AN ABSTRACT OF THE THESIS OF

<u>Terry Dean Long, Jr.</u> for the <u>Master of Science</u> in <u>Psychology</u> presented on <u>November 4, 1996</u> Title: An Analysis of the Leisure Activities Finder Based on Congruence of Personality and Activity Choice Abstract approved: _____ In an effort to assess the validity of Holland's Leisure Activities Finder (LAF), this study compared groups of 18-to-28-year-old college students who had been classified as participating in recreational activities that were either congruent or noncongruent with their personality types. Holland's Self Directed Search (SDS) was completed by participants to determine personality type. Results of the SDS were then used to identify personality congruent activities listed in the LAF. Level of enjoyment and frequency of participation were the two variables by which comparisons were made. Participants were also asked to list the three recreational activities they participate in most often and rate each activity on enjoyment and frequency. Each activity was located on the LAF to determine if it was included in the list of activities identified as congruent with the participant's personality. Dependent variable ratings were rank ordered and placed into high, medium, and low groups of enjoyment and frequency; therefore a total of six groups were formed. Two-tailed <u>t</u>-test comparisons were made between congruent and noncongruent activities within each of the six groups. No significant differences were

found among any of the six comparisons. This study found no evidence to support the ability of the LAF to differentiate between activities that are congruent and incongruent with one's personality. Further research should consider variables such as self-esteem, self-efficacy, and other factors believed to be related to participation in activities congruent with personality.

AN ANALYSIS OF THE LEISURE ACTIVITIES FINDER

BASED ON CONGRUENCE OF PERSONALITY

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AND ACTIVITY CHOICE

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CHAPTER 1

INTRODUCTION

Over the past 30 years, a substantial body of research has revealed a positive correlation between participation in recreational activity and psychological well-being. Such findings appear to demonstrate the tremendous utility of recreation as a therapeutic tool; however, implementing such methods in a manner that harnesses the full potential benefit is a complicated task. Although various definitions have been offered, most characterize recreation as consisting of voluntary activity that is carried on in leisure time. While the pleasure derived from the activity itself is usually the primary motivator for participating, recreational experiences can also satisfy other needs such as social interaction, stress reduction, and achieving healthy levels of self esteem. Leisure time is often described as involving any discretionary time that is unencumbered by work or other obligations. Therefore, recreation refers to a variety of possible activities ranging from physical team competition to more individualized and relaxing tasks such as meditation or photography.

Also important is the substantial portion of life that involves leisure time. Assuming that work, leisure, and sleep are the three primary categories of how humans spend their time, it seems reasonable to conclude that the quality of leisure is a major contributor to life satisfaction. Such a statement would be especially true if one's professional life fails to adequately meet the needs that arise from the individual's particular personality type. In such a situation, leisure activities can compensate for the lack of professional gratification.

During the 1960s, the general approach to recreation as a therapy was to program "normal" activities in which large groups could participate. Sports, games, and arts and crafts were implemented to improve overall fitness, boost morale, and keep participants occupied in a healthy manner. Over the past two decades, the focus has gradually shifted from the population as a whole to the individual client. With this shift was born the task of identifying the most beneficial way for an individual to spend leisure time. While the endless number of possible recreational activities complicates such a task, the opportunity to develop multiple recreational interventions is also present.

Statement of Problem

The majority of past research has attempted to approach the problem of understanding therapeutic benefits of recreation by identifying specific activities that improve clients' psychological well-being. Such studies have often failed to address the issue of how individuals will differ in their response to the activity. It would be ill-advised to assume that a highly competitive recreational activity would be rewarding and beneficial for every individual. Consider the overly competitive person who explodes into a fit of anger when defeated or the social introvert who is terrified by the pressure to perform well during a team activity. Specific personality types may either benefit or suffer mentally when taking part in any particular activity. Therefore, a primary concern in the field of therapeutic recreation, as well as public recreation, is the lack of knowledge concerning congruence between leisure and personality.

In an effort to enhance current knowledge in this area, the present study evaluated the accuracy of the Leisure Activities Finder (LAF). The LAF was constructed on the basis of Holland's theory of personality types and is an outgrowth of Holland's Self-Directed Search (Holland, 1985a; 1985b). The purpose of the LAF is to identify potential recreational activities based on their level of congruence with an individual's personality type. Holland initially established the activity-personality matches of the LAF by exploring what activities certain personality types tend to participate in the most; therefore, the scale is based on the assumption that most people tend to participate in personality congruent activities.

Miller's (1991) initial study of the LAF offered some evidence of validity; however, conclusions drawn from the data are limited by several weaknesses in the research

design. Participants were asked to report one favorite activity, which was then used as the sole basis for determining congruence with personality type. The possibility that individuals may sometimes fail to independently choose and participate in the most beneficial leisure activities may have compromised the results of Miller's initial analysis. Several factors could contribute to such errors on the part of the participant, including absence of resources, a lack of knowledge concerning potential resources, physical and environmental limitations, and mental status. Considering factors such as frequency of participation and the amount of pleasure obtained from participation may help determine the true level of congruence between activity and personality. Participants reporting activities that were actually incongruent with personality could have created a bias towards ruling the LAF invalid.

By modifying Miller's initial study concerning the ability of the LAF to match recreational activities with personality type, the author hoped to avoid such problems and further clarify the validity of a relatively new and unestablished instrument. The results of the partial replication were analyzed with the intention of locating significant trends among various levels of activity enjoyment and participation rate.

Because of the potential benefits of maintaining

congruence between activity and personality, there is a definite need for research concerning validity of the LAF and similar instruments designed to match personality with activity. By establishing the LAF as a legitimate clinical tool for this task, recreation programmers and therapists will be given access to an instrument that can address the specific needs of individual clients. A more systematic and efficient method of identifying the most beneficial activities can then be implemented.

In contrast, data revealing the inability of the LAF to identify appropriate recreational activities would be equally important. This importance is demonstrated by the fact that the LAF is currently available for purchase by the general public despite the absence of adequate reliability and validity data. The significance of the current study lies in revealing the true utility of the LAF, rather than attempting to promote or condemn its use.

<u>Review of Literature</u>

When considering what conclusion can be drawn from literature addressing the therapeutic usefulness of recreation, one must keep in mind the broad range of possible activities. The ability to make holistic statements about the psychological benefits of recreation is impeded by the generality of the concept; however, careful review of several specific styles of recreation should help clarify its contribution to mental health.

Sport and exercise activities. According to a position statement released by the International Society of Sport Psychology (ISSP), physical exercise has been associated with reduced state anxiety, decreased level of mild to moderate depression, decreases in neuroticism, reduction in various stress indices, and beneficial emotional effects for all ages and genders (Morgan & Goldston, 1987). Such a general statement should be interpreted with caution because the type and level of exercise will greatly affect outcome. For example, Dishman (1988) found low intensity and short duration exercise unable to reduce anxiety levels. Furthermore, Dishman concluded excessive chronic exercise may have detrimental effects such as chronic fatique, anxiety, and depression. These findings emphasize the importance of thoroughly considering the various approaches to exercise.

When assessing self-concept of individuals who participated in a 16-week weight training program, Tucker (1983) found that those who participated in the program had significantly higher self-concept scores than the control group. Robertson, Mellor, Hughes, Sanderson, and Reilly (1988) found that squash play was related to increased self-efficacy and perceived body competence; however, squash play was also related to type-A disposition. Because of potential adverse health consequences, such highly competitive activities may actually be maladaptive for certain individuals. Interestingly, adolescent dancers were shown to be more emotional and have higher levels of anxiety than non-dancers (Bakker, 1988). Inconsistencies in the pattern of results dealing with exercise exemplify the danger of making general assumptions concerning therapeutic worth.

Artistic and nature activities. Another significant realm of the recreational domain includes non-sporting activities that are oriented around concepts such as relaxation, beauty, creativity, and accomplishment. Benefits from such activities range from decreases in depression through the use of music therapy to improvements in self-image, interpersonal interaction, and self-expression by partaking in vacation therapy (Amundson, Dyer, Henderson, & Rathbone-McCuan, 1991; Hanser & Thompson, 1994). Additionally, a five-day white water canoe trip was shown to improve the ability of schizophrenics to experience pleasure, communicate, and form a sense of belonging (Clark, Goering, & Tomlinson, 1991). Although such activities may involve exercise, physical ability will often play a much lesser role in determining level of accomplishment and overall reward for the participant.

<u>Personality and choice of activity.</u> The ability of specific forms of recreation activity to offer various

benefits must be considered in the context of the participant's personality. As previously discussed, individuals may react differently to any specific activity. An example of how such information may be applied is illustrated by research suggesting that knowledge of personality differences among participants in a weight training program can improve ability to predict changes in global self-concept (Tucker, 1983). Thus, certain individuals would benefit from the weight training program more than others. A large portion of the research concerning the relationship between choice of leisure activity and personality type has evolved out of Eysenck's personality theory (Eysenck, 1967). Kirkcaldy and Furnham (1991) found psychoticism to be "marginally" correlated with combative activities while extroversion was "modestly" correlated with arts and crafts. The same study brings attention to the importance of sex differences concerning the expression of personality through recreational means. Α positive correlation was found between extroversion and competitive activities in men, while neuroticism and competitive activities in women were negatively correlated. Such findings help clarify the earlier mentioned findings by Furnham (1981) that extroverts were more likely to seek out stimulating social situations and neurotics tended to avoid competitive or social activities.

Colley, Roberts, and Chipps (1985) made a comparison of individual sport athletes, team sport athletes, and nonathletes on the basis of personality type. While no difference was found between athletes from team and individual sports, results did suggest sports participants combined have higher levels of extroversion than nonparticipants. Davis and Mogk (1994) measured extroversion and psychoticism among elite, sub-elite, sport enthusiasts, and nonathletes. Unexpectedly, sub-elite athletes were the only group to have significantly higher extroversion scores than nonathlete controls. The authors concluded that level of interest and recreational participation were of greater significance than level of success.

Related to the concept of interest level is source of participant motivation. Field and Steinhardt (1992) argued that modern approaches toward exercise activities were overly focused on external motivators such as body image and athletic performance. Their hypothesis was supported by data showing higher levels of self-esteem and positive self-reinforcement among participants who exercised for pleasure and enjoyment rather than appearance or athletic reasons. Wolfe and Kasmer (1988) shed light on how different personality types may experience different levels of internal motivation by concluding that extroverts perceived competitive situations as being more arousing,

rewarding, interesting, and likable. Introverts often saw the same situation as potentially punishing.

Leisure, vocation, and the LAF. Melamed and Meir (1981) have concluded that both leisure and vocational choices are expressions of an individual's personality. When considering the congruence of activity with personality, Melamed, Meir, and Samson (1995) found vocational congruence and leisure congruence were positively correlated. Congruence was determined by comparing the similarity between personality and activity codes. Additionally, leisure congruence was positively correlated with worker satisfaction and negatively related to burnout, somatic complaints, and anxiety. The strongest outcome of the study was the compensatory effect that high leisure congruence had when paired with low vocational congruence. It appears as if leisure may compensate when individuals fail to achieve vocational congruence.

The LAF is comprised of a list of various recreational activities organized under predesignated personality codes, or Holland Codes, to indicate personality congruence for each activity. Holland Codes are created by rank ordering the three highest of six possible personality subscale scores. The subscales, which are based on Holland's personality theory, are labeled Realistic, Investigative, Artistic, Social, Entertaining, and Conventional (Holland, 1985a). Personality scale scores are found by completing Holland's Self Directed Search, which is a vocational interest scale (Holland, 1985b). By looking up the participant's Holland Code in the LAF, one can find several potential recreational activities. The described procedures for using the LAF are based on the theory that specific personality types will tend to be congruent with certain categories of work and leisure activity (Holmberg, Rosen, & Holland; 1991). Furthermore, work and leisure are interrelated dimensions of personality expression and specific types of each will tend to occur together based on personality type. In an effort to validate the theoretical foundation of the LAF, Miller (1991) compared activities identified by the LAF with participants' favorite recreational activity. After each participant indicated his or her favorite recreational activity, Miller determined the Holland Code for the favorite activity by referring to the LAF. Participants also completed the SDS for the purpose of attaining a second Holland Code. The SDS code was then compared to the favorite activity code. The level of congruence between the two codes was used to indicate the ability of the LAF to identify activities congruent with personality. Although the author concluded that results did offer limited support of validity, research concerning this issue is limited and incomplete. Miller's concluding statements concerning the weak results of his own study reiterate the need for further research.

Hypothesis. The general hypothesis in the current study was that participation in activities identified by the LAF as congruent with personality would result in higher reported level of enjoyment and frequency of participation. Such findings would help clarify the vague results of Miller's (1991) study and lend support for the ability of the LAF to identify recreational activities that are congruent with the participant's personality type. The following research questions were proposed:

- Do individuals who partake in recreational activities identified by the LAF as being congruent experience higher levels of enjoyment than those who participate in noncongruent activities?
- 2. Do individuals with high levels of congruence participate in the reported activities more frequently than those with low levels of congruence?

Summary

Previous research has failed to sufficiently explore methods of identifying the most beneficial activities for specific personality types (Kirkcaldy & Furnham, 1991). While several personality traits have been associated with specific subdivisions of recreation, very little is known concerning methods to identify the most beneficial activities for individuals. Based on studies of leisure and vocational congruence, the LAF appears to be a potential tool for such a task. Because human nature allows us the pleasure of being unique, the goal of the current study was not focused on identifying the single "perfect" activity for a specific personality type. The LAF allows for the identification of distinctive personality types that can be paired with numerous recreational activities. Such a design allows for a more individualized approach to programming without restricting participants to an excessively small number of potential activities.

CHAPTER 2

METHODS

Participants

Ninety undergraduate students attending Emporia State University in Emporia, Kansas initially volunteered as participants in the research project. Of the 90 participants, 42 were men and 48 were women. Participant age ranged from 18 to 26 with a mean of 20.84 and a standard deviation of 1.97. The majority of participants were enrolled in either Introductory Psychology or Developmental Psychology courses. Those who participated received course credit for their efforts.

Instrumentation

The first instrument administered was Holland's Self Directed Search (SDS) (Holland, 1985b), which measures Holland's (1985a) six personality types and corresponding work environments. There are 228 items used to determine a participant's personality type, which is expressed in a three-letter Holland Code. O'Neill and Magoon (1977) found the SDS able to predict college major and occupational plan in nearly two thirds of the cases.

Participants were also given a questionnaire requesting that they indicate what three recreational activities they have spent the most time participating in over the last 12 months and the average number of times each month they actually participated in the activity. Furthermore, the questionnaire asked participants to rate, on a 7-point Likert scale, the level of enjoyment for each activity they listed.

Procedure

After receiving approval to proceed from the Human Subjects Committee, the researcher posted sign-up sheets obtained from the graduate student office in Visser Hall at Emporia State University. Four group testing sessions were conducted within a 1-week period. At the beginning of each testing session, participants were given an Informed Consent form, which briefly explained the study and their rights as participants. If students chose to sign the Informed Consent form and agreed to participate, they were given a complete set of materials needed for data collection. They then filled out the distributed materials in the testing room under the supervision of the experimenter. Due to the importance of keeping test materials in order, each separate scale had been previously labeled with a participant number. In order to maintain confidentiality, participants were only identified by the assigned number. After completing the test materials, participants were given a Research Participation Slip to verify their participation in the project for course credit.

All research materials were scored by hand. The SDS was scored first, which yielded a three-letter Holland Code. From this code, a list of personality congruent activities can be identified by finding the first two letters of the Holland Code on the LAF. A separate Holland Code for each of the participant's preferred activities was then located on the LAF. The SDS code and each preferred activity code were compared to determine if the two were congruent.

For the purpose of considering the relationship between the existence or absence of congruence and the level of activity enjoyment, three groups of activities were formed. As mentioned earlier each participant rated three activities on their level of enjoyment. The ratings were rank ordered for each participant. The highest ranked activity for each participant was used to form the first group, the second highest made up the second group, and the lowest ranked activity was placed in the third group. The same rank order procedure was used again to divide participants into three additional groups based on frequency of participation. Each participant was placed in both the enjoyment level groups and the frequency of participation groups; therefore, the two variables were evaluated separately. The described method allowed for the two proposed research questions to be explored at three different levels. Analysis of multiple activities also presented a complete representation of overall participant leisure activity and enabled further analysis of Miller's use of the enjoyment variable as a measure of congruence.

As done by Miller, the level of congruence was

determined by comparing two-letter Holland Codes from the SDS to Holland Codes associated with preferred activities on the LAF. However, Miller's use of the Iachan Index procedure for quantitatively describing level of congruence was modified (Iachan, 1990). The Iachan Index allowed participants to be assigned a point value, ranging from zero to six, based on the extent to which the Holland code from the SDS matched the Holland Code for the preferred activity. The present study only considered two-letter matches as being congruent, which included both a perfect two-letter match (e.g., SR-SR) and an inverted two-letter match (e.g., SR-RS). One-letter matches of any kind (e.g., SR-SE, SR-ES) and no matching letters at all were considered incongruent. Such a procedure allowed for the formation of two distinct groups, congruent Holland Code pairings and incongruent Holland Code pairings.

Each dependent variable's three classification categories were divided into two groups based on the presence or absence of activity congruence; therefore, a total of 12 groups were formed for 6 comparisons. In contrast to the Iachan Index used by Miller, this procedure was in agreement with the formal two-letter code procedure of the LAF. Furthermore, the formation of two groups for comparison lends well to statistical analysis, whereas the Iachan index is limited by its nonlinear nature. While the complex statistical foundations of the Iachan Index may work well with a three-letter Holland Code, its power and utility are greatly reduced when only two letters are considered. Experimental Design

An inferential research design was implemented in the present study, which attempted to identify possible relationships between level of congruence, frequency of participation, and level of enjoyment. The independent variable was level of congruence between the SDS Holland Code and the Holland Code for each listed activity. The two dependent variables were level of enjoyment and frequency of participation. Thus, frequency of participation and level of enjoyment were evaluated to determine if they were the result of level of congruence between activity and personality.

Statistical Design

Independent <u>t</u> tests were used for all data analysis. Because the three levels of enjoyment and three levels of participation frequency were determined by rank ordering each participant's ratings of the three activities listed, every participant was represented in six groups. A comparison of congruent and noncongruent activities was made within each of the six dependent variable categories; therefore, a total of six independent two-tailed <u>t</u> tests were performed.

Summary

In sum, 90 students were recruited from Emporia State

University to participate in the current project. They completed measures of personality and recreational activity preference. The data produced were used to consider the effectiveness of the LAF as a tool for determining personality congruent recreational activities.

CHAPTER 3

RESULTS

A total of 90 students participated in the study; however, only 89 were included in the data analysis. One female profile was discarded due to incorrect completion of the leisure survey.

Raw dependent variable scores were used for statistical analysis. For frequency of participation, participants were given an option of responding in "times a week" or "times a month." If a response was given in "times a week," the raw score was multiplied by four to determine how many times a month they had participated in the activity. Monthly frequency was used for statistical analysis, which ranged from 1 to 30 times a month.

Statistical analysis involving level of enjoyment yielded no significant differences between congruent and noncongruent groups within the high $[\underline{t}(87) = -.38, \underline{p} > .05]$ medium $[\underline{t}(87) = -.10, \underline{p} > .05]$ or low $[\underline{t}(87) = -1.33, \underline{p} > .05]$ categories. Comparisons between congruent and noncongruent groups in terms of frequency of participation also failed to produce significant differences within the high $[\underline{t}(87) = .06, \underline{p} > .05]$ medium $[\underline{t}(21.17) = -1.61, \underline{p} > .05]$ and low $[\underline{t}(87) = -.93, \underline{p} > .05]$ categories. Means and standard deviations for all six comparisons are presented in Table 1.

Table 1

Means and Standard Deviations of Enjoyment Level and

Frequency of Participation (Times Per Month)

		Relative Enjoyment					
	High	Medium	Low				
Congruent							
<u>Congruent</u>							
Mean	6.87	6.23	5.62				
Standard Deviation	0.30	1.09	1.25				
	(n = 21)	(<u>n</u> = 17)	(<u>n</u> = 16)				
Noncongruent							
Mean	6.87	6.21	5.15				
Standard Deviation	0.42	0.93	1.29				
	(<u>n</u> = 68)	(<u>n</u> = 72)	(n = 73)				
		<u>tive Frequ</u> Medium	-				
	High 		Low				
Congruent							
Mean	18.16	11.70	7.38				
Standard Deviation	7.03	7.19	3.15				
	(<u>n</u> = 17)	(<u>n</u> = 19)	(<u>n</u> = 18)				
Noncongruent							
Mean	18.05	9.70	6.49				
Standard Deviation	6.42	4.03	4.24				
	(n = 72)	(<u>n</u> = 70)	(<u>n</u> = 71				
	(n = 72)	(n = 70)	(n =)				

CHAPTER 4

DISCUSSION

The intent of this study was to complete a replication and extension of Miller's (1991) initial analysis of the predictive value of the Leisure Activities Finder (LAF). Miller judged the validity of the LAF by how well it identified the participants' most enjoyed activity. Such a method raises concerns about the ability of a single activity to reflect an individual's congruence between recreational tendencies and personality. The current study's analysis of two dependent variables at three different levels was performed to detect any significant differences between congruent and noncongruent groups in terms of level of enjoyment and frequency of participation. When compared to Miller's use of a single activity for each participant, the latter method of examining several activities for each participant allowed for a more comprehensive representation of actual leisure behavior.

Results of the analysis provided no support for the validity of the LAF as a tool for identifying personality congruent activities. Significant differences between congruent and noncongruent groups, especially at high levels of enjoyment and frequency, would have supported the validity of the LAF. The lack of significant differences between individuals who chose congruent activities and individuals who chose noncongruent activities opposes the

assumption that the LAF can identify activities that induce frequent participation and high levels of enjoyment. Because such variables are assumed to be indicators of congruence, the utility of the LAF as a counseling tool is also guestioned.

The LAF identified a suspiciously small number of the 267 listed activities as being congruent with the personality types derived from the LAF for this sample. In fact, only 20% (n = 54) of listed activities were classified as congruent with personality type for enjoyment. The small number of personality-congruent activities created extreme differences in group size within each of the six comparisons. Group sizes for the six congruent groups ranged from 16 to 21, while the size of the incongruent groups ranged from 68 to 73. Such an unbalanced number of participants per group raises questions concerning the power of the statistical design and the overall accuracy of the LAF. A likely explanation for such extreme differences is that the LAF failed to identify several situations in which individuals were actually participating in activities congruent with personality.

The high number of reported recreational activities that were classified as incongruent may also be a reflection of social and environmental factors effecting recreational choice and opportunity. Specifically, factors such as current recreational fads, amount of free time, geographic location, expense of activity, and the actual reason or motivation for participation will all determine what activities are introduced to a person, how often that individual is able to participate in those activities, and the level of enjoyment received from participation.

Interestingly, there was also a tendency for the majority of participants to be classified under similar personality types. Evidence of such a tendency is conveyed by the fact that over three fourths of the activities listed by participants were classified as LAF code combinations involving two of three Holland subscales, which are labeled as Realistic, Social, or Entertaining. The three dominating subscales represent only half of the six possible subscales. There are 15 potential LAF code combinations that can be derived from the six Holland subscales. The tendency for a large portion of listed activities to be classified within 3 of the 15 potential catagories is possibly a reflection of the activities that are available to the sample population in the Midwest region and the social trends that occur within that particular cohort (ages 18 to 28).

The procedure of forming groups based on the rank ordered ratings of the two dependent variables created another concern. Using the rank order method allows for activities with high ratings to be classified in the low participation or frequency group and vise versa. For example, the frequency of participation ratings for a

participant's three activities may have all been over 20 times a month. In this case, a relatively frequently participated in activity would be classified in the low frequency group. Furthermore, a rating that was classified as high for one participant may be classified as low for another participant. Such a tendency may have ultimately created three homogeneous groups for each dependent variable.

A final factor that should be considered when interpreting results is the tendency of participants to consistently rate level of enjoyment at the upper end of the Likert scale. In fact, 80 of the 89 participants rated their most enjoyed activity (high enjoyment group) as a 7 on a 7-point Likert scale. Furthermore 74% (n = 66) of participants rated all three activities as a 5 or higher on a 7-point Likert scale and seventeen percent (n = 15) rated all three activities as a 7. The tendency of participants to rate activities very highly in terms of enjoyment reduced score variance and the possibility of uncovering any existing true differences between congruent and noncongruent groups. Such problems could be avoided in future replication by wording the survey instructions in a manner that would encourage variation in ratings.

<u>Conclusion</u>

Because no significant differences were found among the six comparisons, no supporting evidence can be offered

regarding the use of the LAF to identify beneficial recreational activities. Miller's study is based on the assumption that level of enjoyment is an indicator of congruence. Perhaps a more relevant method to approaching the question of the LAF's usefulness would be to consider variables that are also suspected as being benefits of participating in congruent activities. These would include concepts such as self-esteem, locus of control, and other aspects of self perception and mental health. A shift in focus to actual psychological benefits would appear to provide alternate methods of measuring personality congruence that could be considered in conjunction with level of enjoyment or frequency of participation.

Future studies concerning how such variables are related to participation in personality congruent activities, as determined by the LAF, should involve a more controlled experimental setting with closer consideration of age factors, regional trends, available recreational opportunity, and other variables that may create trends or subgroups within the general population. Furthermore, future researchers should consider examining the effects of actually using the LAF in the field to prescribe activities. While no data supporting the LAF has come from studies using frequency of participation and enjoyment level to differentiate between individuals who participate in congruent and individuals who participate noncongruent activities, it would be premature to dismiss the possibility of the LAF being a useful field instrument.

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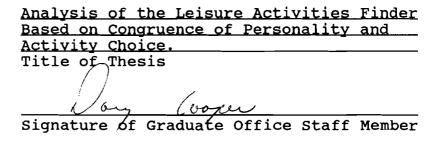
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Wolfe, R. N., & Kasmer, J. A. (1988). Type versus trait: Extraversion, impulsivity, sociability, and preferences for cooperative and competitive activities. Journal of Personality and Social Psychology, 54, 864-871. I, Terry Long, hereby submit this thesis to Emporia State University as partial fulfillment of the requirements for an advanced degree. I agree that the Library of the University may make it available for use in accordance with its regulations governing materials of this type. I further agree that quoting, photocopying, or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without written permission of the author.

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