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The University of Southern Mississippi

Explaining Leisure Interests, Personality, Work Centrality, and Vocational Interests

by

Stormy Z. Speaks

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of the Requirements for the Degree of
Bachelor of Arts of Psychology
in the Department of Psychology

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Abstract

The current study examined the relations between leisure interests and other vocational constructs among undergraduate university students. Methods included utilizing previously obtained data from a sample of 194 undergraduate students at the University of Minnesota, where study measures were given in 2007. Data collected included the Leisure Interest Questionnaire, used to determine leisure interests and activities outside the workplace; the International Personality Item Pool, a measure of five main personality traits; and the Strong Interest Inventory, a measure of vocational interests. Work centrality, or the importance of the role of work, was also assessed to determine the relations between leisure interests and vocational interests, given the importance of leisure versus work in an individual's life. As predicted, significant correlations between leisure interests, vocational interests, and personality were found.

Key Terms: leisure interest, vocational interest, work centrality, career development, personality

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Chapter I: Literature Review

Awareness of leisure interests and vocational interests of college students has been growing, notably over the last three decades, as dramatic changes have occurred in college and universities in the United States (Hendel & Harrold, 2004), with institutions struggling to meet the changing demands in services and demographics of students. Current conditions, such as the economic downturn and the growing use of technology, further challenge colleges to address social changes to meet the needs of a diverse student body. Researchers have suggested that Americans have become "career conscious," or more concerned about their careers, because of these shifts occurring in not only political and social realms, but also the supply and demand of jobs (Paulovits, 1980). These changes must be addressed in order for individuals to be prepared for their careers. One way to address changes in the nature of work is through career education, in which college and university students are educated about meeting the needs of tomorrow rather than those of today. Career education may also include increased focus on cultivating leisure interests in order to better understand one's vocational personality (e.g. an individual's unique skills, interests, and personality in relation to work), which may aid in career development. Therefore, understanding the leisure interests of college students may provide students with additional information to thoroughly examine their career options, broaden their vocational interests, and lead to an increase in self-knowledge, which will ultimately prepare them for the world of work.

Defining Leisure Interests

First, it is imperative to define the word *leisure*. Tinsley & Tinsley (1982) defined leisure as an attitude or state of mind in which an individual believes he or she is pursuing an activity for personal enjoyment rather than conforming to societal norms. Leisure activities are also freely chosen by the individual. Furthermore, Kelly (2009) said work is "remunerative, required by social norms, and necessary for the maintenance of the self and family," while leisure, or "nonwork," is the complete opposite – not profitable, required by society, or necessary to support a family (p. 439). However, Kelly suggested that because of the relation of leisure interests to work, individuals have different opinions of what constitutes work and leisure. In other words, work activities and leisure activities can overlap. He concluded that leisure is "neither work nor necessary activity" (Kelly, 2009, p. 450).

Leisure is also subjective rather than objective. According to Parr and Lashua (2004), an activity is considered leisurely when high levels of freedom, positive affect, and intrinsic motivation are perceived by the individual engaged in such activities. In other words, if an individual is allowed to choose an activity, feels positively about the activity, and is personally driven to engage in that activity, that activity is considered a leisure activity. Mannell and Kleiber (1997) also described leisure as a subjective and "mental experience while engaged in leisure activities and the satisfaction or meanings derived from these involvements" (p. 55). Therefore, leisure is defined by an individual's perceptions of his or her attitudes towards and outcomes of various activities.

Thus, leisure interests are an individual's preferences for different types of leisure activities. Leisure interests are subject to the influence of work but may also be pursued in conjunction with vocational activities, suggesting that leisure interests may be similar to, or completely independent of, vocational interests (Kelly, 2009). In sum, leisure interests are chosen by individuals and are subject to personal interpretation.

While interest in different leisure activities may not translate to engagement in those activities, studies indicate that actual engagement in different leisure activities can impact vocational choices and experiences. Parker (1971) found that the relationship between an individual's work and leisure activities is affected by his or her work situation and the core value the work offers. Parker subsequently identified three patterns that explain the relationship between work and leisure activities – extension, opposition and neutrality. Individuals who follow the extension pattern have similar leisure and work activities, while individuals who follow the opposition pattern have divergent leisure and work activities. Those who follow the extension pattern do not distinguish between work and leisure activities (e.g. a professional basketball player playing basketball recreationally), while those who follow the opposition pattern sharply distinguish between work and leisure activities (e.g. an office manager who skydives on weekends). Lastly, individuals who follow the neutrality pattern have somewhat different leisure and work activities. These individuals recognize the differences between work and leisure activities but do not necessarily distinguish between them; no leisure activity is off limits because it overlaps work activities and vice versa. The individuals in each of these patterns find some sort of satisfaction with their work-leisure lives, albeit in different

ways. Overall, this suggests the relationship between leisure and work activities may be complex, as leisure and work activities may either be complimentary or contrasting.

Engaging in leisure activities also has implication for work attitudes. Several studies by Melamed and Meir (Meir & Melamed, 1986; Melamed & Meir, 1981; Melamed, Meir, & Samson, 1995) examined individuals with incongruent vocational choices (i.e. vocational choices that do not match their vocational interests or personality) and leisure activities congruent to their personalities. Melamed and Meir concluded that leisure activities may or may not be congruent with work activities, but incongruence can be beneficial and compensatory when work activities are inconsistent with one's vocational interests. Miller (1991) found that individuals select leisure activities that are congruent with their personalities, which leads to higher satisfaction for incongruent vocational choices. Furthermore, Trenberth (2005) suggested engaging in leisure activities helps people cope with stress and sustains good attitudes, which may reduce the negative outcomes of work-related stress (e.g. job dissatisfaction, turnover). Therefore, participating in congruent leisure activities may improve an individual's job satisfaction in jobs that may be less congruent with his or her personality and possibly lessen stress. Furthermore, engaging in leisure activities may help individuals build relationships with others, develop positive emotions, and acquire knowledge, skills, and abilities (Brajša-Žganec, Merkaš, & Šverko, 2011), which subsequently improves one's quality of life.

Correlates of Leisure Interests

Investigation of leisure interests provides additional clarification of their relation to other psychological constructs. In particular, the examination of leisure interests and personality has increased our understanding of leisure interests. Wilkinson and Hansen (2006) measured this particular relationship, finding that the trait of Openness to Experience measured by the NEO Personality Inventory – Revised (NEO PI-R; Costa & McCrae, 1985) positively correlated with cultural and artistic leisure interests, such as Cultural Arts and Literature & Writing, as measured by the Leisure Interest Questionnaire (LIQ; Hansen, 1991). Additionally, Extraversion and Neuroticism were found to be positively correlated with social interests, such as Socializing and Partying. This research suggests that one's personality is related to what types of leisure activities he or she is interested in pursuing.

To expound upon this, Brandstatter (1994) argued that those with high levels of extraversion seek and pursue excitement more so than those with low levels of extraversion. Subsequently, extroverts engage in exciting activities more so than activities in other aspects of life, which provide them with higher levels of stimulation. Furthermore, Kircaldy (1990) found that those with high levels of neuroticism (e.g. negative emotionality) dislike playful leisure activities, such as skiing and scuba diving. Conversely, Kircaldy found a positive correlation between extraversion and engagement in these activities. These findings may be due to the idea that individuals with higher levels of neuroticism are likely to have less interest in "exciting" activities and that individuals with higher levels of extroversion report increased interest in these "exciting" activities. This is not surprising given that individuals with higher neuroticism scores are

easily distressed and experience more negative emotions. They would therefore be more likely to consider the potential dangers of "exciting" activities, whereas extroverts tend to generally report more positive attitudes and emotions, which may result in a more favorable appraisal of "exciting" activities. These findings suggest that leisure interests seem to complement an individual's personality.

Interaction with others also appears to be an important aspect of leisure interests, despite differences in personality. Barnett (2006) found that all student groups reported social activities as part of their leisure activities, regardless of personality. However, personality traits were shown to be related to different types of social activities one chooses to engage in. For instance, Barnett found that those with low levels of neuroticism engaged in sports activities more so than individuals with higher levels of neuroticism and that those with high levels of openness and low levels of agreeableness prefer performing arts activities. Overall, the literature supports the notion that personality is related to interest in different leisure activities.

Leisure interests are also related to individuals' work interests. Researchers have found positive correlations between leisure and vocational interests. Initial research suggested weak relations between leisure and vocational interests. Taylor, Kelso, Cox, Alloway, and Matthews (1979) found significant, but small, correlations between leisure and vocational interests and proposed that more research is needed to clarify these relationships. As more measures of vocational interests were developed, research suggested that leisure interests were more substantially related to vocational interests than previously assumed. Vondracek and Skorikov (1997) posited that leisure interests may play a role in the development of vocational interests. They found support for this idea

given positive correlations between work interests and leisure interests. For example, interest in the leisure activities of Sport and Helping Others were highly correlated with corresponding preferences for these same tasks as vocational activities in their study of students in seventh through twelfth grades. Furthermore, their findings suggested that leisure interests are an important contributor to vocational identity in that levels of interest in work, occupational exploration, self-efficacy, and identity achievement were positively correlated with each other and leisure interests. Thus, students should be encouraged to explore various leisure and work interests, which will benefit them later as they begin to seek employment, because they will have a better idea of the types of careers they wish to pursue.

Other vocational factors such as work centrality may also be related to leisure interests. Work centrality has been defined as "individuals' beliefs regarding the degree of importance that work plays in their lives" (Hirschfeld & Feild, 2000, p. 790), meaning that higher levels of work centrality are indicative of work being a more important life role relative to other life roles (e.g. leisure, family, citizen). Hirschfeld and Feild found that leisure interests influence the level of work centrality in an individual's life in that work centrality is innate and reflects individuals' value systems and self-identities. These results suggest that correlations between work centrality and leisure ethic are higher than correlations between work centrality and work ethic, which may mean that work centrality is more negatively related to one's importance in doing leisure activities. As a result, it is expected that individuals who are work-oriented will have different leisure and vocational interests than those who are leisure-oriented. It is assumed, people who identify work as more important may have lower leisure interests, feeling that work is

more important. In addition, society can also affect the importance of the role of work, according to a study by Snir and Harpaz (2009). They found that there are more work-devoted individuals in societies that value self-expression compared to societies that value survival. Correspondingly, work investment is heavier in societies in which skill mastery is valued. Therefore, societal factors may not only influence work centrality but may also influence the magnitude of individuals' leisure interests.

The Importance of Studying Leisure Interests

Despite a relative lack of research on leisure interests, studying leisure is a worthwhile venture because leisure can foster individual growth and development. Hendel and Harrold (2004) suggest that examining the leisure activities of college students is especially imperative because leisure activities encourage identity development, a crucial component of the personal and vocational growth of students. Ultimately, Hendel and Harrold suggest leisure interests cultivate vocational interests. In the same vein, Kleiber and Kelly (1980) examined the structure of leisure interests among college students and leisure interests' importance to vocational development. During emerging adulthood, which occurs between the ages of 18 and 25 years, establishing relationships with others, setting goals, and vocational development are the main foci (Hansen, Dik, & Zhou, 2008). Young adults are very focused on social leisure activities, which not only allow them to find romantic partners but also allow opportunities to engage in occupational networking. Kleiber and Kelly concluded this time period is a crucial stage in vocational development, because young adults are exposed to the process of vocational exploration and development. Therefore, it is important college students

are exposed to a variety of leisure and vocational activities early on to cultivate career goals.

Incorporating leisure into career counseling may also increase college retention. Ludwikowski, Vogel, and Armstrong (2009) suggest the majority of college students have not cultivated vocational interests prior to college admission, which ultimately may create challenges in finding a focus in college, as the main goal of higher education is to obtain training for an individual's career. In fact, Ludwikowski and colleagues noted a positive correlation between dropout rates and uncertainty about career choice. Thus, providing guidance on leisure interests and vocational interests may simultaneously encourage earlier exploration and awareness of vocational options and increase retention in higher learning institutions.

Research has indicated that career counseling can be helpful to students who are struggling with their career decision making, and incorporating leisure interests into career counseling may be beneficial. For instance, students who completed a career planning course were found to have more knowledge of vocational options and higher levels of confidence in their abilities to make career decisions (Thomas & McDaniel, 2004). Not only can career counseling narrow a student's vocational focus, but it can also promote awareness of the role of leisure in the workplace. Weiner and Hunt (1983) found that students who were undecided about their majors had the lowest work orientation. They hypothesized low work orientation is because undecided majors are confused about vocational goals and do not have defined ideas of how to approach a particular career. This led them to suggest that career counseling should include not only vocational counseling but also leisure counseling. Educating counselors about the

importance of developing leisure interests, promoting engagement in leisure activities, and effectively integrating leisure into counseling will subsequently lead to more effective career counseling practices. In turn, this could help students cultivate healthy leisure participation in their lives, which may lead to increased satisfaction with career choice. In addition, investigating the leisure interests of college students could help counselors develop awareness about the lifestyle and needs of diverse college student populations (Hendel & Harrold, 2004).

Examining leisure interests in career counseling may also be done in conjunction with assessing vocational interests, as discussing vocational interests has proven helpful in facilitating students' career development. Harmon and colleagues found that one-half to two-thirds of students choose a career based on their results of vocational interest assessments (Harmon, Hansen, Borgen, & Hammer, 1994). However, few studies have examined the expected relations between vocational and leisure interests, thus making it difficult for counselors to conceptualize clients' situations and provide recommended areas for leisure exploration. Investigation of the relations between leisure interests and vocational interests may help career counselors better predict likely areas for career exploration for students, given their leisure interests.

In conclusion, the literature on leisure interests is sparse, despite evidence suggesting that engaging in leisure activities may be helpful for increasing career exploration among college students. Additional research is needed on student samples to better assist students with their career choices based on their leisure and vocational interests in an effort to encourage increased understanding of one's vocational personality. The present study aims to aid in this venture.

Hypotheses

Given that exploration and engagement in leisure interests is related to the career development process (Hendel & Harrold, 2004), adequate research is needed to explore the relations between leisure interests and vocational constructs so that this information can provide a more comprehensive understanding of individuals' vocational personalities and aid in increasing the effectiveness of career counseling. To examine these relations, the current study was developed to examine the relations between leisure interests and vocational interests, personality, and work centrality. Based on the existing literature, the following hypotheses guided this research.

Hypothesis 1. Leisure interests were expected to be significantly related to vocational interests. Specifically, positive correlations between leisure interests and vocational interests were expected to be found by examining correlations between scores on the LIQ and the Strong Interest Inventory (SII). In particular, the General Occupational Themes (GOTs) of the SII were used for this analysis, as they provide overall information on vocational interests. The GOTs are based on John Holland's (1996) theory of vocational identity that describes six different areas of interest related to occupations. These six types are Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC). Realistic interests involve the preference for working with one's hands, building things, and working outdoors. Investigative interests involve the preference for intellectual activities, problem solving, and analytical thinking. Artistic interests include expression, creation, and imaginative thinking, with individuals high in artistic interests reporting enjoying written and performing arts. Helping others, teamwork, and relationship building are characteristic of social interests. Enterprising

interests involve the preference for working with others in a leadership role, including an interest in debating with, competing with, and persuading others. Those with conventional interests have preferences for organizing, and more likely to have increasing attention to detail and conscientiousness.

Of the GOT scales of the SII, Realistic interests were expected to correlate most highly with leisure interests that emphasize "doing" (e.g. Camping & Outdoors, Adventure Sports, Individual Sports, Hunting & Fishing, Building & Restoring, Gardening & Nature), Investigative were expected to correlate highly with interests that emphasize thinking (e.g. Cards & Games, Travel), and Artistic interests correlate with leisure interests focused on creating (e.g. Literature & Writing, Arts & Crafts, Shopping & Fashion, Cultural Arts, Dancing). It was expected that Social interests would correlate most highly with leisure interests that include helping (e.g. Community Involvement, Team Sports), Enterprising interests with leisure interests focused on interpersonal interactions (e.g. Socializing, Partying), and Conventional interests with leisure activities involving organizing objects or data (e.g. Collecting, Computer Activities).

Hypothesis 2. Leisure interests were expected to be positively related to personality traits given prior research demonstrating this relationship (Wilkinson & Hansen, 2006). It was expected that Openness would be related to leisure interests in Literature & Writing, Cultural Arts, Arts & Crafts, Shopping & Fashion, and Travel; Conscientiousness to Collecting and Computer Activities; Extraversion to Adventure Sports, Dancing, Socializing, and Partying; and Agreeableness to Community Involvement and Team Sports. Finally, it was expected that Neuroticism scores would negatively correlate with Individual Sports, Socializing, and Partying.

Hypothesis 3. Leisure interests and vocational interests were expected to differ between individuals who are more leisure-oriented (i.e. prefer the role of leisure to work) and individuals who are more work-oriented (i.e. prefer the role of work to leisure).

Chapter II: Methods

Participants

The sample included 194 students at a large Midwestern university who were enrolled in a psychology course, for which they received partial class credit for their participation. There were 118 female participants (60.8%) and 76 male participants (39.2%). Of the participants, 159 identified their ethnic background as White/European (82.0%) and 22 as Asian (11.3%). The remaining 13 participants identified their ethnicity as Alaskan native, Black, Hispanic, Pacific Islander, or multicultural (6.7%). The average age of participants was 19.11 years (SD = 1.7 years), and the average numbers of years spent at college was 1.67 years (SD = 0.96).

Measures

Leisure Interest Questionnaire (LIQ). The LIQ (Hansen, 1998) consists of 250 items pertaining to leisure activities that form 20 scales. The LIQ was used because it provides a "more thorough and comprehensive assessment of leisure interests" (Hansen & Scullard, 2002; p. 331). Participants were asked to rate each item on a three-point scale, (*like*, *indifferent*, and *dislike*) that reflected the degree of interest in the various activities (e.g. snowboarding, stamp collecting) listed. The scales are summarized in Table 1.

Hansen and Scullard suggest that the 20 LIQ scales can be organized into four categories: athletic activities (e.g., individual sports, adventure sports, team sports), artistic activities (e.g., cultural arts, dancing, literature & writing, arts & crafts), social activities (e.g., socializing, partying, community involvement), and outdoor activities

(e.g., gardening & nature, camping and outdoors. The consistency of the scale items (Mdn = .85), estimated with Cronbach's alpha, resembles those of well-established measures of vocational interests, demonstrating the LIQ's reliability (Hansen & Scullard, 2002). Evidence of validity was established given positive correlations between the scales and similarly themed Basic Interest Scales (BISs) of the Strong Interest Inventory, where correlations were greater than .45 (Hansen & Scullard, 2002).

International Personality Item Pool. Personality was measured using the International Personality Item Pool (IPIP; Goldberg, 1999), a 320 item measure to assess the Big Five personality factors and their facets (Openness to Experience, Conscientiousness, Extroversion, Agreeableness, and Neuroticism). These factors are measured by asking participants to rate a series of statements describing various behaviors on a scale from one to five (1 = very inaccurate, 5 = very accurate) to assess how accurately each statement describes them. Goldberg (1999) found acceptable evidence of validity for IPIP scores given significant correlations with the NEO-PI (Costa & McCrae, 1985), another measure of the Big Five personality traits. Internal consistency estimates (Cronbach's alpha) for the current sample ranged from .88 (both Openness and Agreeableness) to .93 (Extraversion).

Centrality of Work. Items that assess the centrality of work were taken from Harpaz and Fu (1997) and used to measure the importance of work. Participants were asked to assign 0 to 100 points to how important a certain area (e.g. leisure, community, work, religion, and family) is in their lives, where 0 is not important at all and 100 is of greatest importance. The points are independent of each area, and therefore each item can range from 0 to 100. In a later study by Snir and Harpaz (2005), test-retest stability

of scores on this measure, over a period of four weeks, was found to be fairly high. They found the test-retest Spearman rank correlation coefficients for each area were: .76 (leisure), .64 (community), .66 (work), .76 (religion), .82 (family).

Strong Interest Inventory. Vocational interests were measured using the Strong-Campbell version of the Strong Interest Inventory (SII; Campbell & Hansen, 1981). The SII aims to provide insight into a person's interests to assist with career development and contains 317 items that include three categories of scales: General Occupation Themes, Basic Interests Scales, and Occupational Scales. Participants were asked to rate each item on a three-point scale (like, indifferent, and dislike). Of note are the General Occupational Themes (GOTs) of the SII, which assess Holland's (1997) six occupational types (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional). The GOTs are an overall assessment of one's vocational interests and thus were used in this study. Estimates of internal reliability range from .84 (Enterprising) to .92 (Realistic) (Harmon et. al, 1994) for the GOTs, and supportive evidence of validity between the SII and Vocational Preference Inventory (Holland, 1985) has been found given the high median correlation (r = .76) between scales across measures (Hansen, 1983).

Data Analyses

Data was analyzed and organized using IBM SPSS (Statistical Package for the Social Sciences) software. Hypotheses were examined by calculating the correlations between the LIQ scale scores and SII GOTs and the LIQ and IPIP personality scale scores. Additionally, mean differences in scores on the LIQ scales and SII GOT scales

were examined for work-oriented versus leisure-oriented individuals, given scores in the Work Centrality measure.

Chapter III: Results

The first step of the analysis involved examining the relationship between leisure interests on the LIO and the General Occupation Themes (GOTs) on the Strong Interest Inventory (SII) using Pearson correlations. Table 2 contains the correlations for the 20 LIQ scales and the six SII GOT scales. Concerning the Realistic scale, significant correlations were noted between Camping & Outdoors (r = .31, $p \le .01$), Adventure Sports $(r = .30, p \le .01)$, Individual Sports $(r = .34, p \le .01)$, Hunting & Fishing $(r = .63, p \le .01)$ p < .01) Building & Restoring (r = .75, p < .01), and Gardening & Nature (r = .41, p < .01) .01), which were expected, as these are activities consistent with Realistic vocational interests. A significant correlation was found between the scores on the Cards & Games scale and the Investigative theme $(r = .38, p \le .01)$, but otherwise the Investigative scale was not expected to be related highly to any other LIQ scales. However, Investigate scale scores were correlated with scales on the LIQ (e.g. Adventure Sports, Building & Restoring, Camping & Outdoors, Gardening & Nature), similar to correlations between scales on the SII that are adjacent to the Investigate type, such as the Realistic type. Regarding the Artistic scale, significant correlations were discovered between Literature & Writing $(r = .67, p \le .01)$, Arts & Crafts $(r = .57, p \le .01)$, Shopping & Fashion $(r = .57, p \le .01)$.30, $p \le .01$), Cultural Arts $(r = .80, p \le .01)$, and Dancing $(r = .41, p \le .01)$, which were expected, as these interests are consistent with Artistic vocational interests. There was also a high positive correlation with the Gardening & Nature LIQ scale, $(r = .50, p \le .01)$, likely illustrating aesthetic interests that contribute to Artistic interests overall. Community Involvement was significantly correlated with the Social theme $(r = .52, p \le$.01), as were the LIQ Socializing $(r = .46, p \le .01)$, Cultural Arts $(r = .38, p \le .01)$, and

Dancing $(r=.41, p \le .01)$ scales. Significant correlations were noted between the Enterprising scale and the leisure activities of Socializing $(r=.23, p \le .01)$ and Partying $(r=.20, p \le .01)$, although the highest correlation was with the LIQ Community Involvement scale $(r=.36, p \le .01)$. Significant correlations were found between the Conventional theme and Computer Activities $(r=.41, p \le .01)$ and the Conventional scale and Collecting $(r=.42, p \le .01)$ and Building & Restoring $(r=.41, p \le .01)$. Adventure Sports, Cards & Games, Camping & Outdoors, Individual Sports, and Collecting were all significant positively correlated with all occupation themes. Overall, LIQ scale scores were highly correlated with SII GOT scores.

Next, IPIP scores assessing personality and the 20 scales of the LIQ were correlated to examine the second hypothesis. Table 3 displays these Pearson correlations. As hypothesized, Openness was strongly correlated with Literature & Writing $(r=.61, p \le .01)$ and Cultural Arts $(r=.58, p \le .01)$. No significant correlations were found among scores on Conscientiousness and the Computer Activities (r=-.00) and Collecting (r=-.03) scales, respectively, which had been hypothesized. In fact, the only significant correlation with Conscientiousness noted was Community Involvement $(r=.21, p \le .01)$. There were significant correlations noted between Agreeableness and Community Involvement $(r=.31, p \le .01)$ and between Agreeableness and Team Sports $(r=.22, p \le .01)$, as well as Socializing $(r=.31, p \le .01)$ and Partying $(r=.47, p \le .01)$. Significant correlations were noted among Extraversion and Dancing $(r=.25, p \le .01)$ and Socializing $(r=.26, p \le .01)$. As anticipated, significant correlations were not found between Extraversion and Adventure Sports (r=.14, ns) as well as Extraversion and Partying (r=.06, ns). Neuroticism was most negatively related to leisure interests. As

expected, a significantly negative correlation between Neuroticism and Socializing (r = -0.15, $p \le 0.05$) was noted, but there was not a significant correlation between Neuroticism and Partying (r = -0.11, ns. Collecting leisure interests were found to have no significant relationships with any of the personality scales.

Finally, the relationships between work centrality and leisure interests and the SII GOTs were examined. Based on their assessment of the importance of leisure versus work on the measure of work centrality, participants were categorized into one of three groups: "work-oriented" (n = 53), "leisure-oriented" (n = 109), or placing equal importance on work and leisure (n = 32). Only the work and leisure-oriented groups were examined in this analysis. Concerning leisure interests, only Arts & Crafts (t(160) = 3.11, p < .01) and Gardening & Nature (t(160) = 2.22, p < .01) were significantly different among individuals reporting higher work centrality versus those reporting higher leisure centrality. While both groups reported little interest in these activities, leisure-oriented individuals reported less interest in these activities than work-oriented individuals. It was also noted that participants placing more importance on work reported more interest in Gardening & Nature than those with higher importance on leisure. Results are listed in Table 4.

Regarding the GOTs, mean differences were found between the Investigative type (t(108.27) = 2.43, p < .01) and the Social type (t(108.27) = 1.82, p < .01) between individuals reporting higher importance of work versus higher importance of leisure. Results showed that individuals who are work-oriented reported higher Investigative and Social interests on the SII. Results are listed in Table 5.

Chapter IV: Discussion

First, it was hypothesized that there would be a positive correlation between leisure interests as measured by the LIQ and vocational interests as measured by the SII. Significant correlations among all leisure interests and at least one of the six General Occupation Themes on the SII were found. Of the 20 scales of the LIQ, five (Adventure Sports, Cards & Games, Camping & Outdoors, Individual Sports, and Collecting) were significantly positively correlated with all GOTs, suggesting these leisure interests are highly related to vocational interests.

Results of the current study differ from those found by Taylor et al (1979), who noted similar but weak correlations between leisure and work interests in a sample comprised of year ten (the tenth year of compulsory education) students about to complete secondary school in New Zealand. Differences between the results from Taylor's study and the current investigation may be due to numerous reasons. First, Taylor's study could have regional bias; students in the United States and New Zealand could have significant differences between leisure and work interests. Secondly, the career development of adolescents is probably not as generally developed as that of any college student population, who are highly exposed to a multitude of majors and peers pursuing different career paths, which was used in the present study. Since higher education fosters deeper exploration of leisure interests and vocational interests, students will have a more defined relationship between these types of interests. In fact, research has shown that over time, students' interests change and crystallize (Tracey, Robbins, & Hofsess, 2005). Thus, it could be assumed that older individuals likely have broader and more defined interests, as age allows for more opportunities for interest development.

Students are also encouraged by parents, peers, teachers, and college admissions counselors to choose majors related to their interests, suggesting that college students may be aware of how their leisure and vocational interests are related given that they have had to select or are thinking about a major already.

Furthermore, correlations between leisure interests and vocational interests found in the present study are similar to the magnitude of correlations found by Vondracek and Skorikov (1997) in a sample of middle and secondary school children in the United States. These relationships may be unique to American samples, possibly explaining the weaker correlations found in Taylor and colleagues' (1979) sample. Strong positive associations between work and leisure were found in both this study and that by Vondracek and Skorikov. In their study, students had explored, or engaged in, the vocational activities of Sport, Helping Others, and Computers the most. Similarly, leisure interests involving Adventure Sports and Individual Sports in the present study were correlated with all six GOTs, and Computer Activities and Community Involvement scales were correlated with five of the six GOTs.

Secondly, it was hypothesized that leisure interests would be positively related to personality traits as measured by the IPIP. However, study findings were not entirely consistent with this hypothesis. Each leisure interest on the LIQ was examined in relation to the Big Five personality types. Relations were found between Openness and Literature & Writing, Cultural Arts, Dancing, and Socializing and between Neuroticism and Partying. However, several other relationships that were not hypothesized were found, such as the positive correlation between Conscientiousness and Community Involvement. Furthermore, one leisure interest (Collecting) was found to have no

significant correlations between any of the personality domains, possibly indicating that personality does not play a role in the pursuit of this leisure interest. Neuroticism was most negatively related to leisure interests, indicating that this trait hinders appropriate leisure interest development and possible engagement in leisure activities.

Concerning leisure interests and personality, results are similar to those of Wilkinson and Hansen (2006), who posited that individuals pursue leisure interests that complement their personalities. Similarities in this present study and that of Wilkinson and Hansen include correlations between Openness to Experience and Cultural Arts and Literature & Writing, Extraversion and Partying, and Neuroticism and Socializing. However, correlations between Neuroticism and Partying were not found in the present study but were in Wilkinson and Hansen's study. This result is interesting considering that the samples in Wilkinson and Hansen's study and those of the present study were collected at the same university. This could simply be due to participant differences but warrants further replication to determine the nature of these relationships. Results of the current sample suggest that being extroverted is not essential to interest in socializing and are consistent with Barnett's (2006) findings that all students report engaging in social activities despite personality differences.

Additionally, Kircaldy (1990) and Barnett (2006) discovered different relationships between leisure interests and personality. Both found that individuals with high levels of Neuroticism dislike adventurous leisure activities, such as scuba diving, which was supported in the current study; in fact, Neuroticism was negatively correlated with most leisure interests. High levels of Neuroticism could suggest mental instability or illness, which often causes a lack of interest in leisure activities. Contrary to

Kircaldy's results, significant correlations between Extraversion and adventurous leisure activities were not found. This suggests that perhaps Extraversion does not influence the pursuit of such activities in a student population. Furthermore, findings in this study do not replicate Barnett's finding that lower levels of Neuroticism lead to more engagement in sports activities; Neuroticism and these activities were most negatively correlated in the present sample. Correlations were also found between high levels of Openness and performing arts activities as well as low levels of Agreeableness and performing arts activities in this study, which reflects Barnett's results.

Finally, it was hypothesized that the magnitude of leisure interests would be related to the extent to which one deemed work versus leisure as a central life role. Few mean differences between those who reported being leisure-oriented versus work-oriented were found for the 20 leisure interests scales. Of the 20 leisure interests scales, two (Arts & Crafts and Gardening & Nature) showed significant differences between leisure-oriented individuals and work-oriented individuals. Both groups did not report high interest in either activity, but it was found that work-oriented individuals reported more interest in these activities than leisure-oriented individuals did, particularly in Gardening & Nature activities. These results suggest more importance placed on work or leisure roles does not necessarily affect leisure interests, although centrality of life roles appears to play a role in interest in Gardening & Nature leisure activities. This could be because Gardening & Nature requires knowledge, physical and mental activity, and planning, which are all characteristics of a typical work environment. Additionally, work-oriented individuals had higher Investigative and Social vocational interests,

suggesting that work environments that involve thinking and social interaction interest them more than those without such attributes.

Differences in leisure interests given one's level of work centrality in this study are only somewhat similar to Hirschfeld and Field's (2000) findings that individuals with higher leisure orientation had lower work centrality. However, in the present study, only two significant relationships were found between leisure interests and work centrality. Therefore, it appears that work centrality does not heavily impact the magnitude of one's leisure and vocational interests. Perhaps leisure interests and vocational interests develop regardless of what domain individuals emphasize in their life (e.g. home or work). Furthermore, the participants in Hirschfield and Feild's study consisted of current workers, while the present study consisted of current students. The workers may have different perspectives on work considering they are already immersed in a work role, while students more likely have an idealized view of work, which could have affected the results. Further research might examine work centrality differences between employed students and students who do not work in order to gain a clearer picture of the impact of work centrality on career development of students. It may be that students' lack of work experience leads them to have similar leisure and vocational interests regardless of placing more importance on work or leisure roles. However, this may change as they spend more hours working after graduation versus more equitable time spent doing both work and leisure activities during the time they are students.

Overall, the results of this study provide some clarity as to how leisure interests are related to other vocational constructs. Relationships between leisure interests, vocational interests, and personality were found, but not all of the current results reflect

previous studies' findings. In general, results suggest that leisure interests are highly related to vocational interests, as well as some aspects of individual's personality, with little difference in leisure interests of work-oriented and leisure-oriented people.

Examining leisure interests, vocational interests, and personality is essential to career counseling at colleges and universities in order to help students make the most appropriate vocational decisions. As demonstrated in several previous studies (Thomas & McDaniel, 2004; Weiner & Hunt, 1983), both leisure and vocational interests should be incorporated into career counseling so that students are more successful in their efforts to identify and explore possible careers. These studies demonstrated that students engaged in career counseling were able to better plan, made more informed decisions about occupations, and understood how leisure interests were related to vocational interests (Thomas & McDaniel, 2004; Weiner & Hunt, 1983). Previous research shows that career counseling is helpful to students, as many outcomes of career counseling contribute to vocational development, such as identity development (Hendel & Harrold, 2004), relationship establishment, and goal setting (Hansen et. al., 2008). Thus, providing career counseling that incorporates discussion of leisure interests would likely help ensure that students pursue careers they are enthusiastic about, which in turn would likely lead to increased job satisfaction and productivity.

Limitations and Future Directions

The present study has the following limitations. One limitation is that the results came from a single university, which could include regional bias and limit the generalizability of the findings. For example, other regions may have either other leisure interests or the relationships between leisure and vocational interests may differ, because

some leisure activities are more easily satisfied in certain regions (e.g. hunting game or water sports). Participation from other institutions of higher learning in various parts of the country could examine this limitation further. Another limitation is the lifestyle and role differences of students and adult workers. Since adults typically have less time to pursue leisure activities due to employment constraints and other roles (such as that of a caretaker or homemaker) the current results may not generalize to employed adult populations. Efforts to collect samples of working adults to address this issue could examine if differences exist between the leisure interests of adult workers and students.

More research is needed regarding work centrality to better understand work centrality's relationships between leisure interests and vocational interests. Little research on work centrality exists, but the results of the current study, as well as findings from other research (Hirschfeld & Feild, 2000), suggest that it is a topic worth examining further since more students prefer leisure over work. Research on work centrality and leisure interests could help college and university career counselors effectively promote the role of work in an individual's life and also help students set goals and explore vocational options. A better understanding of work centrality could guide vocational counseling to assist counselors with helping clients explore careers that interest them given the importance of the role of work and/or leisure for each individual.

By examining leisure interests, personality, work centrality, and vocational interests among college students, career counselors can help prepare students for the world of work. The relationships found among these factors indicates that leisure interests are worth studying even further to assist in cultivating mentally healthy, productive workers.

Chapter V: References

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Chapter VI: Tables

Table 1

Scales on the Leisure Interest Questionnaire.

Scale	Number of Items	Mean	SD
Camping & Outdoors	11	5.98	4.76
Adventure Sports	23	10.51	10.65
Individual Sports	8	3.44	3.62
Team Sports	16	6.52	8.03
Hunting & Fishing	11	91	6.39
Cards & Games	10	1.13	4.16
Computer Activities	8	1.33	4.06
Building & Restoring	11	-3.17	6.18
Collecting	7	-3.42	3.43
Gardening & Nature	12	22	5.88
Arts & Crafts	13	-1.94	6.98
Literature & Writing	9	.88	5.16
Cultural Arts	20	2.28	9.88
Dancing	9	.52	5.40
Culinary Pursuits	9	3.51	4.49
Community Involvement	13	2.41	6.41
Shopping & Fashion	8	3.67	4.26
Socializing	11	8.92	4.00
Partying	7	3.71	2.72
Travel	10	6.77	2.34

Table 2

Correlations between Leisure Interest Questionnaire Scale Scores and SII General
Occupational Theme Scores

LIQ Scale	R	I	A	S	Е	С
Computer Activities	.43**	.36**	.18*	.06	.29**	.41**
Adventure Sports	.30**	.33**	.21**	.29**	.24**	.15*
Cultural Arts	.17*	.35**	.80**	.38**	.17*	.09
Arts & Crafts	.18*	.26**	.57**	.33**	.08	.14
Team Sports	.14	.20**	12	.24**	.25**	.20**
Cards & Games	.32**	.38**	.22**	.15*	.19*	.32**
Building & Restoring	.75**	.45**	.14	.20**	.28**	.41**
Partying	.04	.04	.17*	.19*	.20**	01
Hunting & Fishing	.63**	.38**	.12	.10	.30**	.33**
Gardening & Nature	.41**	.44**	.50**	.32**	.07	.18*
Community Involvement	.10	.33**	.28**	.52**	.36**	.31**
Camping & Outdoors	.31**	.33**	.17*	.26**	.15*	.15*
Shopping & Fashion	20**	.03	.30**	.32**	.12	03
Culinary Pursuits	.08	.21**	.38**	.36**	.19**	.07
Dancing	11	.10	.41**	.41**	.12	02
Literature & Writing	.13	.26**	.67**	.20**	.07	.02
Individual Sports	.34**	.36**	.20**	.29**	.28**	.28**
Socializing	.02	.22**	.29**	.46**	.23**	.12
Travel	.16*	.17*	.26**	.23**	.11	.10
Collecting	.51**	.35**	.32**	.24**	.30**	.42**

^{*} $p \le .05$, ** $p \le .01$

R = Realistic, I = Investigative, A = Artistic, S = Social, E = Enterprising, C =

Conventional

Table 3

Correlations between Leisure Interest Questionnaire Scores and International

Personality Item Pool Scores

LIQ Scale	О	С	A	Е	N
Computer Activities	.14	00	08	18*	09
Adventure Sports	.10	.11	.31**	.14	32**
Cultural Arts	.58**	.08	.14	.19**	.03
Arts & Crafts	.33**	04	13	.08	.15*
Team Sports	17*	.13	.22**	03	26**
Cards & Games	.09	.08	01	07	18*
Building & Restoring	.06	.05	03	19*	18*
Partying	.07	.04	.47**	.06	11
Hunting & Fishing	.02	00	.11	22**	23**
Gardening & Nature	.38**	03	08	04	.05
Community Involvement	.24**	.21**	.31**	.16*	22**
Camping & Outdoors	.13	.13	.19**	.10	31**
Shopping & Fashion	.14	.13	.08	.20**	.14
Culinary Pursuits	.26**	.03	.05	.13	.10
Dancing	.17*	.04	.19**	.25**	.06
Literature & Writing	.61**	.06	.10	.09	.08
Individual Sports	.03	.12	.18*	02	22**
Socializing	.14*	.14	.31**	.26**	15*
Travel	.13	.12	.12	.20**	07
Collecting	.14	03	04	12	05

 $^{**}p \le .05, *p \le .01$

 $O = Openness, \, C = Conscientiousness, \, A = Agreeableness, \, E = Extraversion, \, N = \\$ Neuroticism

Table 4

Mean Differences on Leisure Interest Questionnaire Scales Scores between Individuals

Reporting Higher Leisure versus Work Centrality

	Work-Oriented		Leisure-Oriented			_
LIQ Scale	Mean	SD	Mean	SD	t	df
Computer Activities	1.21	3.71	1.44	4.25	34	160
Adventure Sports	10.42	9.67	10.01	11.26	.23	160
Cultural Arts	3.47	8.79	.71	10.09	1.70	160
Arts & Crafts	19	6.22	-3.56	6.56	3.12**	160
Team Sports	7.51	7.83	6.40	8.22	.82	160
Cards & Games	1.54	3.85	.95	4.34	.83	162
Building & Restoring	-2.28	6.82	-3.96	5.80	1.63	160
Partying	3.08	3.17	3.92	2.46	-1.86	160
Hunting & Fishing	30	6.41	-1.40	6.46	1.02	160
Gardening & Nature	.85	5.27	-1.28	5.93	2.23**	160
Community Involvement	3.09	6.67	1.87	6.35	1.13	160
Camping & Outdoors	5.85	4.55	5.80	4.74	.07	162
Shopping & Fashion	4.43	4.05	3.38	4.34	1.49	160
Culinary Pursuits	3.90	4.12	3.15	4.64	1.01	160
Dancing	1.11	5.11	.15	5.49	1.07	160
Literature & Writing	1.72	5.15	.24	5.12	1.72	160
Individual Sports	3.39	3.67	3.13	3.80	.42	162
Socializing	9.29	3.51	8.70	4.26	.88	160
Travel	6.74	2.11	6.65	2.47	.22	162
Collecting	-2.62	4.17	-3.65	3.06	1.78	160

^{** =} *p* ≤ .01

Table 5

Mean Differences of SII GOTs Scores for Individuals Reporting Higher Leisure Versus

Work Centrality

	Work-C	Oriented	Leisure-Oriented			
SII GOT	Mean	SD	Mean	SD	t	df
Realistic	44.15	11.32	41.67	9.66	1.42	159
Investigative	48.90	8.91	45.36	8.57	2.43*	159
Artistic	48.16	8.91	45.36	8.57	1.79	159
Social	52.40	10.34	48.80	10.64	2.03*	159
Enterprising	48.49	11.87	48.21	10.58	.15	159
Conventional	49.18	12.13	48.01	10.70	.62	159

 $^{* =} p \le .05$