THE NEED FOR INCLUSION IN NATIONAL CHAMPION PROFESSIONAL GOLFERS

By

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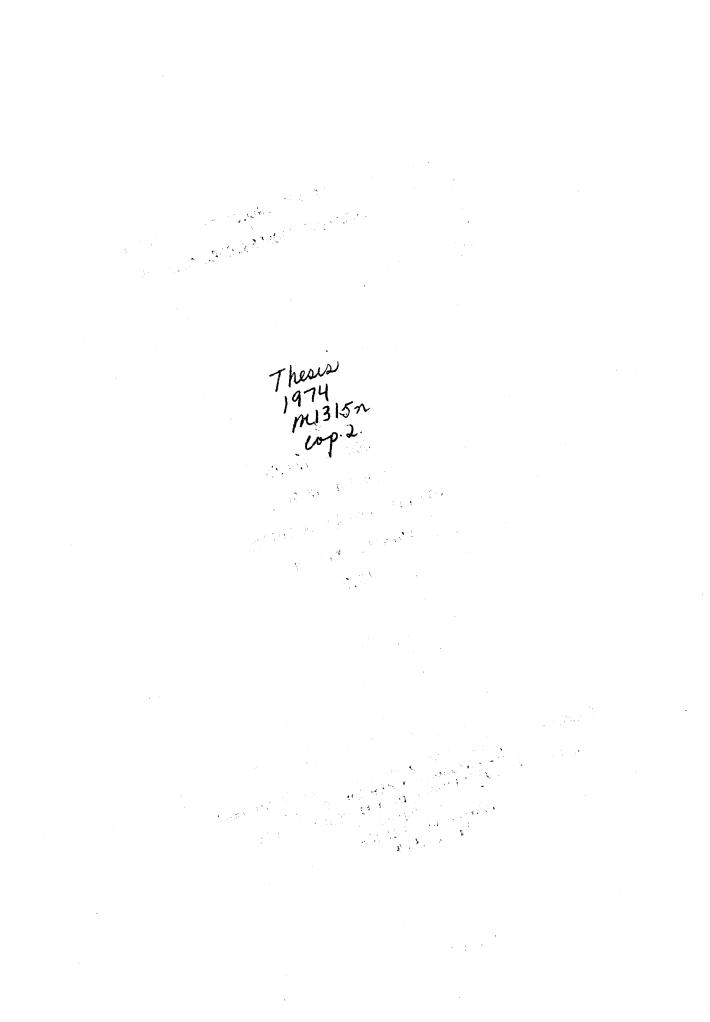
Bachelor of Arts

Southeastern State College

Durant, Oklahoma

1969

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE July, 1974



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PREFACE

This study represents an attempt to analyze the effects of interpersonal stance upon success in highly competitive activities, such as national-level sports and certain types of business and scientific achievement. Dale Maxwell, M.D. (Personal Communication, Stillwater, Oklahoma) brought to my attention the possibility that such successful individuals may include an over-representation of a particular personality trait, a low need for superficial social inclusion.

In an attempt to study this possibility, this study examines the results of a test of interpersonal stance, the FIRO-B, taken by a group of national champion professional golfers. These scores were compared with golfers who were not national champions. A number of difficulties were encountered, including finding a control group which was composed of individuals who were not significantly successful in any competitive activity. Another problem concerned the nature of obtaining the test results. It was feared that interpersonal stance would influence people to participate or not participate in the study.

My appreciation to Dr. Maxwell for sharing his idea with me, to Kenneth D. Sandvold, Ph.D., the chairman of my committee, for his warmth, encouragement and many helpful suggestions, and to Robert Schlottmann, Ph.D., and Larry Hochhaus, Ph.D., committee members, for their considerable effort and time in studying the manuscript and their helpful suggestions. I would also like to thank the Department of Psychology and William Jaynes, Ph.D., head, for financial support,

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Mike Hubbard for his help in seucring the control group data, Buzz Gill, golf professional, for his advice and suggestions, and the professional and amateur golfers who donated their time and effort to complete the FIRO-B and return it to me.

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CHAPTER I

INTRODUCTION

This study is an investigation of certain aspects of the interpersonal style of national champion professional golfers as measured by the FIRO-B Test. The 125 top money winners in professional golf in the United States during 1971, as indicated by their total winnings at the end of that year, were sent the FIRO-B and a letter requesting their cooperation in filling out the test and returning it to the author.

Out of this number, 37 returned their test, either signed, or anonymously. A control group of 270 members of a local golf club was then sent a similar letter and the FIRO-B. Seventy-five (75) of these were returned to the author, either signed or anonymously. The golf handicap of each member of the control group was also obtained, and none had a handicap of less than three.

The purpose of this study was to examine the possibility that national champion golfers have lower needs for inclusion than similar individuals who are not national champions. Specifically, a score of zero or one in Wanted Inclusion (Wi) on the FIRO-B, sometimes called the "exclusive club" score, was thought to be overly represented among national champion golfers and was the central focus of this study. The mean Wanted Inclusion Score found in the national champion group FIRO-B's was compared with the same mean found in the amateur group through use of the t Test.

The FIRO-B Test is a 54-item Guttman Scale designed to measure interpersonal stance in terms of three variables, inclusion, control and affection. Each of these variables is measured at two levels, wanted and expressed. The six scores are said to indicate the basic interpersonal stance of the individual and provide some information about his conflicts in dealing with others. The FIRO-B (Fundamental Interpersonal Relations Orientation--Behavior) is one of a series of similar tests written by William Schutz (1967).

In addition to the possible influence of the need for inclusion on success, a number of factors which could be related to obtaining a high level of performance are also discussed briefly.

CHAPTER II

THE PSYCHOLOGICAL STUDY OF CHAMPIONS

Early observations on the nature of the motive to attain success have come from William James (1890), the work of Dembo (1931), which deals with the level of aspiration, and the writings of Kurt Lewin (1946).

Although James was one of the first psychologists in the United States, his work concerning self esteem, which he defined as the ratio of success to pretensions, continues to be read as classic (McReynolds, Pg. 157). Dembo sparked a great deal of research by introducing the concept of level of aspiration.

Lewin discussed success and failure in terms of the concept of frame of reference. "It has been shown," he wrote, "that to avoid the feeling of failure after a poor performance, the frame of reference is frequently shifted. Other ways to avoid failure are various forms of rationalization" (1946, pg. 830).

But it was Alfred Adler (1917, 1963) who was the most important pioneer in the study of success and failure. He often spoke of it in terms of feelings of individual inferiority. "This inferiority feeling-compensation relationship," he wrote, "appears to us to be the deepest mechanism yet found in all psychological life" (1970a, pg. 39).

It was during Adler's early writings (1917, 1963) that discussion of defense of compensation as brought into play to deal with inferiority

feelings was the central theme of his work. Later, however, he abandoned the concept of compensation and the dynamics of inferiority in favor of "the creative life power of the individual (1970b, pg. 51)." In essence he shifted from a theory based upon deficiency as a motivator to a view which held personal growth as the central motivator. His theory, then, became similar to that of Maslow (1943).

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Although Adler shifted his central theme, his early work has not been forgotten. It continues to enjoy the respect of many therapists and theoreticians although Adler himself appeared to lose interest in it.

When inferiority theory was at its peak, the evaluation a person placed upon his physical organs was considered by Adlerians to be extremely important in shaping his later life. "The development of the young child's life plan," Adler wrote, "is decisively influenced by the evaluation of his organs. The greater the innate inferiority of an organ, the more clearly will the striving for compensation set in . . ." (1970a, pg. 40). Not only will children with such organ inferiority by influenced adversly, but also, according to Adler, so will children who are physically intact but brought up harshly, without proper love and warmth (1970a, pg. 41).

There are two areas in Adler's work which are important to this study. The first is the dynamic of inferiority and the defense against it, compensation. The second is his concept of social interest. Many Adlerians, in fact, see social interest as the basic measure of psychological adjustment. The more socialized a person, the better adjusted they believe him to be. Socialization to these workers does not include the emotionally shallow but skillfully manipulating relationships

such as those attributed to sociopathic individuals. These two Adlerian concepts--social interest and inferiority--are of major importance to this study and may be viewed as closely-related and interchanging.

Adler considered the school to be very important because it could correct the mistakes of the family in developing social interest. He also thought the removal of economic oppression, either from one nation to another or across social classes in a single society, to be very important, but he placed primary emphasis upon the mother. "Yet we consider decisive," he wrote, "the influence of the mother in the family as the one who prepares the way for social interest . . ." (1970, pg. 47).

Characteristics of Successful Sportsmen

While the bulk of the work done in this area points toward psychological differences between highly successful and average or poor competitors, some writers in the field have denied this as an important area for investigation. For instance, among several points which seem to this writer contradictory, Ogilvie (1964) asserted that "psychological driving forces that support the need to compete in major athletics will be proven to be unique for each participant (pg. 428)." He continues in this short paper to stress that no two athletes will be found to be "driven by identical motivational systems" (pg. 428).

In this same paper, Ogilvie states that psychological tests have been very limited in helping coaches understand athletes. He reports that most coaches already know what would be found by psychological testing of their athletes. While stating that all athletes have both

traits which are similar to other athletes and also traits which are unique to the individual, Ogilvie downplays the importance of traits and their correlation to successful competition in major athletic events.

Interestingly, Ogilvie states in his paper his belief that athletes are motivated by four "causes": anxiety, fear, hostility and rage. Of these, he discusses only anxiety. "It is a well-established fact that there is a curvalinear relationship between anxiety and human efficiency which defines the limits of the positive effect of anxiety (pg. 428)," he wrote. He then advocates finding for each athlete the point at which the positive effects of anxiety are highest. This seems to be somewhat of a single-factor theory of athletic motivation.

Rushall (1968) has also proposed that personality is not a significant factor in sport performance. Using the 16 Personality Factor Questionnaire (16 PF) Form A, Rushall analyzed baseball players, basketball players, football players and swimmers. He also analyzed data from first, second and third string players as well as nationally-ranked players, finding no significant relationships between performance and personality. He noted, however, that other investigators also using the 16 PF Questionnaire had found significant results linking personality with success in athletics.

Studies With Positive Findings

A Brazilian investigator, Carvalhaes (1968) found that not only was there a positive correlation between the psychological state and production of champion athletes, but that he could predict, up to a 10 percent margin of error, the athletes' yield through the use of psychological tests.

Using a psychological device called the Miocinetic Technique (PMK), which was developed by a Dr. Emilio Mira y Lopez, Carvalhaes studied world champion professional football players of the Sao Paulo Football Club.

The Miocinetic Technique involved obtaining "lineograms," which are not specifically described, but are said to reflect a specific type of arm movement. A total of 558 "lineograms" were obtained from, on the average, 18 athletes from each of the 16 football games included in the study. Three employees of the football club evaluated the performance of the athletes during the games. One drawback of this difficult and complicated study is that it may deal more with immediate factors than long-term psychological traits.

While most studies which report significant findings concerning the relationship of personality traits and sport success are neither so unique nor so enthusiastic as the one above, when taken together their results are impressive.

One such study was done by Kroll and Crenshaw (1968), who state that most people associated with athletics believe that personality is a very important factor in a successful performance:

Implicit in such a posture are the beliefs that certain personality characteristics: (1) are prerequisites for success and that different athletic activities necessitate different sets of such characteristics; (2) can be linked to motivation for entering, continuing on, or dropping out of participation in a sport; and (3) can be affected by participation and associated experiences dependent upon features found both in the participation and in the specific sport (pg. 97).

The authors go on to mention, however, that little quality work has been done toward the formation of any general principles of personality as related to athletics. They place the blame for this upon inadequate statistical analysis and unreliable test instruments.

Using the Cattell Sixteen Personality Factor Questionnaire Form A, Kroll and Crenshaw compared the differences between four sports. In all, 387 athletes were tested. This included 81 football players, 141 gymnasts, 94 wrestlers and 71 participants in karate training. All four athletic groups represented a homogenous with-in sport sample with subjects drawn from a wide geographic area. The achievement level of all participants was rated excellent or superior. Many of the athletes were nationally ranked, they reported.

Their results suggested that personality traits played a highly significant role in the type of sport chosen, and specifically that the group-dependent vs. self-sufficient trait may be a significant discriminator between team sport participants and those who practice individual sports. The issue of personality traits contributing to success was not tested in this study, however Booth (1958) did successfully use the Minnesota Multiphasic Personality Inventory (MMPI) to discriminate between good and poor competitors.

By constructing a 22-item scale following analysis of the 550 items of the MMPI, Booth compared various groups of male college athletes and control subjects. He concluded, however, that in order to validate the 22 items, an additional analysis of the MMPI responses of the poor and good competitors should be done. He found that he could discriminate between these two groups with the scale. His other findings were that nonathletes scored significantly higher on the Mf scale than the athletes; varsity athletes who participated in individual sport activities and not in team activities scored significantly higher on the D Scale; and participants in varsity individual sports scored

significantly higher than varsity participants in both team and individual sports on the Pt Scale.

Lakie (1962) administered five scales from the Omnibus Personality Inventory to 230 athletes from a private university, a state university and two state colleges. By using the personality scales he was able to differentiate sports groups within the state university and private university, but was unable to do this for the state colleges. He also found he could discriminate between the athletes at the private university and athletes at the other universities and colleges. The subjects included competitors in golf, basketball, football, tennis, track and wrestling. The five scales he used were Sm, Co, Si, Li and Mf #2. This study lends support to the hypothesis that personality traits play a significant role in college athletics.

In a study more specifically relevant to this report, Stockfelt (1968) reported on his study of Swedish "elite athletes" which supported the idea that there is a special personality trait found in champion athletes. Using a variety of psychological tests and government data, he defined the elite athlete as the "10 to 20 individuals that have been most successful in a given year. . ." pg. 217. His work included outstanding competitors in the areas of table tennis, soccer, tennis and alpine skiing. Although he does not state the details of his experiment, he argues that his data support the hypothesis of a special personality trait found in champion athletes and he calls this trait "dynamic." He believes it to be similar to high motivation for productivity and somewhat opposite to passivity.

An English investigator, Kane (1968), has expressed his belief that even though there is a fairly large number of studies using a variety of

methods and procedures in this area, the exact nature of the relationship between physical ability and personality characteristics remains a mystery. He points out that conflicting results are easily found in the sport psychology literature, but argues that many of these are the result of conceptual and methodological inaccuracies. Despite this confusing array of research results and methods, Kane states a few general personality traits can be identified as important in the making of a champion athlete. Among these, he cites aggression, dominance, drive, tough-mindedness, extraverted character, confidence, low anxiety and emotional stability.

Using the 16 Personality Factor Questionnaire and a factor analytic technique, Kane did not find support for the hypothesis that constant participation in sports shapes the personality in the direction of increased stability and extraversion. In fact, his work would tend to indicate that such participation does not shape the personality in <u>any</u> significant way.

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Using a discriminant function analysis (canonical variate) Kane found that men specialist physical education students differed in personality from the general men students group. He also found women specialist physical education students differed significantly in personality from the general women student population. He was able to determine in this analysis that men specialist students and women specialist students had a very similar personality profile as he could find no function which would discriminate between the two groups. He further concluded that sports participation and personality are related in a meaningful way. A high rating in sports participation was significantly correlated with low ergic tension, dominance and group-dependence.

Achievement Motivation Theory

Beth and Willis (1968) have discussed success in sports as a function of achievement motivation theory, using the work of McClelland, Atkinson, Clark, Lowell and Lowell (195B). They looked at the McClelland theory of success in beginning handball and college wrestling. The beginning handball subjects were freshmen and sophomore male students at Ohio State University. They were not physical education majors and they had not participated in high school or university athletics. Details of the study were not reported, but the authors state that their results indicate that success in beginning handball was not significantly related to the need for achievement. In their investigation of college wrestling, 14 varsity wrestlers from Ohio State University were divided into groups on the basis of measures of the need for achievement. The groups were then compared for differences in wrestling success. They found the relationship to be not significant (pg. 159). Although their overall results for the wrestlers were not significant, they did find that five of the top seven wrestlers were in the group with the highest achievement motivation scores. "Although one cannot conclude that Na (achievement motivation) is predictive of success in wrestling," they reported, "it might be said that in this study there was a moderate tendency in that direction" (pg. 425).

Neal (1963) studied the personality traits of United States women athletes who participated in the 1959 Pan-American games. Using the Edwards Personal Preference Schedule, she found significant differences in the traits of women athletes from the Pan-American Games and traits of a norm group determined by the Edwards Schedule. She was unable, however, to determine whether the traits of the athletes were a result

of participation in sports or the driving force which pushed them to become champion athletes. Three of the E.P.P.S. variables--achievement, affiliation and aggression--were found to be significant at the one percent level of confidence. The athletes had higher scores in all six of these variables than did the norm group. Not found to be statistically significant were the variables of deference, exhibition, intraception, succorance, dominance, abasement, change, endurance and heterosexuality.

Hosek and Vanek (1968) reported a study of 650 champion sportsmen in Czechoslovakia. Although failing to reveal details of their study, they did report the use of various psychological tests, including Cattell's 16 P.F., Form A; Eysenck's E.P.I., Forms A and B; Mittenecker-Toman's P.I.; Taylor's M.A.S. and Raven's Progressive Matrices, Form A. Their hypothesis that championship sportsmen differ in personality traits from nonchampions was only partially supported in that the difference was found in individual sports only. As to athletes who participated in group sports, they reported greater intragroup variation was blamed as overshadowing any variation between champions and nonchampions. "The heterogeneity found in the total group of sportsmen," they said, "is, from this point of view, so great that any consideration of the sportsman's personality as a relatively precisely characterized concept seems very doubtful" (pq. 759).

A Psychiatric Viewpoint

Carmen <u>et al</u>. (1970) investigated the mental health of athletes at Harvard University. Their study was divided into two parts. First, they examined the psychiatric records of 106 athletes from many different

sports who were seen over a five-year period at the Harvard Psychiatric Service. These athletes represented all levels of competence. The findings indicated that athletes used the psychiatric clinic less frequently than nonathletes. In a smaller study of 26 athletes and 26 nonathlete controls, they reported finding that athletes who did come in for treatment had a greater number of problems than did the nonathletes. They believe that the desire not to surrender to a perceived weakness and denial of the wish for help were often the reasons athletes did not seek treatment when they were in psychological pain.

The chief presenting problem for both groups was difficulty with study. Also reported were sexual difficulty, career uncertainty and family conflicts. Perhaps the most important element of their study was:

The fact that most athletes in the large survey were able to carry on sports activities despite multiple personal problems seems to indicate that sports may have other meanings and functions. They appear to serve as a defense against depression and/or anxiety and as a denial of weakness (pg. 115).

Harlow (1970) has studied the motivation of weightlifters in terms of psychoanalytic theory. Using the Thermatic Apperception Test (TAT) and a sentence completion test, he compared a group of 20 weightlifters and a control group of 20 nonweightlifting athletes. Tested was the psychoanalytic hypothesis that the abnormal accentuation of signs of masculinity by weightlifters is in reality a reaction-formation defense against feelings of femininity in male athletes. Significant differences were found on thirteen of the eighteen variables studied and all of these were in the psychoanalytically predicted direction. Their conclusions indicated ". . . pyschoanalytic theory is potentially a powerful predictive tool" and "there is a personality pattern which is, in general, characteristic of weight men" (pg. 282). Harlow believes his study supports the work of Fenichel (1945) which states that men living today have to contend with more feminine traits within themselves than men of previous times.

Husman (1970) also found the projective method of investigating the motives of athletes to be effective. Using the TAT, a sentence completion test and the Rosenzweig Picture Frustration Test, he studied aggression in boxers, wrestlers and cross-country runners. His data support both the psychoanalytic cathartic hypothesis and circular theories of aggression. Among the specific findings were that boxers appear to possess more of Rosenzweig's trait, superego, than did a Rosenzweig norm group and that athletes seem to turn aggression inward following a combative type contest. Of the 23 significant differences found, 13 involved TAT responses.

Suppressed hostility has been discussed as a major factor in the motivation of superior athletes by Cartty (1968, pg. 195). Sometimes this anger is very intense, he wrote, and may become quite threatening and disturbing to coaches and teammates if it is misdirected toward them.

The personalities of most superior athletes are often marked by hostility and aggression, usually kept well under control and channeled into performance specialities. This aggression may be elecited by childhood experiences, as is claimed by several European psychoanalysts who have studied the athletes of their countries, or by contemporary events in the lives of the performers (pg. 195).

Cratty continues this discussion with the suggestion that in addition to repressed hostility, there may be other negative as well as other positive motivations.

Sperling (1942) has suggested that the need for power is an important motivator for people to participate in sports, regardless of their success. He found that a group of varsity and intramural sportsmen was significantly more motivated by the need for power than a control group of nonathletes. The control group was found to be more motivated toward a social attraction to people as well as to be more aesthetic and theoretically minded.

Johnson, Hutton and Johnson (1954) used projective tests to compare champion athletes with test norms. The subjects were 12 athletes who were either national champions or involved in All-American participation. Most of the All-American athletes were first string competitors, however three were either runners-up or second string. The subjects included a variety of athletes, including four football players, two wrestlers, two boxers, two Lacrosse players, one track man and one rifle marksman.

The subjects were administered the group Rorschach and the chromatic House-Tree-Person Test (HTP) by the senior author. The other authors, both psychologists, scored the tests. They were not aware of the nature of the study, the subjects' names or the type of athletic competition involved. In addition, the secondary authors did not communicate with each other during the study. They were asked to compare the test scores with the tests as they had used them previously.

The graders listed five traits as significantly more prominent among the champion athletes as measured on both tests, compared to the tests' norms and their prior experiences with the tests. These factors were extreme aggression, exceptional feelings of self assurance, high and generalized anxiety, high level of intellectual aspiration and uncontrolled affect (as opposed to overly-rigid control). Also, the

HTP Test indicated the subjects had an unusual need for physical power and physical perfection and that the champions were unusually well able to focus their personality resources on desired goals.

Summary

While there has been relatively little sustained, focused investigation of the relationship of various personality traits to championship performance in sports, the bulk of the data available support the idea that personality and championship performance are closely linked. Several personality traits have been identified as having an exceptionally and significantly high correlation with championship performance in sports. These include feelings of anger, anxiety, self assurance and the need to compensate for perceived weakness.

CHAPTER III

FIRO-B CHARACTERISTICS AND INCLUSION

The FIRO-B contains six Guttman scales of ten questions each, with some overlap between scales, leaving a total of 54 test questions. The test measured three attributes of interpersonal stance, according to the author (Schutz, 1966). He has stated two basic postulates behind his theory and this test. These are the result of extensive factor analytic work by Schutz, and state (1) that everyone has three interpersonal needs and (2) that inclusion, control and affection "constitute a sufficient set of areas of interpersonal behavior for the prediction and explanation of interpersonal phenomena (pg. 13)." This study is concerned with the inclusion score, designed to measure the desire of the individual to be included in social groups, excluding close, intimate relationships.

Each of the three areas of interpersonal stance is divided by Schutz into two subcategories, Wanted and Expressed. The Wanted category theoretically is the person's actual need while the expressed score was designed to measure how much the person typically expresses this need to others. The term "exclusive clubber" refers to individuals with a FIRO-B Wanted Inclusion Score of a zero or a one (Ryan, 1970). Since the FIRO-B scores range from zero to nine, an exclusive club orientation is suggestive of a very low need for inclusion. This is so low as to be termed a "compulsive defense" by some clinicians (Ryan, 1970).

More specifically, Schultz (1966) defines the interpersonal need of inclusion as follows:

The interpersonal need for inclusion is defined behaviorally as the need to establish and maintain a satisfactory relation with people with respect to interaction and association. "Satisfactory relation" includes (1) a psychologically comfortable relation with people somewhere on a dimension ranging from originating or initiating interaction with all people to not initiating interaction with anyone; (2) a psychologically comfortable relation with people with respect to eliciting behavior from them somewhere on a dimension ranging from always initiating interaction with self to never initiating interaction with the self (pg. 18).

FIRO-B Reliability and Validity

One of the more common methods of measuring test reliability is the Coefficient of Internal Consistency, often called the split-half method, where the correlation between the two halfs of the test is obtained. With the FIRO-B, and its Guttman scale construction, the nature of the test's reporducibility is the appropriate way of measuring reliability (Schultz, 1967). The author used 1,582 subjects and obtained a reproducibility score of .94 for wanted inclusion (pg. 5). He also reports a coefficient of stability, the correlation between test scores on retesting following a lapse of one month, of .75 for wanted inclusion, using 126 subjects (pg. 5).

Although this is changing, little evidence about the FIRO-B's validity is available. The author states in the test manual (1967), however, that content validity is a natural outcome of the use of the Guttman scale technique:

Content validity is determined by showing how well the content of the test items samples the calss of situations or the subject matter about which conclusions are to be drawn. If the theory underlying the use of Guttman scales is accepted, then content validity is a property of all legitimate cumulative scales, and therefore of all FIRO-B scales (pg. 6).

Previous Use of the FIRO-B

Because of the relative newness of the FIRO-B and the lack of data concerning it, several examples of use of the FIRO-B in research will be cited.

Ryan, Maguire and Ryan (1970) examined the construct validity of the FIRO-B and came up with very negative results. Using Loevinger's (1957) three components of construct validity (substantive, structural and external), they concluded that none of the requirements for the three components of validity were supported. They chose 144 non-college adults to represent three occupations, each of which the experimenters believed would reflect one of the three FIRO-B components. Salesmen were thought to have high expressed and wanted inclusion needs, policemen were thought to have high expressed control needs and social service workers were predicted to have high needs in expressed and wanted affection. The subjects ranged in age from 24 to 80 and were composed of 120 men and 24 women. None of the subjects had progressed in school beyond the 12th grade in order to provide a non-college sample to contrast Schutz' (1966) validity studies which all used college students.

The salesmen were from five life insurance agencies. The use of salesmen is in line with Schtz' (1966) speculation that salesmen will reflect a predominate interpersonal need of inclusion and that they will tend to score high in both wanted and expressed inclusion. The authors found it very difficult to secure subjects from an occupation which would seem to attract people with high affection needs but did not require a college education. They ruled out many of the helping professions because of this education factor, and finally chose volunteers from a social service agency.

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A one-way analysis of variance was used to study the data. Concerning the structural component of the rest, four of the reproducibility coefficients for the six FIRO-B scales were found to fall short of the .90 level required for a Guttman Scale. The coefficients they reported are listed below in Table I.

TABLE I

Scale	Reproducibility Coefficient
Inclusion, Expressed	.80
Inclusion, Wanted	.86
Control, Expressed	.85
Control, Wanted	.88
Affection, Expressed	.91
Affection, Wanted	.90

FIRO-B REPRODUCIBILITY COEFFICIENTS

Scheffe comparison of salesmen with volunteers and policemen showed that in the expressed inclusion area, the salesmen scored significantly higher than-volunteers (p:<.02) and police (p.<.01). There was no significant difference in inclusion between police and volunteers. A Scheffe comparison of salesmen and volunteers in wanted inclusion yielded no significant differences (p.<.09), however a significant difference was found in wanted inclusion between salesmen (who scored higher) and police (p.<.02).

The means for the various groups included volunteers, expressed inclusion, 4.40; volunteers, wanted inclusion, 3.20; salesmen, expressed inclusion, 5.67; salesmen, wanted inclusion, 4.75; policemen, expressed inclusion, 3.77; and policemen, wanted inclusion, 2.75.

In addition to these external component findings, the authors expressed doubt that the FIRO-B fulfills all of the requirements for the substantive component:

While each item's presence can be explained by the theory, it is not so clear that they adequately reflect the scope of the constructs postulated. Whole scales appear to be rewordings of only a few ideas with scoring criteria being changed to obtain scaleability. . . in fact, some of the item wordings are identical, their meanings made different only by the two answer modes associated with them (pg. 423).

The authors also allege that the FIRO-B affection items do not effectively cover Schtz' (1966) affection components in his FIRO Theory and that behavior reflected in the affection and inclusion scales may be too similar.

The only positive finding in this study--that is, one which supports the FIRO Theory--is that the sales group, as predicted by Schutz (1966), did score highest in the inclusion area and therefore provides support for the hypothesis that the FIRO-B is a valid test for inclusion. Since the present study is only concerned with the inclusion area, this basically negative evaluation of the FIRO-B does not apply in full force, although the authors conclude that the FIRO-B "cannot be said to possess construct validity" (pg. 425).

In a study which does support the validity of the FIRO-B, Kramer (1967) administered the test to 25 subjects and then secured self

ratings of the subjects on the three FIRO-B dimensions. Of the six resulting coefficients, five were significant (p.<.05).

Noting that it is Schutz' (1966) belief that the three dimensions are the basic components of human interaction, Kramer reported that he found that normal subjects administered the FIRO-B cannot identify the particular areas of which the test is a measure, at least not in the terms which Schutz (1966) has used. Operating under the assumption that normal subjects should be able to report valid traits about themselves, Kramer tested the hypotheses that the FIRO-B does measure certain personality factors and that Schutz (1966) has done an adequate job of labeling them.

The 25 <u>S</u>'s were high school students enrolled in college psychology. There was no previous discussion of the FIRO-B nor was there mention of any similar measure. Following administration of the FIRO-B, <u>S</u>'s rated themselves on the six FIRO-B components. There is a possibility that taking the test may have resulted in some effect on the self ratings, however, "This seemed, however a considerably more desirable risk than having the self-ratings done first, since prior labeling of the dimensions would almost certainly have helped <u>S</u>'s to identify the aim of many specific test items" (pg. 81).

Using a rank-order correlation, Kramer compared each of the six categories across the FIRO-B scores and the self ratings. The results are listed in Table II.

Other FIRO-B Studies

Pollack (1971) used the FIRO-B to study the difference in outcome of homogeneous and heterogeneous T-groups. Seventy-seven male and

TABLE II

المحمد مرجع والمحمد المعرفين المحمول والمعمون أنجر والموجو الموجور المراجع والم	
<u></u> ОГ	
	Expressed Inclusion
<.01	Wanted Inclusion
<.01	Expressed Control
<.05	Wanted Control
	Expressed Affection
	Wanted Affection

RANK ORDER CORRELATIONS OF FIRO-B SCORES AND SELF RATINGS

seventy-three female undergraduate students were formed into four homogeneous groups and twelve heterogeneous groups. In the homogeneous groups, subjects were matched according to their scores in the control area of the FIRO-B. After the groups met once a week for 14 weeks, it was found that, when considering all three need areas of the FIRO-B, the heterogeneous groups, as hypothesized, manifested more positive changes than the homogeneous groups (p.<.05). This study, then, tends to support the construct validity of the FIRO-B, however it's support is not strong due to confounding with multiple use of the FIRO-B during the study.

Mendelsohn and Rankin (1969) used the FIRO-B to study the effect of client-counselor compatibility on success of therapy. Although various configurations of the FIRO-B scores did not predict outcome in males, a strong relationship was found between compatibility in the control area between female clients and therapists. So, at least for females, FIRO-B scores may produce some accurate predictions of success in therapy. This, then, would seem to support the validity of the FIRO-B, at least in the control area.

The FIRO-B has also been used to study the effect of compatibility in two-person groups upon productivity. Moos and Speisman (1962) tested 120 undergraduate psychology students with the FIRO-B as well as with the California Personality Inventory Dominance Scale (CPI), the Interpersonal Check List (ICL) and the Thorndike and Gallup Vocabulary Scale. The subjects, composed of an equal number of males and females, were divided into compatible and incompatible groups of two according to role and personality. A simple laboratory test was assigned each group and was the measure of performance.

The authors found that on the criterion of task completion, the compatible groups out-performed the incompatible groups, but there was no difference for the criterion of time to complete the task. In essence, this study indicated that all groups took approximately the same time to complete the tasks, however, there were fewer mistakes made by the compatible groups. Moos and Speisman's study would also appear to support the validity of the FIRO-B, however such support may be weak due to the influence of the other tests employed.

Sapolsky (1965) used the FIRO-B to measure the compatibility of female psychiatric patients and their psychiatric resident therapists. He sought to identify the nature of the relationships between (1) interpersonal compatibility of therapist and patient, (2) perception of therapist by patient and (3) treatment outcome. Subjects were 25 voluntarily hospitalized female psychiatric patients and three psychiatric residents. The person perception factors were measured through the use of a semantic differential scale. Patient improvement was judged by

the ratings of two senior psychiatrists using an eight-point, selfanchored scale. A Mann-Whitney \underline{U} Test yielded no significant difference between the ratings of the two supervisors, which would indicate that their evaluations were similar.

There was great similarity in outcome of treatment for each of the three residents as measured by the senior psychiatrists. Sapolsky compared the patient-doctor compatibility scores and supervisor's ratings of treatment effects through the use of the Pearson Product-Moment Correlation method which yielded an \underline{r} of .45, which is significant beyond the .05 level for a two-tailed test. The data support Sapolsky's hypothesis that interpersonal need compatibility is related positively to treatment outcome.

A study by Schutz (1961) also seems to add support to the FIRO-B as a valid instrument. Schutz composed five 14-person encounter groups, each of which was homogeneous in terms of interpersonal needs of group members as measured by the FIRO-B. Following the sixth meeting of the groups, members were asked to rate their own group members' behaviors. Schutz found that three of the groups were accurate to a significant degree while one group tended to select the socially acceptable or "correct" behavioral description rather than a more accurate one. The last group was poorly predicted. "The total prediction," Schutz wrote, "was highly significant and lends confidence to the FIRO technique for group composition" (pg. 281).

Exclusive Club Concept and Competition

Several articles have been written concerning the concept of exclusive club, or something very similar, and its effect on or corre-

lation with some type of achievement. In a brief and rather superficial article written for coaches, Ogilvie, Tulko and Young (1965) discussed their comparison of four Olympic medalist swimmers with nonmedalist Olympic swimmers. Although no tests of significance were employed, the authors reported the following "trends" in the data: Medalists were found to be less interested in team sports and less interested in membership in groups in general. It appears the authors are speaking of a phenomenon similar to Schutz' (1966) exclusive club orientation.

Knapp (1965) used the Maudsley Personality Inventory to study the personalities of championship British lawn tennis players. Although the difference between the means of the champions and the control sample of normals was not statistically significant, the champions' mean was slightly more in the extravert direction. There were some exceptions among the champions, however:

From this it can be clearly seen that, although there is a preponderance of individuals with extravert tendencies, there are also a considerable number of outstanding lawn tennis players who are introverted. Six players have results on the scale which are more than one standard deviation from the mean of the normal English population and toward the introversion end of the continium (pg. 22).

Kroll and Petersen (1965) have offered strong support for the hypothesis that personality traits play a significant role in winning or losing in college football and that an exclusive club type orientation is associated with winning. Using a multiple discriminant analysis, they examined personality traits as measured by Cattell's 16 PF Test (Cattell, 1957) and found they could correctly classify players as to whether they were from a "winning" or a "losing" team 82% (p.<.05) of the time.

The subjects were 139 college football players from five teams,

three which were rated as "winning" and two which were rated "losing". After failing to classify the players on the basis of individual factor scores, they switched to a procedure which allowed them to compare an individual's score vector with each of the five group score vectors:

Significant discrimination between the five teams was demonstrated with the highest contributors to the derived discriminant function being factor B (intelligence), factor H (shy versus bold), factor O (confident versus worrying), and factor Q (casual versus controlled) (pg. 439).

The H factor is very similar to Schutz (1966) Wanted Inclusion Scale. Of the five teams, the three which were rated as "winning" all had lower means for the H factor than the two teams rated as "losing". Low scores in the H factor area indicate a shy, self-contained, withdrawn individual with less interest in the opposite sex and more feelings of inferiority than high scorers (Cattell, 1957). This would seem, then, to offer support for the hypothesis that there is a significant association between winning, at least in this football sample, and an exclusive club type of interpersonal orientation.

Bentson and Summerskill (1955) studied the personal adjustment of two groups of 59 athletes each. The athletes in one group had won letters for intercollegiate athletic competion while the second group did not have letters but had participated successfully in lesser sports competition. The comparisons were made on the basis of school records and personal interviews with 17 athletes from both groups. The more skillful athletes were found to be somewhat socially reserved. "Letter winners," they wrote, "participated in fewer college activities but expressed greater satisfaction with their college careers" (pg. 8). It appears that these letter winners had traits very similar to Schutz's (1966) "exclusive club" orientation. Taylor (1964) has reviewed the literature published between 1933 and 1963 which deals with personality's contribution to discrepant achievement. Among the traits which he studied were goal orientation, activity patterns, independence-dependence conflict, interpersonal relations, academic anxiety, self concept and authority relations. He was able to identify personality traits which have been reported to be highly correlated with discrepant achievement. The literature, he said, "revealed certain recurrent references to seven basic personality traits connected with over and underachievement" (pg. 76). Those traits are listed in Table III:

TABLE III

Poor Achievers	Personality Trait	High Achievers
Unrealistic Goal Orientation	Goal Orientation	Realistic Goals
High Independence- Dependence Conflict		Low Independence- Dependence Conflict
Socially Oriented	Activity Patterns	Academically Oriented
Negative Interpersonal Relations	Interpersonal Relations	Positive Inter- personal Relations
Free-Floating Anxiety	Academic Anxiety	Directed Anxiety
Negative Self-Concept	Self-Concept	
Hostility Toward Authority	Authority Relations	

SEVEN PERSONALITY TRAITS CORRELATED WITH DISCREPANT ACHIEVEMENT

Taylor has found support for hypothesizing the traits similar to Schutz's (1966) exclusive club factor are at work in the personalities of champions. Taylor also stated that many investigators have reported that overachievers find their work more rewarding than social situations. "Additional studies indicate," he said, "that the overachieving student spends most of his time on studies, gets assignments in promptly, has good study habits and generally has a feeling of academic effectiveness" (pg. 80). In short, he has found strong support for the hypothesis that overachievers are achievement rather than socially oriented. Likewise, he has found strong support for the hypothesis that overachievers are achievement rather than socially oriented. Likewise, he has found strong support for the notion than underachievers lack motivation in school work but obtain satisfaction in social participation. Taylor reports one finding that underachievers are more socially skillful than overachievers:

The underachiever is unwilling to conform to academic requirements and has strong "activity" interests as opposed to intellectual interests. Several other investigators emphasize the underachiever's tendency toward pleasure seeking and extroversion and the tendency to go to college for social reasons, <u>e.g.</u>, joining a fraternity or sorority . . . The underachiever is found to have strong affiliation needs and he immaturely reaches out for contact experiences (pg. 80).

So Taylor has painted a picture of the high-achieving athlete as more interested in his athletic skill and schoolwork than in affiliation with others.

In his review of the literature dealing with peer relations and academic achievement, O'Shea (1969) suggested that there is greater agreement in this area than was previously thought. He reported a method which tended to explain the inconsistency found by previous authors. The method involved categorizing subjects according to age. In doing this, O'Shea found strong support for two hypotheses. First, young subjects such as elementary school students who are high academic achievers tended to be more socially active than low achievers of the same age.

The second hypothesis supports the assertion that older high achievers, such as college students, tend to be less socially active than low achievers of the same age:

The great majority of studies reporting a negative relationship between good social relationships and academic achievement investigated college students. In fact, of 15 such studies reviewed here, 14 had college samples and only one a pre-college sample (pg. 420).

O'Shea also reported that the reverse is true of studies which yielded a positive relationship between social activity and academic achievement. "Of 16 such studies reviewed here," he wrote, "five had elementary school samples, eight secondary school samples, two both elementary and secondary school samples, and only one a college sample"(pg. 420). Among the studies reporting no significant correlations, one used a high school sample and eleven others used a college sample.

Summary

The FIRO-B is a 54-question test consisting of six Guttman scales, two of which are directed toward one of three factors. These factors, inclusion, control, and affection, are reported by the author, Schutz (1966) to represent the three most significant areas of interpersonal orientation. Each factor is tested at two levels, wanted and expressed. The wanted dimension concerns the individual's actual need and the expressed score is said to represent his behavioral expression of that need. The FIRO-B has only moderate validity support. Some work has been done concerning the concept of exclusive club orientation, which indicates an individual with a very low need to be included in informal social groups, however this concept also has not been fully validated. Several authors have discussed the exclusive club orientation, or something very similar, without using the term itself. A connection between this phenomenon and achievement has been reported.

CHAPTER IV

2.

PROCEDURE AND RESULTS

This study was an attempt to analyze the relationship between interpersonal stance and success in national level professional golf competition. Specifically, this study was confined to the interpersonal area of Wanted Inclusion as measured by the FIRO-B. The FIRO-B was sent by mail to 125 males who were the top money winners in terms of total money earned as a result of professional golf competition during the year of 1971, as reported in the 1972 Spring Yearbook issue of <u>Inside Golf</u> magazine. Enclosed with the FIRO-B was a typed letter and a prepaid return envelope which was addressed to the author at Oklahoma State University.

Each letter contained the same wording except that the address and greeting of the letters were individualized for each professional golfer. This was accomplished through the use of automatic typing equipment which gave each letter the appearance of being hand typed.

The letters were mailed to the professional golfers in care of the Kaiser International Golf Tournament at the Silverado Country Club in Napa, California. The officials of the tournament had been contacted by phone previously and had agreed to forward the letters to the professionals. This tournament was held on October 21, 22, 23 and 24 in 1972. The letters were mailed on or about October 7, 1972, with the assumption that about 15% of the professional golfers would not receive their

letters due to failure to appear at the event itself, lost letters or the inability of the tournament staff to locate the golfers at the proper time. A total of 31 usable FIRO-B's were received by return mail in the prepaid envelopes, some anonymously. Most, however, contained the name and address of one of the professional golfers on the mailing list. The cover letter stated that the author would supply the results of the study if the golfer would write his name and address on the FIRO-B.

These test scores were compared with those of a sample of the male membership of an Oklahoma City golf club. This country club is composed of primarily wealthy and successful businessmen, some of whom belong to the club for business reasons only and who do not play golf. Consequently, this sample of golf club members contained some who were quite successful in business, but no FIRO-B's were included in the study that did not state that the individual played golf with a handicap. The reported handicaps averaged 16. The amateurs and professionals were not matched for age or education.

The letters to the members of the Oklahoma City golf club were similar to those sent to the professional golfers, however a tag was attached to each of the FIRO-B's sent to the amateurs, which was not done with the professionals. This tag asked the golfer his handicap and whether he had earned any type of doctor's degree. The letters were changed from the form followed for the professionals only when the wording was not appropriate for the amateur group.

The amateurs' letters were sent to every third member of the golf club as listed in the club's 1973 membership roster, a total of 250 individuals. This sample included an over-representation of physicians, attorneys, dentists and businessmen of other professions as compared to the general golf club membership. Out of the 250, 75 were received which could be used in this study with about 10 others which were found to contain a statement that the individual did not play golf or a number of questions which were not answered. It was thought that a number of others which were sent to individuals who did not play golf were not returned because the individual knew that his test would not be appropriate for this study from his cover letter. No FIRO-B's were received in which the individual indicated a handicap of less than three.

Of the 31 FIRO-B's returned by the golf professionals, 16 of them had a Wanted Inclusion (Wi) Score of a zero or a one, the scores which Schutz (1966) refers to as reflecting an "exclusive club" orientation. The other 15 tests had Wi Scores of from two to nine. The Wi Score, and, in fact, every score on the FIRO-B, has a lower limit of zero and an upper limit of nine. The mean Wi Score for the professional golfers was 2.64. Of the 75 FIRO-B's received from the country club folfers which were used in this study, 29 had a Wi Score of a zero or a one. The average Wi Score for the amateurs was 4.03. The hypothesis tested was that there was no significant difference between the Wi means of the two groups.

The scores from these two groups were compared with a one-tailed \underline{t} test and a significant difference was found (p.=<.05, t_{obs} = 1.91, d.f. = 104).

Because the average age of the professionals was 29.8 and the average age of the amateurs 49.8, both groups were divided into two subgroups of equal size. One subgroup contained all of the members of the group who were older than the average age of the group while the

other subgroup contained all members who ages were below the average for the group. In one or two cases, the members ages fell on the average. The Wi Score means of the subgroups within each group were also compared with a <u>t</u> Test and no significant differences were found between the young and old golfers in either the amateur or the professional groups (professionals, older $\overline{x} = 2.07$; amateurs, older $\overline{x} = 4.10$, younger $\overline{x} = 3.95$). This would tend to support the hypothesis that the FIRO-B is not significantly influenced by age.

The amateur and professional groups were also compared in terms of the other five scores yielded by the FIRO-B and in two cases a signicant difference was found. A two-tailed <u>t</u> test with 104 d.f. was used in all five cases. The means for the Expressed Control socre were different (p.<.001, t_{ODS} = 7.973) with the mean for the professional group being lower than that for the amateur group. There was also a difference between the means of the Expressed Inclusion Scores (p.<.01, t_{ODS} = 3.047). There was no statistical difference between the means of the Wanted Control, Expressed Affection or Expressed Inclusion Scores.

TABLE IV

MEANS FOR FIRO-B SCORES

	eI	wI	eC	wC	eA	wA
Professionals	s.77	2.65	2.97	3.16	3.19	5.32
Amateurs	4.24	4.03	4.44	3.40	3.28	5.13

The Expressed Control Score theoretically measures the need to control others while the Expressed Inclusion Score was designed to represent the extent that the person behaviorally attempts to join in informal social groups. The Wanted Control Score is an attempt to measure the need to be controled by other. The Wanted and Expressed Affection Scores were designed to represent the desire for and the expressed behavior directed toward becoming involved with others in close, intimate or loving way.

A test of correlation, Pearson's r, was used to study the relationship between golf handicap and Wanted Inclusion Score in the amateur group. The result (r = -.057) was not significant.

No relationship was found between reported handicap and Wanted Inclusion Score. Factors such as coordination and native ability may be contaminating the comparison, however.

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CHAPTER V

DISCUSSION

The results of the present study are encouraging and support the hypothesis that individuals with low needs for social inclusion as defined by Schutz (1966) are over-represented in samples of highly successful individuals. This study was limited to success at professional golf, and further work needs to be done in other areas. The relative lack of norm data for the test instrument used to estimate the need for inclusion, the FIRO-B, and the problems of finding a control group sample which is not contaminated to the point of failure to represent individuals with relatively low needs for achievement also need further attention.

The present study supports the work of Maxwell (personal communication) in which he suggested that a low need for inclusion may be related to discrepant success. While the present study supports this hypothesis, the control sample used here does not contain average individuals in terms of personal success. While the country club golfers were not national golf champions, many were professionally successful in other areas. Despite this contamination, a significant difference was found between these golfers and the national champions.

It is expected that further study using a control group of individuals who have had average success in their professional as well as golf activities will yield a greater difference in means. It seems to have

been particularly helpful to judge success in national champion professional golf in terms of money won. Perhaps this could be applied to the amateurs also in terms of their professional life, with no person accepted into the control group with an income which deviates from the mean income for the area in which he lives by more than one standard deviation.

A somewhat surprising development, however, was the difference between the two groups in their Expressed Control Scores. While a difference in Expressed Inclusion as measured by the FIRO-B was expected to accompany a difference in Wanted Inclusion, the more passive stance toward interpersonal control as found in the golf professionals was not anticipated. This may represent a general moving away from people emotionally and a consequent redirecting of emotion, attention and energy into personal participation in sports. All of the means were lower for the professionals with the exception of the Wanted Affection mean. Only three were significantly lower, however.

The lower Expressed Inclusion might be expected because it appears that people with a low need for inclusion would usually tend to express this need with lower inclusion behavior. Sometimes, however, individuals with low need for inclusion act as if they had a high need for inclusion in order to satisfy some other need, such as the need to control others or the need for affection.

The other FIRO-B mean scores, Wanted Control, Expressed Affection and Wanted Affection, were very near to being the same for both groups.

Finding a method of testing Maxwell's hypothesis proved more difficult than first thought with numerous pitfalls and difficulties, some of which have been mentioned in the previous few paragraphs.

Others included matching the control and experimental groups for age and a number of problems in securing the control group data.

Concerning the problem of age matching, there is little in the literature to shed light on the nature of the effect of aging on FIRO-B scores. In hopes of understanding this relationship better, both the control and the experimental groups were divided into two equal parts, one composed of the older members of the group and the other composed of younger members. The Wi scores of these two subgroups within each group were compared and no significant differences were found. While this tends to suggest that the effects of aging upon the Wi Score of the FIRO-B are minimal, further work needs to be done to clearly establish this or identify some other relationship which escaped this particular comparison.

The problem of obtaining control group data was difficult. While mail-back returns seemed the only feasible way to obtain the professional golfers test data, other possibilities were open for the control group. The difficulties which arise when the data is secured one way for one group and another way for the other group, in terms of contaminating the comparison, seemed to indicate the mail-back method for the control group as well. However, other methods were also attempted, including spending time around a golf course and personally requesting that the golfers who were there fill out the FIRO-B. It quickly appeared, however, that golfers who seemed to have higher inclusion needs were much more willing to take the FIRO-B and were much more visible to the examiner. A number of golfers, for instance, immediately went from their car to the course, avoiding any conversation. Others spent much time in the clubhouse visiting. Since it was not thought

appropriate to follow golfers on to the course to request their cooperation, it was difficult to obtain a representative sample of golfers at the particular club.

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Another possible contaminating effect may be that golfers with low needs for inclusion are less likely to return their FIRO-B. This seems to be a logical hypothesis as it seems likely that people with low inclusion needs have been hurt by others in the past and therefore may tend to be more distrustful of others than people with average needs for inclusion. The actual difference in the need for inclusion between these two groups of golfers may in fact be greater than indicated by the present study due to this effect.

There is also the problem of the control group member's tie with the golf club, in that he was a member of a social organization. Some golfers play golf often but are not members of any club. This particular factor is very difficult to overcome because the golfer who does not want to be bothered by social intrusions is often successful in avoiding researchers also. The use of the FIRO-B itself as a measure of the need for inclusion can be questioned because of the relative newness of the FIRO-B and the lack of a strong empirical backing for the test. Using this test was a difficult choice, however the fact that the FIRO-B needs more empirical study appeared to justify its use.

The results of this work are encouraging and seem to contribute to the understanding of discrepant achievement. If further work in this area is also productive, a major contribution to our understanding of both achievers and people in general may follow.

It would be particularly interesting for a future study to investigate the factor of team sport participation upon discrepant achievement

and inclusion. This would include basketball players, who are often highly oriented toward achievement and at the same time very concerned with cooperating with their teammates, as well as football players, who may be influenced in an unusual way by the expression of aggression. Another topic for future research could be the relationship between the amount of money won in champion professional sports and the extent of Wanted Inclusion.

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APPENDIX A

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LETTER TO PROFESSIONAL GOLFERS

Okalhoma State University Letterhead

October 7, 1972

Mr. c/o Kaiser International Silverado Country Club 1600 Atlas Peak Road Napa, California 94558

Dear Mrs. :

I am a psychologist who is interested in why some people are successful while others are not. Since you are a successful person in professional golf competition, I am requesting your assistance in a research study. This would require about five to ten minutes of your time and involves completing the enclosed form and returning it to me.

Any data that you supply me will be held in strict confidence. The study is concerned with general personality traits of "winners" as a group. It is not concerned with indivudal personalities.

The data you supply will be "averaged in" to ascertain the personality trends of the group. We have already isolated a trait found in the great majority of winners in national bridge competition.

I would be happy to send you the results of this study when it is completed. If you are interested in the outcome, please write your address on the FIRO B form. This project should furnish interesting information about the personality of the golf champion.

Any assistance you can give me in accomplishing this study will certainly be appreciated. A self-addressed, stamped envelope is enclosed for your convenience in returning the form.

Sincerely,

John W. McCoy Clinical Psychologist I

Enclosure: FIRO B, envelope

APPENDIX B

LETTER TO AMATEUR GOLFERS

Oklahoma State University Letterhead

May 27, 1974

Mr._____

Dear Mr. ____:

I am a psychologist who is interested in why some people are successful while others are not. I am currently conducting a study with the help of 37 of the top 125 professional golfers in the country.

Since you are a golfer who is not a national champion I am requesting your assistance in this research study. This would require about five to ten minutes of your time and involves completing the enclosed questionnaire and returning it to me.

Any data you supply me will be held in strict confidence. The study is concerned with the general personality traits of national champions as a group compared with similar individuals who are not national champions, also taken as a group.

The data you supply will be "averaged in" to ascertain the personality trends of the group. We have already isolated a trait found in the great majority of winners in national bridge competition, but not found in otherwise similar individuals who are not national champions.

I will send you the results of this study when it is completed if you write your address on the FIRO B form. Any help you can give in accomplishing this study will certainly be appreciated. I have written to 270 members of the Quail Creek Golf Club after discussing the project with Mr. Gill.

Your name on the questionnaire would be helpful, but not important to the study. Your golf handicap, age, sex and whether you have earned a doctor's degree are important, however.

Sincerely,

John W. McCoy Ph.D. Candidate/Psychology

Kenneth Sandvold, Ph.D. Professor of Psychology WITA 2

John Wharton McCoy

Candidate for the Degree of

Master of Science

Thesis: THE NEED FOR INCLUSION IN NATIONAL CHAMPION PROFESSIONAL GOLFERS

Major Field: Psychology

Biographical:

Personal Data: Born in Paris, Texas, June 6, 1947, the son of Dr. and Mrs. Carl McCoy.

Education: Graduated from Durant High School, Durant, Oklahoma, in May, 1965; attended Southeastern State College, Durant, Oklahoma, from 1965 through 1969, receiving the Bachelor of Arts degree in 1969 with a major in Psychology; attended Oklahoma State University from 1969 until completing the requirements for the Master of Science degree in psychology in July, 1974.

Professional Experience: Graduate teaching assistant, Department of Psychology, Oklahoma State University, 1970-72; Research Fellow, Oklahoma Medical Research Foundation, Oklahoma City, summer of 1970; Clinical Psychologist I, Payne County Guidance Center, Stillwater, Oklahoma, 1972-73.