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A LONGITUDINAL STUDY UNDERSTANDING INTERPERSONAL BEHAVIOR CHANGES FROM RECREATION STUDENT TO PROFESSIONAL

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ABSTRACT

Personality instrument have been used in college classrooms to help students understand how their interpersonal behaviors will effect their professional work. This investigation assessed 1) how students majoring in commercial recreation have changed in personality over a five year time frame, from traditional college student to practicing professional and 2) which demographic variables have influenced these changes.

Forty-six students completed a self-assessment personality inventory, Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B). Five years later, the same individuals completed the FIRO-B and demographic questionnaire. Twenty-six responded.

The findings suggest a majority of students who changed in personality categories, however, these changes were not statistically significant. Additionally, demographic variables showed no relationship with the changes in personality. These findings indicate the use of personality assessments in undergraduate courses may be a predictor of interpersonal behavior in the professional setting and may be helpful in preparing students to understand their professional style.

INTRODUCTION

Developmental psychology focuses on understanding the life stages or cycles of people based on chronological age. The life stages typically include a variety of stages from infancy through adolescence, but much of the developmental literature categorizes adults into one single stage. More and more, developmental psychology literature is focusing on the changes adults go through and suggest that a variety of stages exist beyond adolescence (1, 2).

Levinson (1) divided adult life into transitional stages. The first stage is the transition into early adulthood between the ages of 18 and 22. The 18 to 22 year old age span Gerson et al. (2) considered to be the "age of identity". These investigators believed that

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a college student is not in the thrust of traditional adulthood because they are usually later in confronting his or her individual identity based on the social environment created in college. The authors further indicate that students are forming their values during this stage and learn their absolute limits in a variety of activities. Kelly (3) concurs suggesting that the 18 to 22 year old may fall in the late adolescent or young adult stages. During the late adolescent stage peer acceptance is important and young adults desire autonomy before the challenge of adult life begins.

The literature suggests an additional developmental stage during college years. During the transition time between college life and adulthood several changes take place in students. Traditional students are exposed to socializing pressures and others have found that a student in college becomes less authoritative, more independent and self conscious (4). A number of studies have been completed on understanding the changes in personality of students and some have quantified these results. With change occurring in a short amount of time, personality instruments may not be as useful for understanding their interpersonal behavior as an adult.

Personality assessments have been used with college students to help them understand their individual characteristics/traits and how these areas may impact on them professionally. Using assessments to help students identify future professional characteristics may be premature if indeed students personalities change from age 18 to 22 years while enrolled in college. It is important to understand if traditional undergraduate students, in certain major areas, experience a change in personality from adolescence to adulthood.

Definitions

The terms personality and interpersonal behaviors as used in this study to refer to those traits or characteristics which are broadly identified in the three categories of the FIRO-B. These categories are inclusion, control and affection.
FIRO-B

The Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B) is a tool designed to measure a person's behavior interacting with other people in the areas of inclusion, control, and affection. These three areas categorize human interactions by providing insight as to an individual's direction of behavior explained in two dimensions, expressed and wanted interpersonal need. Expressed behavior is that which a person expresses toward another person and wanted behavior is that which a person wants others to express toward him/her. Individuals proceed developmentally through inclusion, control, and then affection categories. Of the three interpersonal dimensions, affection is the last to develop in people, as it is the most advanced (5).

Cross Sectional and Longitudinal Studies

Several studies have used the FIRO-B to explore interpersonal behavior. It has been used to understand how personality impacts on developmental effort, how it relates to other personality assessments and how it helps assess leader/member relations (6-8). In addition, several studies have focused on understanding the interpersonal behaviors of students and postgraduates.

Bailey (9) used FIRO-B with newly enrolled graduate students to understand interpersonal issues of new graduate students. The investigation found students had a high need

to develop personal relations with others, expressed and wanted affection. In addition, they had a more moderate need to control. The results were used to design the counseling curriculum around more opportunities for close interaction.

Graduate students appeared to be more readily studied in longitudinal analysis. Interpersonal and leader behaviors were assessed in Seaberg and Ramirez/s (10) study of graduate students. One hundred and fifty-four students enrolled in the Colleges of Business Administration and Education complete the FIRO-B. The investigators found expressed inclusion was a need of these students with less supervisory experience. Issues of control were not found to be significant and the study concluded that since some respondents were in the preparatory phase of adult life, the issues of control were not significant to them. Business students were more inclined toward expressed and wanted affection. Seaberg and Ramirez (10) concluded that people engaged in professions that are concerned with people were more likely to have people oriented characteristics.

One study examining changes in college students and professionals using the FIRO-B has been identified. Ritcey (11) studied undergraduate and graduate business students and compared their FIRO-B results with practicing business professionals. One hundred and four were in each sample. He found a significant difference existed in the inclusion and affection scales. The students scored higher on these scales than the professionals. Ritcey (11) contends this supports research suggesting students are predisposed to an abundance of social issues. He also found a significant difference existed in the expressed control scale. The professionals scored higher than the students in this area. He suggested "younger and less experienced pre professionals (students)

were not as pre disposed to a structured environment where power is exercised through the interpersonally ordered environment." (10, p. 81). Ritchey also found a significant difference in the control scale based on gender. Ricey predicted a difference would exist between a business and human service professional. The traits important in each industry would be different.

Longitudinal Studies

FIRO-B and other personality assessments have been used to study interpersonal behaviors at one moment in time. Some assessments have additionally been used to study interpersonal behaviors over time. Kuh (12) studied factors influencing post college personality. The investigator used the challenge-response theory to help explain the post college changes in student behavior. Various demographic variables influenced post college personality. Occupation and level of educational attainment were of particular interest. A cross sectional study looking at college freshmen, seniors and alumni was administered using the Omnibus Personality Inventory (OPI). Several demographic variables were studied and assessed using the OPI. The study found no change of personality scores based on occupation, male marital status, and major taken in college. It did find relationships however, between the change of scores and age of respondents, and female marital status. Kuh (12) indicated the need for a longitudinal study of college seniors was needed to discover post college changes.

Dollar (13) also used the OPI to study changes in personality. Traditional full-time students who desired to be teachers completed the assessment. The investigator studied the personalities of this student group for ten years from entrance in college

to professional status. Students during these years flowed through two development life cycle phases. A 71% response rate was obtained from the original sample, from the pre to the post OPI. Seventy-five percent of the responding sample was employed professionally in education. The remaining 25% were either not employed or attending graduate school five years after graduation. Study results indicated that 8 of 14 scale items changed significantly. An increased/improved emotional maturity, psychological adjustment, self-esteem and reduced anxiety were evident in the results. A decrease occurred in social extroversion and less interest in socializing was also concluded.

In another professional field, Whittemore, Burnstein, Loucks and Schoenfeld (14) completed a longitudinal study of medical students to understand their personality changes. The investigators used Jackson's personality research form with 846 medical students at both their freshmen and junior year in medical school. Eight of 20 personality trail scales changed significantly. No change was apparent based on gender or age. Those traits that did change were that students appeared to have more of a hedonistic nature. Generally, respondents were less oriented toward achievement, had increased aggression and were more impulsive. The investigators concluded that these results resembled our findings and that medical students no longer had ideal beliefs about medical education. Between years one and three, students allowed themselves to be less disciplined and ambitious.

Zeldow, Daugherty and Leksas (15) disagreed with these findings about medical students changing to more hedonistic personalities. The investigators studied medical students throughout their academic career. They found a decrease in locus of control, increased vulnerability and a decrease in dominance over the four years from freshmen to senior. They concluded that no cynicism was found and that although students became less extroverted and more tense in years two and three they returned to freshmen levels by year four. Zeldow et. al. (15) concluded that these personality changes were not necessarily negative but students became more humanizing. Regardless of the type of change what these studies conclude is that students do change.

Purpose

It appears in the literature that personalities do indeed change from college to professional level. However, the research in this area does not spread across all types of disciplines or educational levels. Until the research encompasses all types of professional fields, the conclusions can be limited to only that area of study. The purpose of this investigation is to identify 1) if a change in personality occurs from a traditional undergraduate, to a professional level, and 2) the extent to which gender, marital status, highest degree held, age, number of children, and the amount of supervisory experience have on post college personality changes.

METHODS

Sample and Procedures

Respondents in the study were undergraduate commercial recreation and facility management students of a mid-size, Midwestern university. Respondents were selected from a Seminar in Commercial Recreation course after completing a FIRO-B questionnaire. Once the FIRO-B was completed and assessed, students were asked if they would be willing to volunteer to a follow up, post

study five years later. Those interested provided their FIRO-B scores, name and permanent address to the investigators. In two sections of the course during the 1993/94 academic year, 48 of 61 students volunteered and provided the information necessary to participate.

In 1998, addresses and telephone numbers were updated from the original sample of 48 students. Of the original sample, 46 of the 48 did not have updated records that could be verified. In these cases, the original mailing address was used to contact the former students. A personal letter, demographic questionnaire, and FIRO-B personality assessment were mailed first class with postage paid return, to the sample. Reminder postcards were sent one week following the first mailing and a return of 18 of 48 assessments was initially received. The two unknown updated addresses were returned addressee unknown. The investigators then attempted to contact each student who had not responded to the survey. Telephone contact was achieved with 16 of the 28 remaining students. A second mailing was sent to the 28 students and a return of an additional eight was achieved. Overall, 26 of 46 students responded to the study which was a response rate of 56%. Only those students responding to the post college questionnaire and assessment were included in the final analysis.

Instrument

Two instruments were used to study the post college changes in students. A demographic questionnaire was designed to elicit information about the respondents. The variables included age, marital status, number of children, supervisory experience, gender, highest degree held, and occupations for the past

five years. The second portion of the instrument was the FIRO-B.

The FIRO-B contains six scales that measure interpersonal need: expressed inclusion, wanted inclusion, expressed control, wanted control, expressed affection, and wanted affection. The instrument contains 54 total items, 9 for each scale. A range score of 0 to 9 or 10 may be obtained with 0 to 2 considered a low score and preference for this behavior is very selective; 3 to 6 is a medium score and the preference for this behavior is moderate; and 7 to 9 or 10 is a high score and with preference for this behavior being strong (16).

The FIRO-B scales were originally developed using one thousand subjects. Reliability of the instrument has been completed using internal consistency analysis. Reproducibility scores are very high and consistent across sample types. In addition, test/retest analysis was completed on a sample of Harvard students over a one-month time frame. The six scales achieved a mean coefficient of .76. Content, and concurrent validity were also assessed and found to be appropriate (5). Shutz (5) indicated that there are differences among occupational groups. Thousands of FIRO-B instruments have been collected and used to create occupational profiles. High scores of all six dimensions are usually reflected by professional positions with a large amount of contact with other adults. Introverted stereotyped positions involving activities with less people contact had low scores overall. Finally, the expressed and wanted scores in the inclusion and affection dimensions were shown to have a statistically significant correlation (5).

Analysis Procedures

Descriptive statistics were gathered for each of the respondent's pre and post FIRO-B assessments. This was used to profile identical respondents during the five year time span. Additionally non parametric tests including Pearson's Chi Square and Binomial Tests were used to determine if the pre/post results were significantly different and if any demographic variables indicated a relationship to the changes in personality results.

RESULTS

Of the 26 students who responded, 42% were male and 58% were female. This differed slightly from the original sample of 52% male and 48% female. However, since only those pre tests were used from those who responded in the post college assessment, the variance was not an issue. The average age of the respondents was 28 years. Almost half (56%) of the respondents were married in the past five years and 44% remained single. Forty-six percent of the respondents also had at least one child.

Respondents had all completed at least a bachelor's degree with one respondent completing a master's degree. Most had worked at one point in their career in a recreation capacity since the first assessment (72%) however, 46% currently held recreation related positions. The remaining 54% worked professionally in a variety of industries including manufacturing, personnel, sales, banking, construction, and insurance. Former students averaged slightly over two years of service with their current employers. Additionally, they averaged slightly less than two years of supervisory experience since the first assessment was completed (23.3 months) (Tables 1.1 and 1.2). Sixteen percent of the respondents indicated

they had no supervisory experience since the last assessment.

Descriptive statistics were completed with the college and post college FIRO-B scores. The majority of respondents during college fell into the high inclusion category, low control category, and high affection category. Seaberg and Ramirez (10) suggested that people interested in the service industry would have more people orientated characteristics. The high inclusion category suggests this relationship. Most respondents during college were high in people oriented categories (Table 1.3). Additionally, Bailey (9) found graduate students had high affection and moderate control scores which are similar to the findings in this study.

A shift occurred between the college and post college assessments. Respondents moved into the low and moderate inclusion categories, and less were in the high or people oriented categories. Low control scores continued to exist with even more respondents moving in the lower direction in the past five years. As well, affection scores appeared to have a more moderate shift. Some respondents moved from low and high into moderate categories but the majority remained at the high end (Table 1.3). These findings support those of Dollar (13) and Zeldow et. al. (15) as they both found students decreased in inclusion, affection, extroversion categories as a less interest in socializing emerged (Table 1.4). Schultz (5) indicated that people with high scores in all dimensions reflect people who have a lot of adult contact. Those with low scores tended to work in more introverted positions. When assessing only those professionals still working in the recreation field they indicated a combination of low and high scores in each of the dimensions. None of the three dimensions showed that all recrea-

tion professionals displayed all low or high scores.

Even though a change existed between college and post college FIRO-B scores, these changes were not statistically significant. In each of the three interpersonal dimensions, inclusion, control and affection, no significant change was indicated at the .05 significance level.

Although Kuh (12) found some demographic variables had a relationship with changes in personality (specifically age, and female marital status), this study found no relationship existed with this sample. Whittemore et. al. (14) supported these findings as they also found no relationship with gender or age and personality assessment changes. No relationship existed based on occupation, male marital status and college major in Kuh's (12) study (Table 1.5, 1.6, and 1.7).

DISCUSSION

As the literature suggests, a traditional college student, aged 18 to 22 years falls into one adulthood life cycle stage. Therefore, one of the underlying reasons for initially completing this study was to ascertain if the use of personality assessments as a tool in undergraduate courses was of any value in discussing professional behaviors. It is apparent in this study, change has occurred in student to professional personality but it is not statistically significant. Even though differences appeared between college and post college categories, significant differences did not exist between any of the interpersonal behavior dimensions. Additionally, none of the demographic variables were

shown to have a significant relationship with the change in personality over the past five years.

These results suggest that a separate developmental stage may not exist regarding this sample and their interpersonal behaviors. Personality assessments may be used in classroom activities as a tool to discuss professional issues. Students' interpersonal behaviors will not change significantly in the five year time span from college senior to professional. Additionally, demographic factors such as age, gender, marital status, education level, number of children, and supervisory experience do not play a role in these changes occurring.

These findings do not support that a significant change in personality exists between the adolescent and adult life stages. One limitation to this study however, was the small sample size. The authors suggest that if seeking statistical significance, a sample size of at least 75 would be appropriate if the same data was to emerge in another study of this type. Continued research into the changes of personality between traditional college student and professional need to occur, but with larger sample sizes.

Further study would be beneficial in identifying other potential demographic impacts to interpersonal behavior. Such influences may be related to issues relating to financial concerns, divorce, or death. Do these variables influence change in behavior? Additionally, continued analysis with this cohort group will reveal at what stage a change may occur. This study was completed five years after a senior level class was taken, however, would any change occur across these students adult life cycle stage?

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TABLE 1.1
Responding Student Demographic Characteristics

	n	%
Gender		
Male	11	42
Female	15	58
Total	26	100
Position		
Recreation related	12	46
Non-recreation	14	54
Total	26	100
Amount of Recreation Experience		
None	7	28
1 year	10	40
2 years	5	20
3 years	2	8
4 years	1	4
Total	25	100
Highest Degree Held		
Bachelor's	25	96
Master's	1	4
Total	26	100
Marital Status		
Single	11	44
Married	12	48
Other	2	8
Total	25	100
Number of Children		
0	7	54
1	4	31
2	2	15
Total	13	100

TABLE 1.2

Responding Students Demographic Characteristics Continued

<u>Age</u> <u>n</u> Mean age, in years <u>sd</u>	20 28 5.13
<u>Length of Time with Current Employer</u> <u>n</u> Mean no. of months <u>sd</u>	25 25 20.12
<u>Amount of Supervisory Experience</u> <u>n</u> Mean no. of months <u>sd</u>	25 23.3 20.28

TABLE 1.3
Pre and Post FIRO-B Categories for Respondents

	Pre Test In College			Post Test After College	
	n	%		n	%
Inclusion					
Loner	5	19		5	19
Loner Tendency	-	-		-	-
Now You See Him/Don't	2	8		5	10
Cautious Association	-	-		2	9
Social Flexibility	2	8		2	9
Conversationalist	1	4		1	4
Inhibited	1	4		2	9
Hidden Inhibitions	3	11		2	9
People Gatherer	12	46		7	28
Total	26	100		26	101*
Control					
Rebel	10	39		10	38
Self Confident	3	11		6	23
Mission Impossible	3	11		5	19
Checker	2	8		2	8
Matcher	5	19		2	8
Narcissistic	-	-		-	-
Loyal	1	4		-	-
Dependent	-	-		1	4
Take a Break	-	-		-	-
Dependent/Independent	2	8		-	-
Total	26	100		26	100
Affection					
Pessimist	4	15		2	8
Image of Intimacy Tendency	1	4		-	-
Image of Intimacy	-	-		1	4
Careful Moderation	1	4		1	4
Golden Mean	3	12		6	23
Living up to Expectations	-	-		1	4
Cautious Lover	2	8		5	19
Cautious Lover in Disguise	4	15		-	-
Optimist	11	42		10	38
Total	26	100		26	100

* Does not add up to 100 due to rounding errors

Table 1.4
Binomial Test Comparing Pre and Post FIRO-B Categories

		Binomial Test	
FIRO-B Categories		n	sig.
Change in Affection			
Change		15	.556
No Change		11	
Total		26	
Change in Control			
Change		15	.556
No Change		11	
Total		26	
Change in Inclusion			
Change		17	.170
No Change		9	
Total		26	

TABLE 1.5
Pearson's Chi Square Comparison of Demographic Variables and Inclusion Category

	Inclusion		
Demographic Variables	Value	df	Sig.
Age	6.25	6	.528
Gender	.99	1	.419
Highest Degree Held	1.96	1	.346
Amount of Supervisory Experience	14.87	12	.227
Ever worked in Recreation	3.24	4	.619
Number of Children	2.61	2	.276
Marital Status	3.96	2	.169

TABLE 1.6
Pearson's Chi Square Comparison of Demographic Variables and Control Category

	Control		
Demographic Variables	Value	df	Sig.
Age	9.58	6	.094
Gender	1.2	1	.426
Highest Degree Held	1.42	1	.426
Amount of Supervisory Experience	16.88	12	.092
Ever worked in Recreation	8.13	4	.070
Number of Children	.07	2	1.00
Marital Status	.16	2	1.00

TABLE 1.7
Pearson's Chi Square Comparison of Demographic Variables and Affection Category

	Affection		
Demographic Variables	Value	df	Sig.
Age	8.28	6	.215
Gender	.08	1	1.00
Highest Degree Held	1.42	1	.426
Amount of Supervisory Experience	13.19	12	.412
Ever worked in Recreation	2.56	4	.814
Number of Children	.07	2	1.00
Marital Status	2.83	2	.360