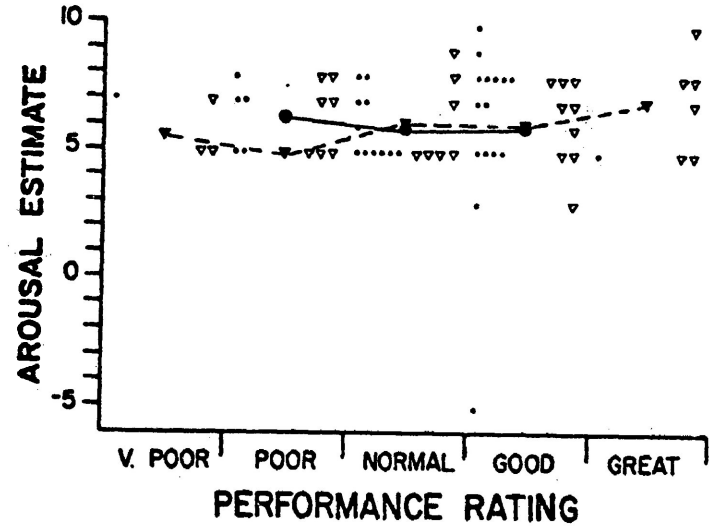

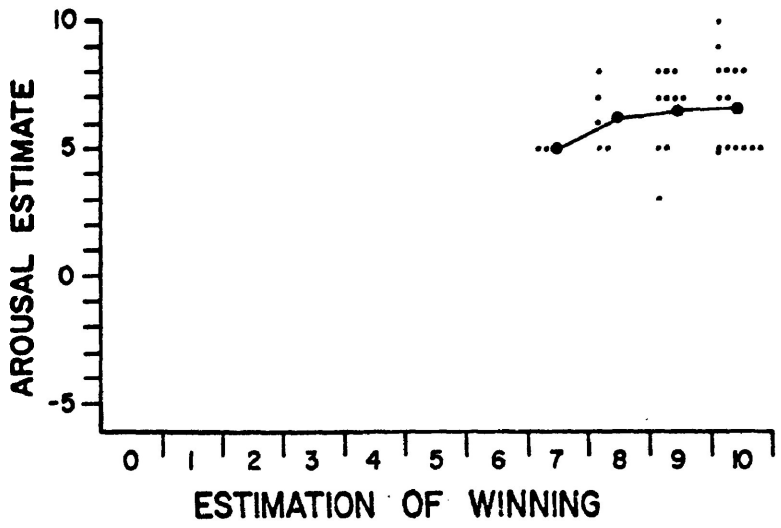

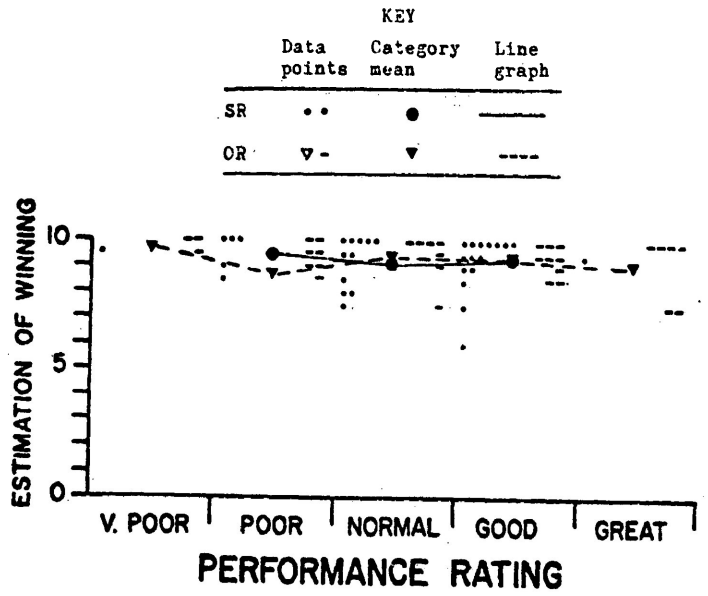

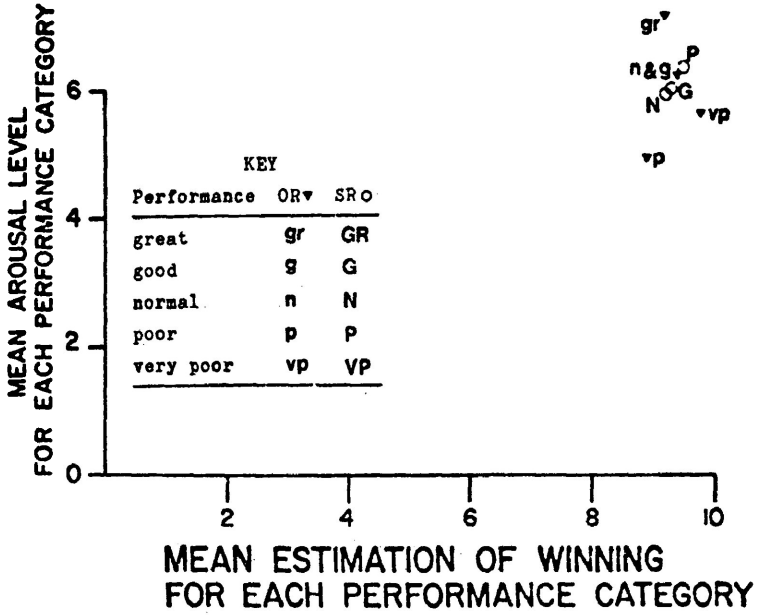

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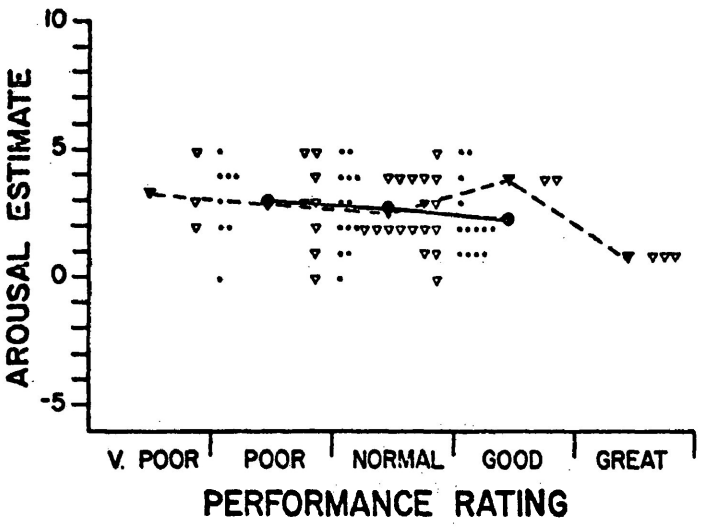

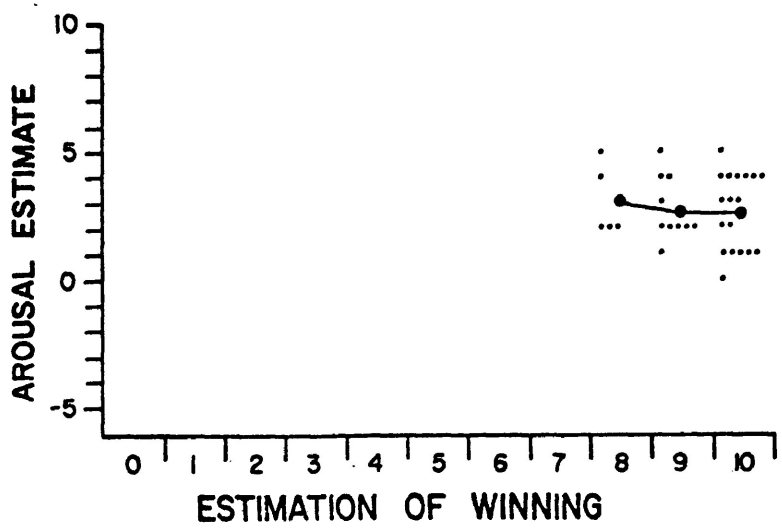

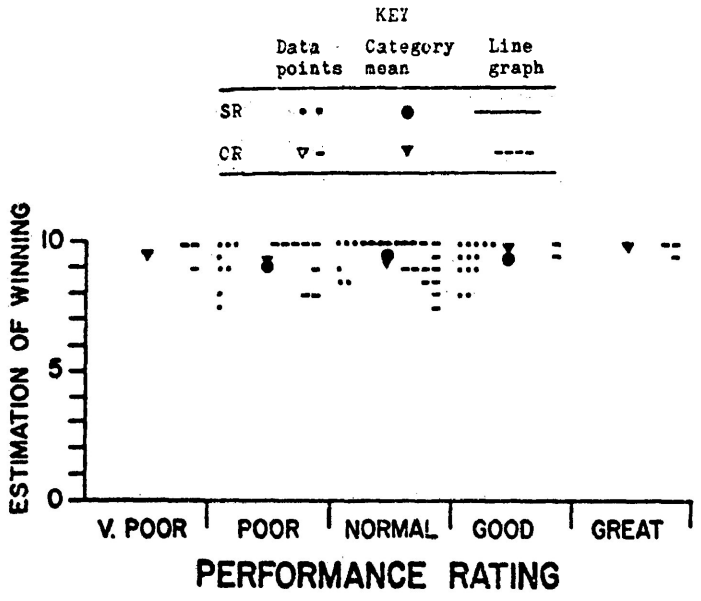

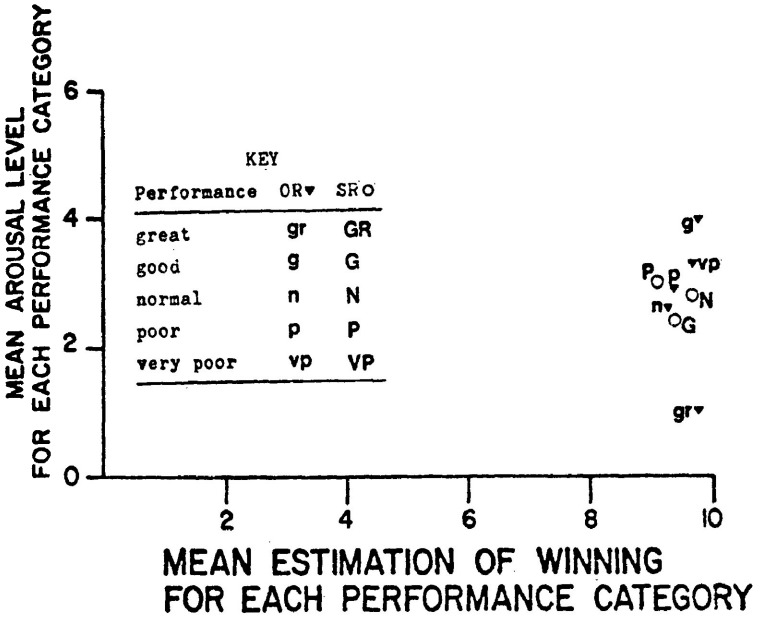

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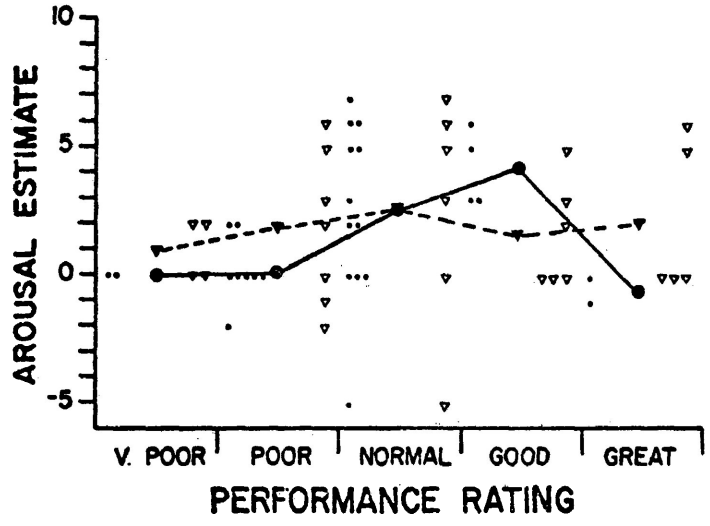

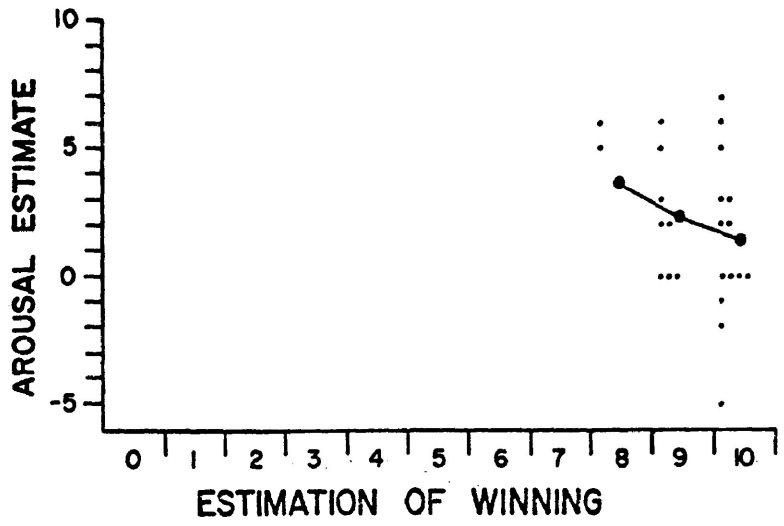

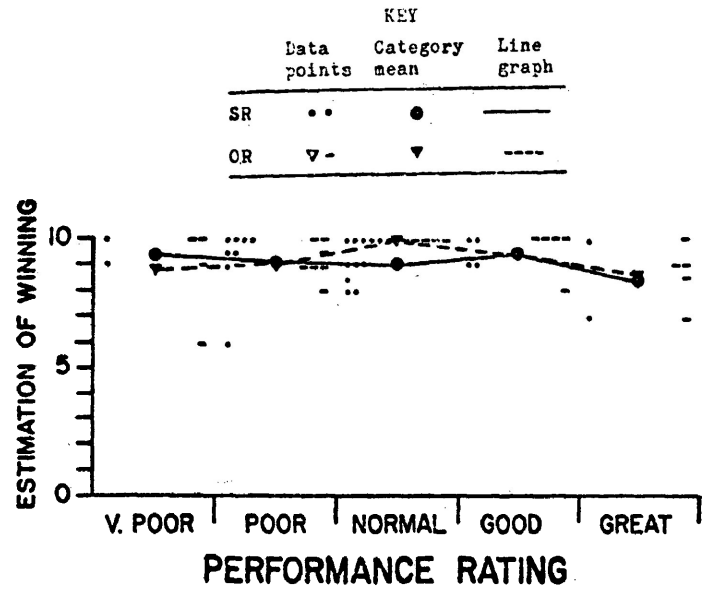

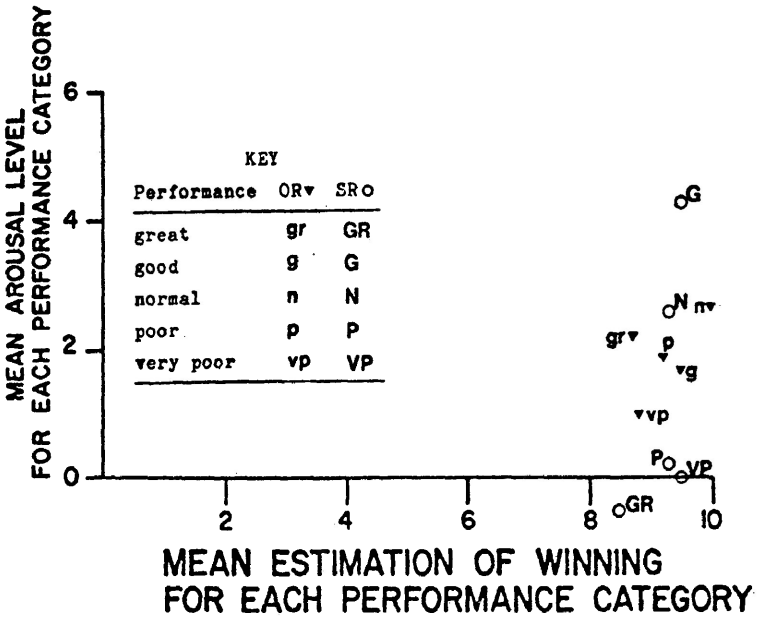

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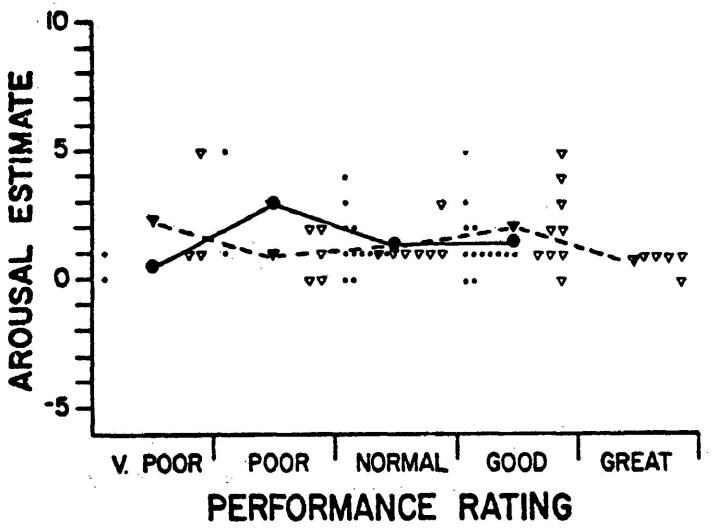
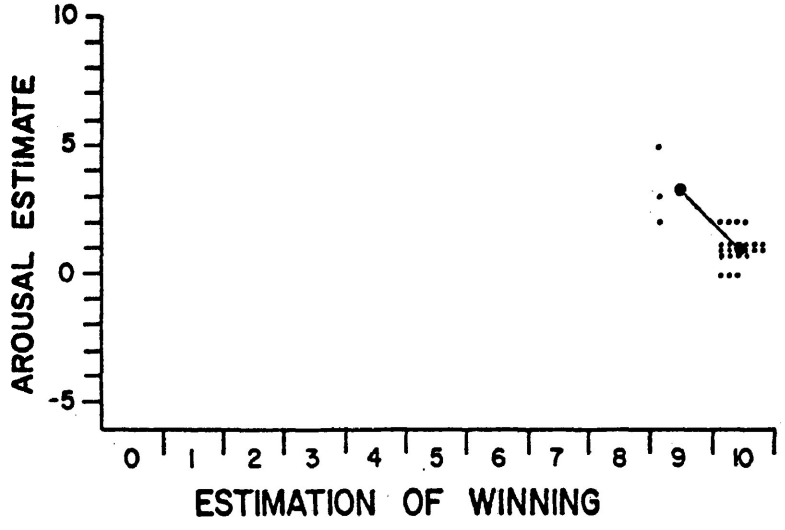
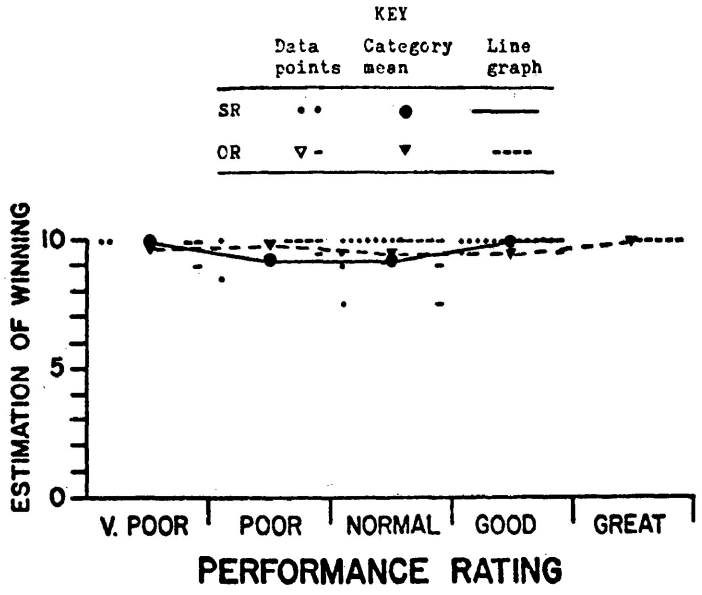
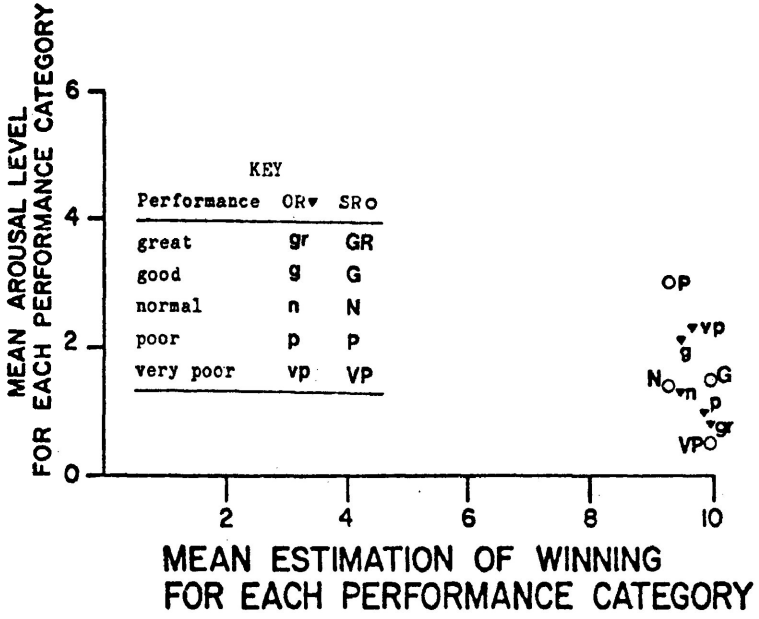
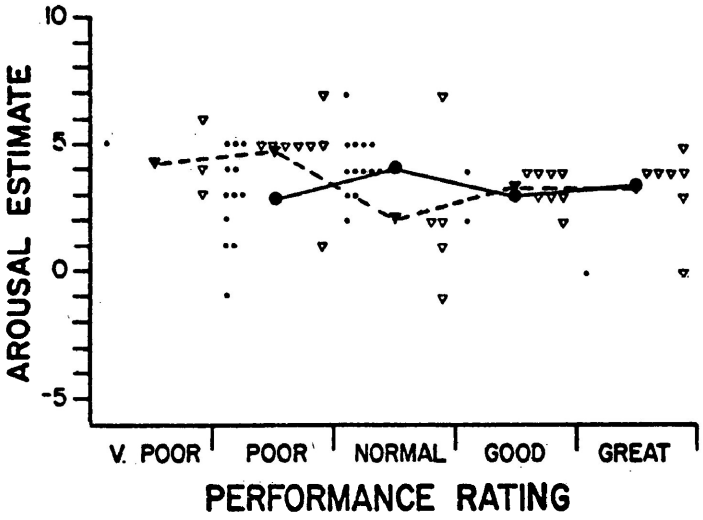


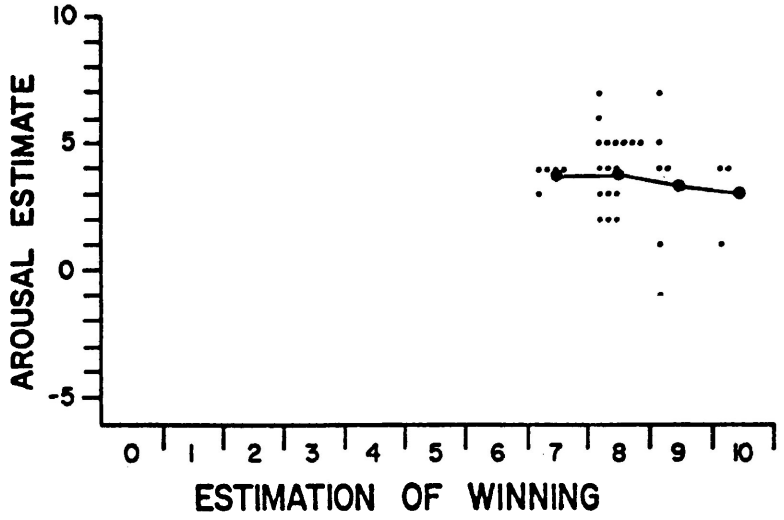


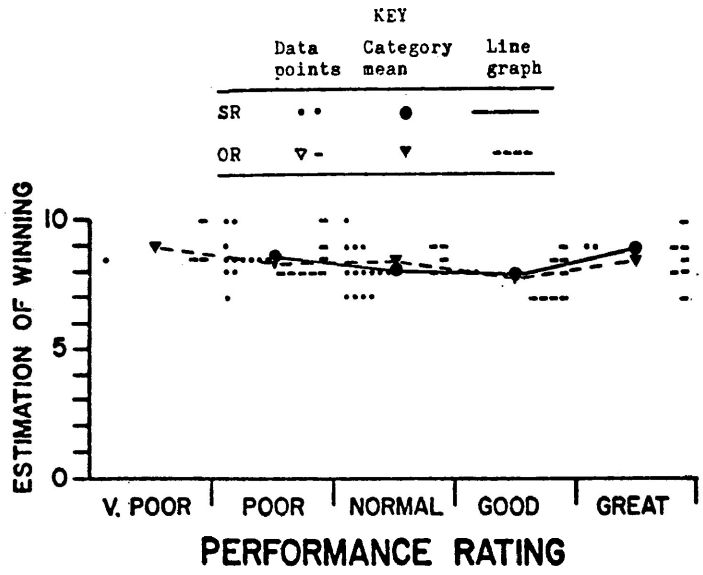


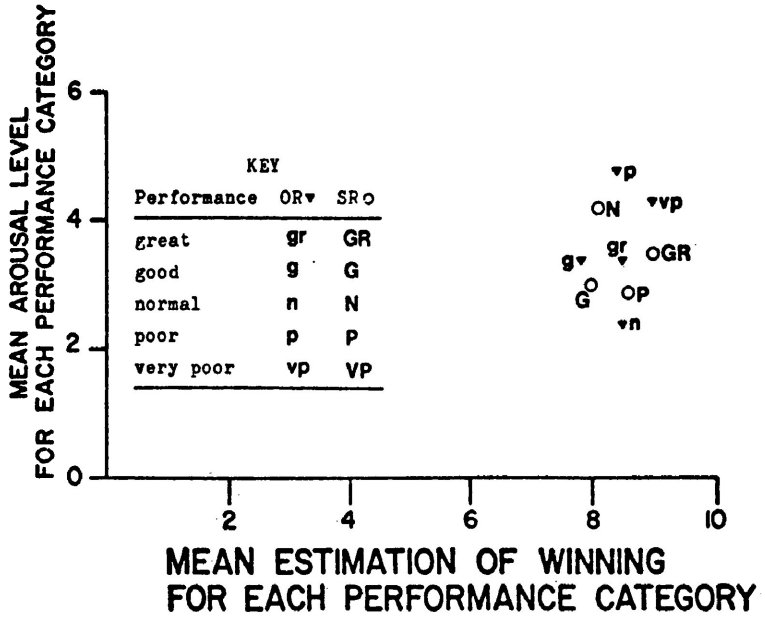


Appendix E Subject 7

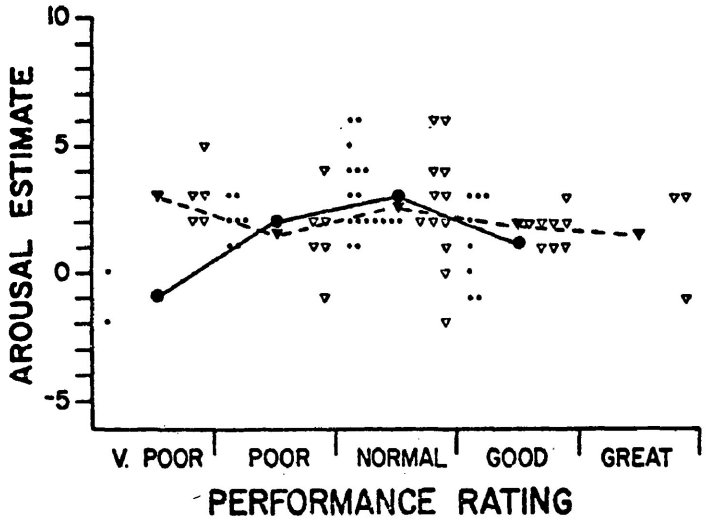


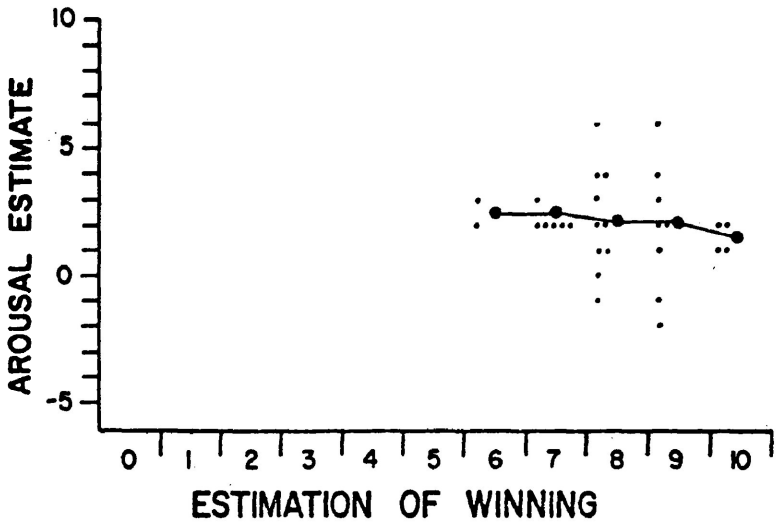


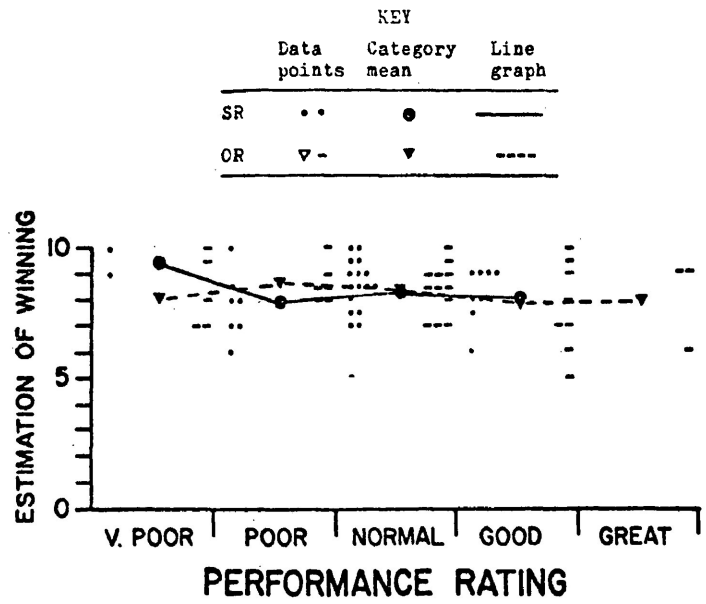


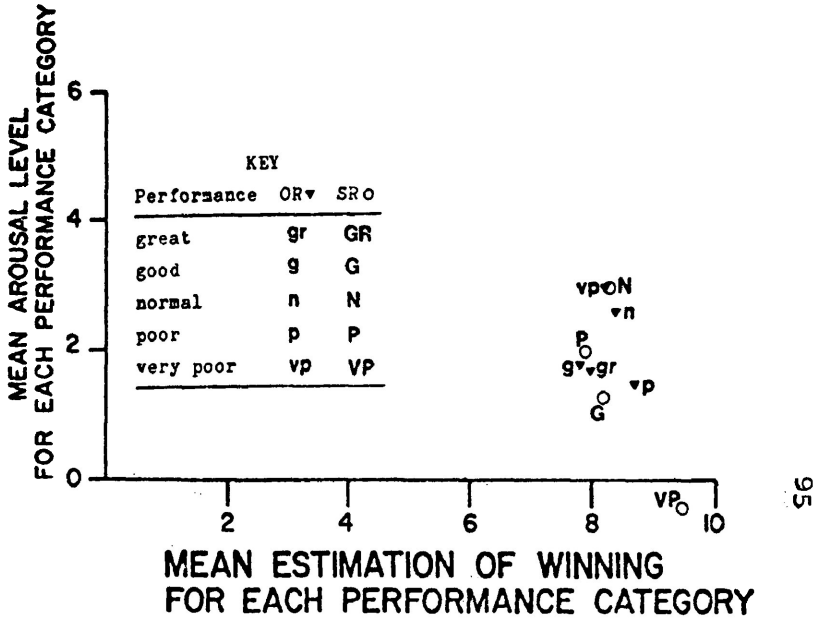


Appendix E Subject 8

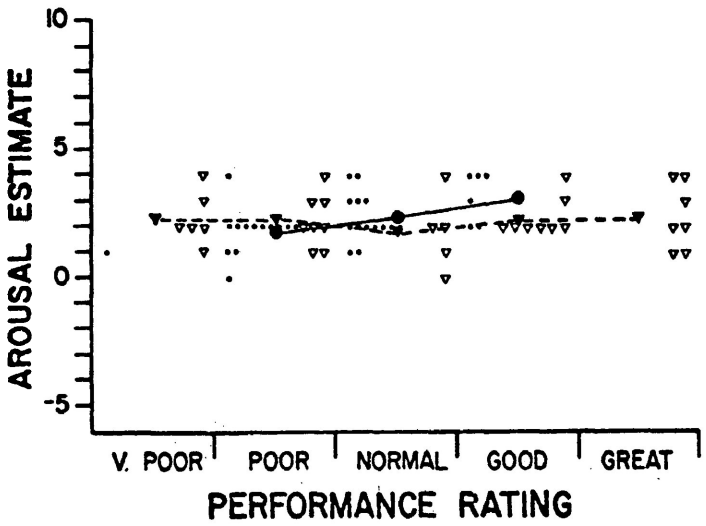


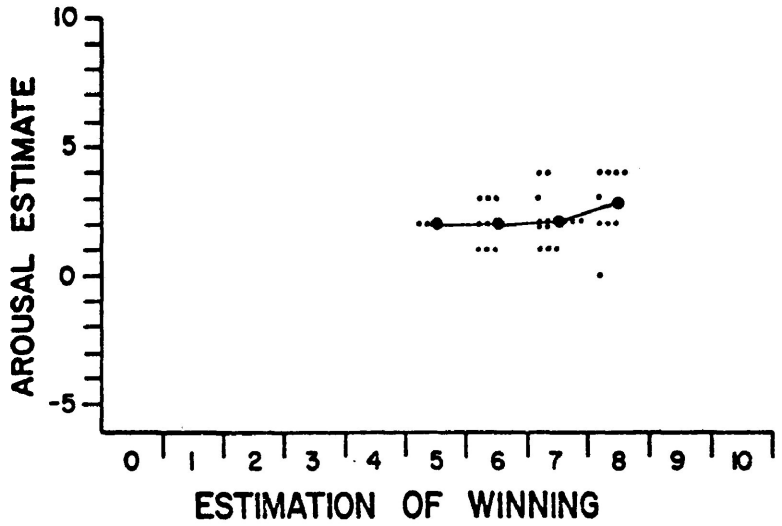


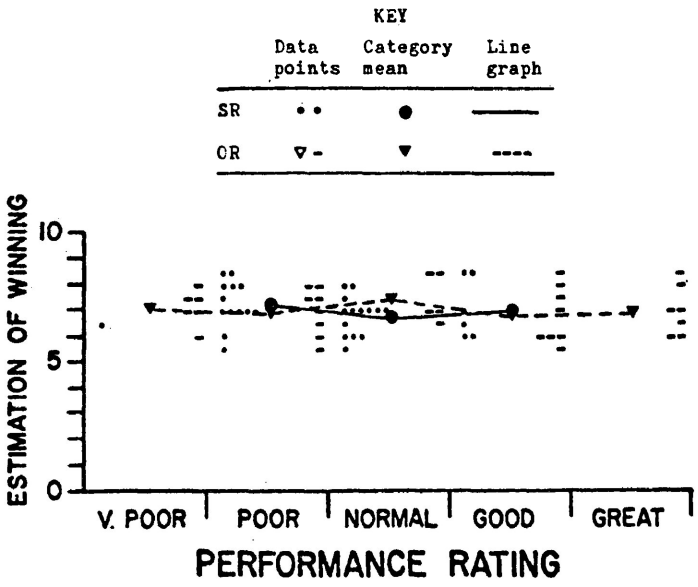


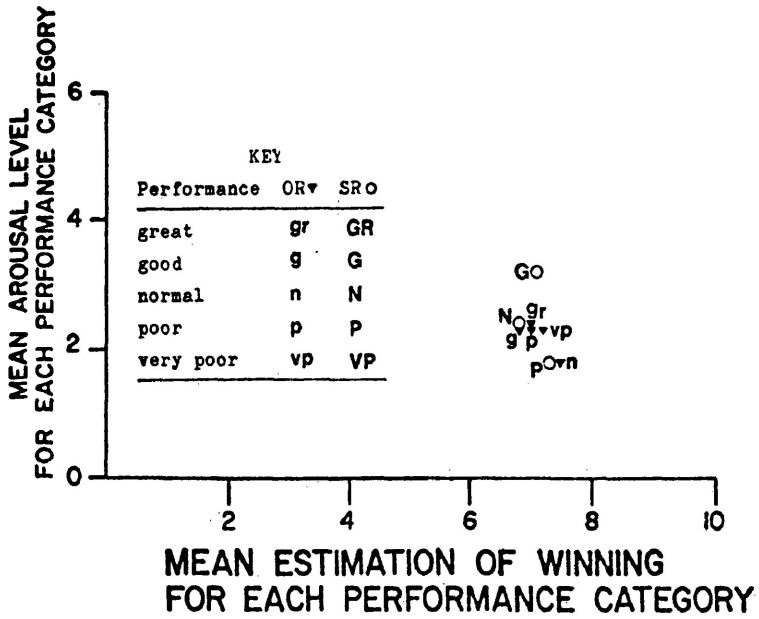


Appendix E Subject 9

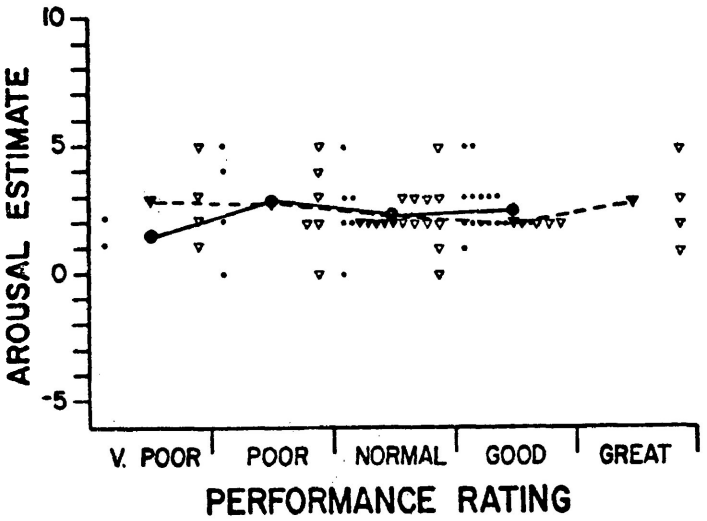


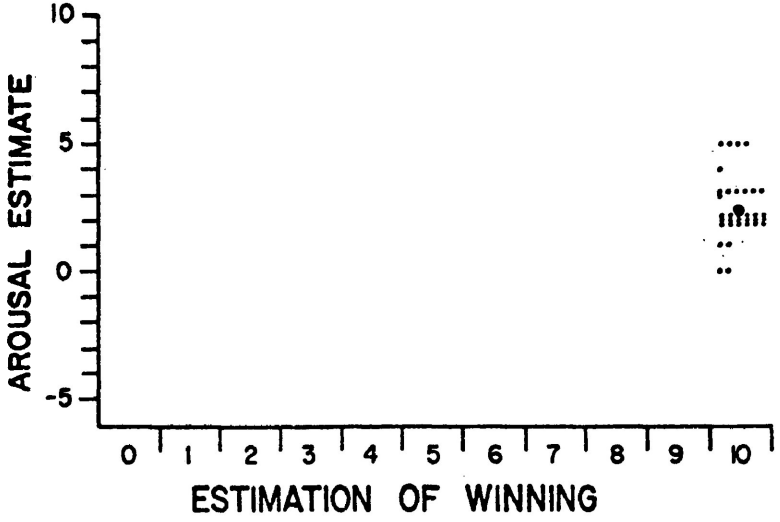


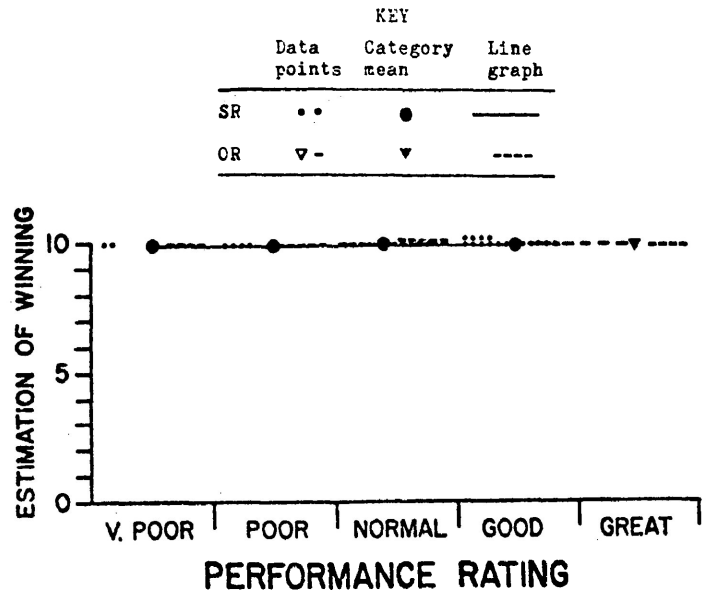


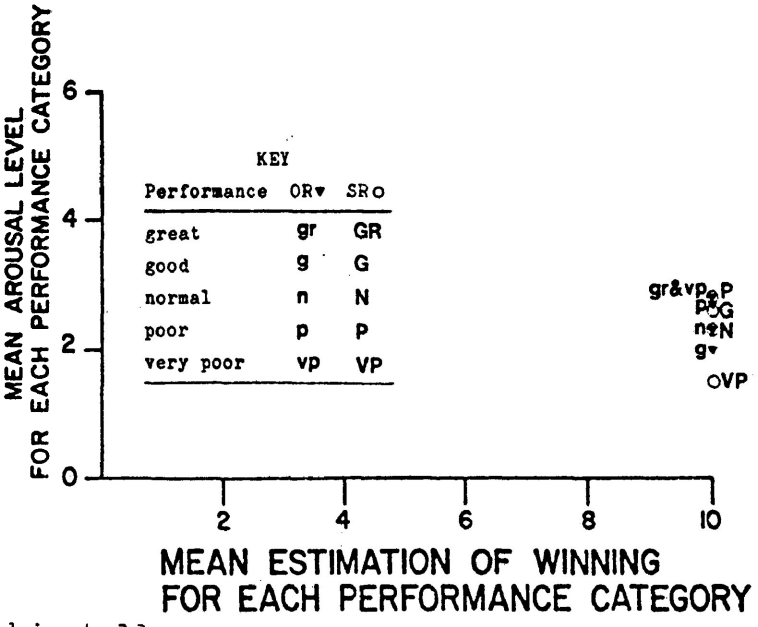


Appendix E Subject 10









Appendix E Subject 11

APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 1

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	30	20	23	6	1
GOOD	21	15	16	6	15
NORMAL	18	10	9	10	7
POOR	12	6.5	3	6	8
VERY POOR	5	3	-2	4	1

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.

OBJECTIVE RATINGS	VP	P	N	G	Gr
GR				5	1
G			1	5	
N		2	4	4	
P	1	3	1	1	
VP		3	1		

SUBJECTIVE REPORTS

Percentage agreement

40.6

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

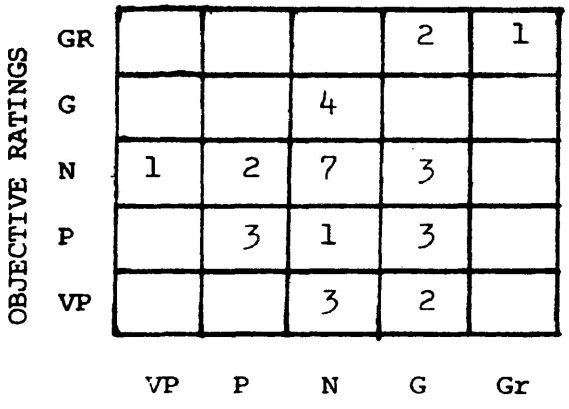
APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 2

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	9	3	3	3	1
GOOD	4	1	0	4	10
NORMAL	0	-1.5	-3	13	15
POOR	-1.5	-3	-4.5	7	5
VERY POOR	-3	-5	-6	5	1

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.



Percentage agreement

34.4

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 3

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT		2	1	3	1
GOOD		0	-1.5	3	2
NORMAL	-3	-2	-4	6	7
POOR		-4.5	-6	0	3
VERY POOR		-7	-8	3	2

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.

OBJECTIVE RATINGS	VP	P	N	G	Gr
GR			1	1	1
G		1	2		
N	1	1	3	1	
P					
VP	1	1	1		

SUBJECTIVE REPORTS

Percentage agreement

33.3

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

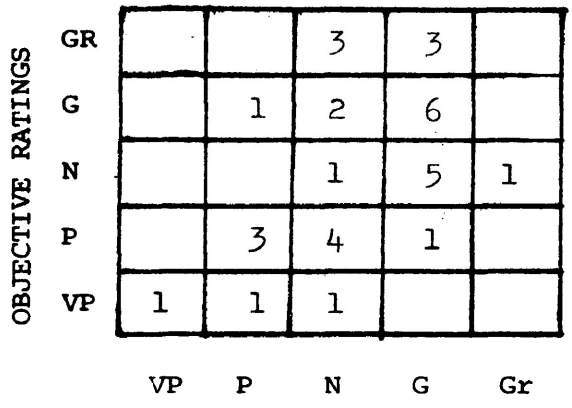
APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 4

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	16	6	4	6	1
GOOD	11	3	1	9	16
NORMAL	6	1	-2	7	11
POOR	3	-5	-6	8	5
VERY POOR	0	-11	-10	3	1

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.



Percentage agreement

33.3

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 5

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	25	22	12	3	0
GOOD	17	12	6	2	13
NORMAL	8	2	1	18	13
POOR	3.5	-2	-3	8	8
VERY POOR	-1	-6	-7	3	0

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.

OBJECTIVE RATINGS	VP	P	N	G	Gr
GR				3	
G		1		1	
N		3	9	6	
P		3	3	2	
VP		1	1	1	

SUBJECTIVE REPORTS

Percentage agreement

38.2

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 6

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	8	5	3	5	2
GOOD	4	2	1	6	4
NORMAL	0	-1	-1	6	12
POOR	-3	-5	-2.5	7	8
VERY POOR	-5	-9	-4	4	2

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.

OBJECTIVE RATINGS	VP	P	N	G	Gr
GR			2	1	2
G		1	3	2	
N	1	1	4		
P		4	2	1	
VP	1	2	1		

SUBJECTIVE REPORTS

Percentage agreement

46.4

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

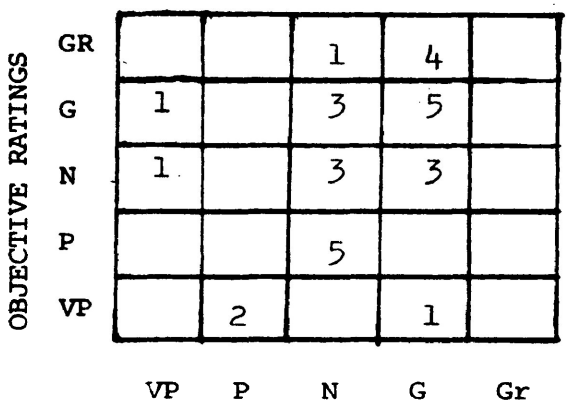
APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 7

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	5	7	0	5	0
GOOD	1.5	3.5	-2	9	13
NORMAL	-2	0	-4	7	12
POOR	-6	-3	-10	5	2
VERY POOR	-10	-6	-15	3	2

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.



Percentage agreement

27.6

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

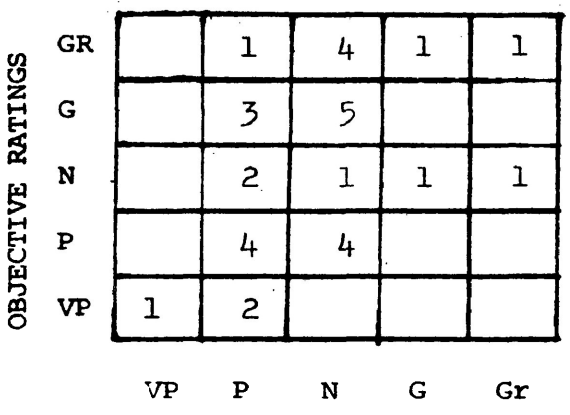
APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 8

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	9	11	11	7	2
GOOD	7	8	5	8	2
NORMAL	5	5	-1	5	14
POOR	3	0	-10	8	12
VERY POOR	1	-5	-19	3	1

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.



Percentage agreement

22.6

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 9

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	15	12	11	3	0
GOOD	9	6	5.5	8	8
NORMAL	3	0	0	12	17
POOR	1.5	-4	-4	6	7
VERY POOR	0	-8	-8	5	2

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.

OBJECTIVE RATINGS	VP	P	N	G	Gr
GR				3	
G		3	3	2	
N	2	1	7	2	
P		2	3	1	
VP		1	4		

SUBJECTIVE REPORTS

Percentage agreement

32.4

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

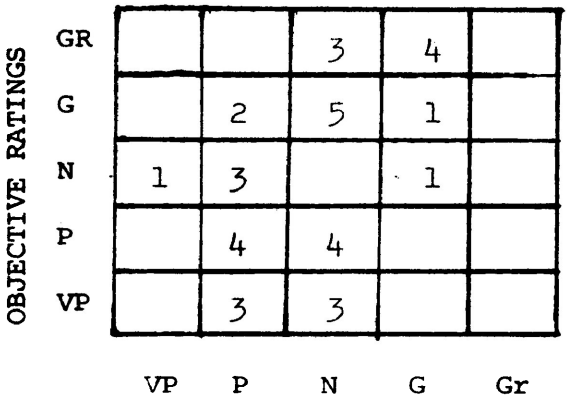
APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 10

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	16	21	7	7	0
GOOD	12	14	2.5	8	6
NORMAL	8	8	-2	5	15
POOR	5	3	-8	8	12
VERY POOR	2	-3	-14	6	1

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.



Percentage agreement

14.7

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.

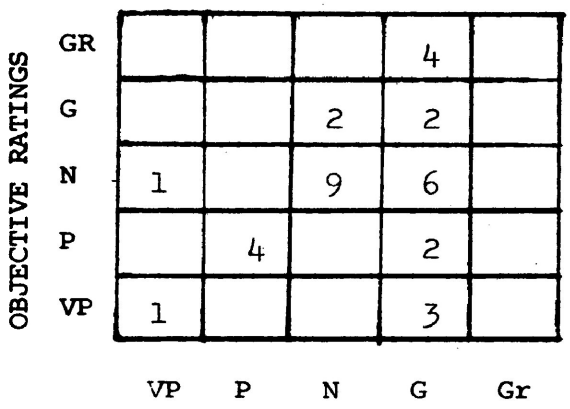
APPENDIX F

PERFORMANCE RATING SCALE CONVERSIONS,
DISTRIBUTIONS AND COMPARISONS

SUBJECT 11

PERFORMANCE CATEGORIES	RATING SCALE			DISTRIBUTIONS	
	A	B	C	OR	SR
GREAT	50	35	36	4	0
GOOD	40	28	25	4	17
NORMAL	30	21	15	16	11
POOR	26	16	2	6	4
VERY POOR	22	11	-10	4	2

ABOVE: Shows the numerical conversions for game statistics totals to nominal performance ratings and the distribution of performance categories within each rating method.



Percentage agreement

47.1

ABOVE: Illustrates the degree of similarity between the subject's objective ratings and his subjective reports of performance.