Residence, perceived latitude of choice and desired control among the long-livin

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By
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B.A., Merrimack College, 1983

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Running head: PERCEIVED CHOICE AND DESIRED CONTROL
Acknowledgments

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Each of these have provided a truly educational foundation upon which my future academic endeavors will be shaped.
Desired Control

Abstract

Perceived control, perceived choice, and residential setting are important factors which need to be addressed in research involving the long-living. The focus of this study was to determine the relationships among these variables. The search for an interaction between residential setting (either high or low constraining) and perceived choice and its effect on perceived control distinguishes this study from previous research. Twenty institutionalized and twenty non-institutionalized women sixty-five years of age or over were administered the Desired Control Measure as well as the Importance, Locus and Range of Activities Checklist. Perceived choice scores obtained from the former scale, residential setting, and their interaction were used as predictor variables and scores on the latter scale the criterion, in a multiple regression analysis. Only perceived choice scores significantly predicted perceived control scores, $F(1,38)=24.28$, $p<.001$. A significant interaction between residential setting and perceived choice was not found. The regression slopes for each sample could not be regarded as statistically different based on Marascuilo and Levin's (1983) test for parallelism of slopes, $F(2,37)=1.45$. Further understanding of the importance of residential setting and perceived choice is necessary in order to maximize life satisfaction and well-being among the long-living.
Desired Control

Residence, Perceived Latitude of Choice and Desired Control Among the Long-Living

Freedom to exercise control, that is, to make choices, may be an intrinsically motivating force in human behavior (Burgers, 1975; Perlmuter & Monty, 1977). Moreover, it is apparent that the perception of choice, rather than choice per se, has greater importance for psychological well-being (Perlmuter & Monty, 1977; Noelker & Harel, 1982). Similarly, experimental evidence suggests that the absence, or more importantly, the perceived absence of control may be destructive to an organism (Weiss, 1971; Seligman, 1975). Perlmuter and Monty (1977) cite several studies on diverse topics which, when taken together, strengthen the general assumption that allowing a subject either to exercise choice or to perceive the potential for choice augments performance in a wide variety of situations. The authors conclude that the psychological importance of the need to perceive control, operationalized here as the perceived opportunity to make choices, "is fact, not fantasy" (p.764). Inherent in any definition of choice is availability of alternatives. Positive alternatives may be referred to as opportunities for "reinforcement." Reinforcement can be defined as any stimulus which increases the probability of a response upon which it is contingent and which decreases the probability of a response when it is withdrawn.

The importance of exercising choice is no less great
for the "elderly" than for other age groups. Although a highly heterogeneous population, for the purposes of this paper, the "aged" and "elderly" constitute those individuals sixty-five years of age or older and will be referred to as the "long-living." As used here, the process of aging refers to both physiological and behavioral decline. There are obvious accrued physical changes which include: decreases in visual and auditory acuity; decreases in elasticity of the skin and in subcutaneous fat; atrophy of the sweat glands; changes in the cardiopulmonary system; and a series of changes in the musculoskeletal system that reduce agility and speed and increase the likelihood of fracture (Reid & Ziegler, 1981).

Behavioral decline refers to a continual lessening of skills which might be manifested by loss of memory, poor performance on cognitive measures, decreased coordination, the development of maladaptive behaviors such as talking to oneself in public, poor social skills, and poor self-care (Baltes & Baltes, 1979; cited in Williamson & Ascione, 1983). Importantly, the definitive sign or harbinger of aging is that these cumulative behavioral and physical decrements are irreversible (Goldman, 1971). Thus, many long-living individuals face an increasingly narrow range of choice and opportunities to exercise choice due in part to physical and behavioral constraints.

Not only do many long-living persons face myriad biological and behavioral constraints, but they also face psychosocial changes associated with these constraints.
These include retirement, separation from family, relocation, decreased mobility, greater dependence on others and the loss of spouse (Reid & Ziegler, 1981). In addition to deteriorating health and retirement, there is a tendency for an increasing number of experiences of loss, through death of relatives and friends, and an inability to engage in certain recreational activities, all of which "certainly lessen the number of reinforcers available in an older person's environment" (Williamson & Ascione, 1983, p. 584).

It is the main thesis of this paper that perceived choice is an integral part of life satisfaction and well-being among the long-living, especially because of the increased physical, behavioral, and psychosocial constraints which they face. In particular, it will be emphasized that place of residence and perceived choice will be significantly related to the value placed on selected reinforcers and the expectation that these will be obtained. Those who live in high constraining environments (e.g., nursing homes) are expected to differ in opportunity for choice and the expectation of exercising choice. Residential setting and availability of reinforcers, actual or perceived, play an important role in the subjective well-being of the long-living.

To the degree physical decline, behavioral decline and associated psychosocial changes have been experienced by the long-living person, the greater the extent of loss of control and opportunity for choice. An extreme example of
the detrimental ramifications of such loss has been provided by Ferrari (1963). In her study, a significant relationship was found between mortality and the lack of freedom of choice in relocation of a sample of long-living women accepted as residents to an institution. Seventeen persons in her sample indicated that they had no choice but to relocate to the institution. Of these, sixteen died within ten weeks of residence. Also, Goldman (1971) has presented evidence which supported his thesis that loss of choice of personal opportunities was the most significant measure of aging, whether social or physiological. He also suggested that this loss of choice represented aging only if it was irreversible. It has been believed, generally, that to the extent long-living individuals have been able to maintain a predictable and controllable environment, they have experienced less physical and psychological deterioration (Schulz, 1976). Numerous studies have corroborated the positive relationship between personal control expectancies and psychological well-being among the long-living (Schulz, 1976; Schulz & Hanusa, 1978; Wolk & Teileen, 1976; Wolk & Kurtz, 1975; Langer & Rodin, 1976; Rodin & Langer, 1977; Hulicka, Morganti, & Cataldo, 1975; Reid, Haas, & Hawkins, 1977; Reid & Ziegler, 1980; Fawcett, Stonner, & Zepelin, 1980; Pohl & Fuller, 1980; Mancini, 1981; Janoff-Bulman & Marshall, 1982). Perceived control has held particular salience for the long-living primarily because of the physiological and psychosocial losses associated with aging.
A number of studies have concentrated specifically on the importance of personal control expectancies of institutionalized long-living (Rodin & Langer, 1977; Schulz, 1976; Reid, Haas, & Hawkins, 1977; Noelker & Harel, 1978; Pohl & Fuller, 1980; Ziegler & Reid, 1979; Schulz & Hanusa, 1978; Langer & Rodin, 1976; Fawcett, Stonner, & Zepelin, 1980): and noninstitutionalized long-living (Wolk & Kurtz, 1975; Ziegler & Reid, 1979; Reid & Ziegler, 1980; Hunter, Linn, Harris, & Pratt, 1980). Other studies have compared these populations (Reid, Haas, & Hawkins, 1977; Hulicka, Morganti, & Cataldo, 1975).

Perceived Control Among The Institutionalized

Institutionalization may remove a fundamental sense of control, a loss which, according to Seligman (1975), has been shown to lead to helplessness, depression, and even death, at least among infrahuman animals. Personal control expectancies can be affected by various situational and environmental constraints in institutional settings. Maxwell, Bader, and Watson (1972) have maintained that institutions contain several sources of physical, psychopharmacological, and social restraint. Also, Lawton and Cohen (1974) emphasized that these settings can influence life satisfaction among the long-living. Several other studies have provided evidence that perceived control and life satisfaction were inversely related to perceived institutional constraint.
Desired Control

(Smith & Lipman, 1972; Wolk, 1976; Wolk & Telleen, 1976; Fawcett, Stonner, & Zepelin, 1980; Chang, 1979). Wolk (1976) has suggested that under conditions of strong environmental constraint, belief in personal control, and one's exertion of one's self as a function of this belief, was not only unrealistic but "contraadaptive" (p. 421). Some institutions have provided such constraints. For example, in some instances, the right to privacy, certainly a potent reinforcer, has been rescinded (Goffman, 1961; Lawton & Bader, 1970). Likewise, reinforcers such as choice of activities, when an individual is bathed and by whom, when to eat and what to eat, the types and amount of medication, or placebos, and even choice of purchases may be largely determined for the patient by staff, family members and others. The resultant deprivation of the exercise of choice has been evident. Goffman (1961) has even asserted that the process of interaction in an institutional environment dehumanizes the residents. In fact, loss of perceived control among the institutionalized long-living has been shown to contribute to depression, physical decline, and early death (Schulz, 1976; Schulz & Alderman, 1973; Strieb, 1971). Langer and Rodin (1976), however, found that institutional residents who were given a communication stressing personal responsibility, freedom to make choices, and the responsibility of caring for a plant, improved significantly more than residents in a comparison group on measures of alertness, active participation, and general sense of well-being.
Perceived Control is also a major determinant of life satisfaction among the noninstitutionalized long-living. Reid & Ziegler (1980) have found that when long-living persons feel they have control over everyday events of importance to them, they are more content and well-adjusted. Wolk and Kurtz (1975) and Hunter, Linn, Harris, and Pratt (1980) have provided similar evidence. In both studies a significant relationship was found between personal control expectancies and higher levels of involvement in organizations and volunteer work, as well as more adaptive levels of developmental task accomplishment, and more positive emotional balance in the long-living person's satisfaction with life. Thus, there has been ample evidence to substantiate the relationship between personal control expectancies, well-being, and life satisfaction among the noninstitutionalized long-living.

Comparative Studies

Several studies have been conducted which compare the importance of perceived control and life satisfaction among the long-living in varying life settings. It has frequently been found that residents in institutional settings have lower levels of physical and psychological well-being than community residents (Aldrich & Mendkoff, 1963; Lieberman, 1961;
Lieberman, Prock, & Tobin, 1968; each cited in Pohl & Fuller, 1980). In comparing life satisfaction scores of residents from two settings differing in degree of constraint, Wolk and Telleen (1976) found that perceptions of autonomy accounted for a significant amount of the variance in life satisfaction scores of residents in a retirement village but not for residents in the more highly constrained institutional setting. Hulicka, Morganti, and Catildo (1975) administered a self-concept scale, a life satisfaction scale, and a scale which was designed to assess perceived latitude of choice to twenty-five institutionalized and twenty-five noninstitutionalized long-living females. It was found that the institutionalized respondents, living in a relatively restrictive environment, earned significantly lower latitude of choice scores than the noninstitutionalized respondents. Indeed, the mean latitude of choice score for the noninstitutionalized group was almost three times higher than for the institutionalized group. The latter group also perceived themselves to have significantly less choice on the listed activities than did the noninstitutionalized subjects. In addition, the institutionalized subjects consistently rated items that related to privacy, personal possessions and the timing of activities as very important while the noninstitutionalized subjects rated as most important work, interpersonal association and money related items. Since the
latitude of choice, self-concept and life satisfaction scores were significantly correlated, it was clear that there were qualitative differences in perceived choice and life satisfaction between the two groups.

The focus of this study was to determine the relationships among residential setting (either low or high constraining), perceived choice, and perceived control of reinforcements; that is, the value placed on selected reinforcements and the expectancy of obtaining them. There is evidence that perceived choice and control are related and that residential setting and perceived choice are related. The search for an interaction between the residence and perceived choice variables and its effect on perceived control distinguishes this study from previous research.

Method

Subjects

The participants were two groups of females sixty-five years of age or more, with each group consisting of twenty persons. One group consisted of twenty residents of a proprietary nursing home. A second group consisted of twenty residents from a congregate housing complex. All subjects had been residing in Northeastern Massachusetts. All met the following criteria: (1) age 65 or over, (2) female, (3) Caucasian, (4) high school education or less, (5) single, widowed, separated from spouse or divorced and living
independently, (6) annual incomes of $10,000 or less, (7) were able to provide informed consent for participation in the study, (8) minimum of six month residence in current dwelling, (9) were able to read English in order to understand the language which was used by the investigator and of the instruments involved in the study.

Procedure

Selected for use was the Desired Control Measure, developed by Reid and Ziegler (1981) which was labeled "General Belief Survey I: Interview Questionnaire" for the purpose of this study. This instrument purportedly measures the degree to which an individual desires particular reinforcements as well as the expectation of obtaining these reinforcements. The items were selected on the basis of results from an extensive survey conducted prior to the development of the measure. The items chosen were those most often cited in the survey study. The test-retest correlations for 6-, 12-, and 18-month follow-up studies range from .36 to .63. Throughout each study, the measure was found to have internal consistencies (Cronbach's alpha coefficient) from .85 to .93. According to Reid and Ziegler (1981), the measure has formal content validity insofar as the items were developed from the extensive survey of the long-living and the wordings of the items were carefully examined. Concurrent validity was demonstrated with significant correlations between Desired Control scores and scores on psychological adjustment.
Desired Control

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measures obtained within the same study. Support for predictive validity was shown by correlations between Desired Control scores obtained at one date with adjustment scores obtained at later dates. The findings have also been cross-validated and replicated over several studies (Reid & Ziegler, 1981).

Also selected for use was the Importance, Locus and Range of Activities Checklist (Hulicka, Morganti, & Cataldo, 1975), which is a perceived latitude of choice scale. It consists of thirty-seven statements measuring the personal importance of daily living activities, as well as the degree of choice associated with these activities. Test-retest correlation was found to be .84. Validity is supported by a study comparing military personnel and like-aged men, chosen because of believed differences in perceived choice due to the authoritarian structure of the military. The military group was found to have significantly lower latitude of choice scores. This suggests that the scale provides a valid measure of perceived latitude of choice. These scales were selected because they were specifically designed for use with the long-living.

Written consent was obtained from the administrator of the proprietary nursing home and from the manager of the apartment complex (see Appendix A). In each setting, a social worker, who worked with the proposed subjects, was asked to provide the names of approximately twenty-five
subjects who met the established criteria. Each person was contacted personally by the investigator in her own room or housing unit until twenty subjects agreed to participate. At this time, an interview of approximately one hour was arranged. Prior to the interview the subjects were given an explanation of the study and were asked to sign a consent form which guaranteed anonymity and confidentiality (see Appendix B). The Desired Control Measure was then administered to the respondent by the same interviewer in order to prevent omission of items and to compensate for visual deficits. It was explained that the first part of the scale asked her to rate how desirable different events were to her and that the second part asked her to rate the degree to which she agreed or disagreed with various statements. It was also emphasized that the study was concerned with the event's importance to her, not to others. Upon completion of this scale, the Importance, Locus and Range of Activities Checklist was presented and explained. She then was asked to rate each activity for its personal importance and to rate the degree of personal choice available. Alternative plans were developed in the event of a premature conclusion of the initial interview. If the interview was not completed, for whatever reasons, a suggestion would have been made by the interviewer in an attempt to complete the interview. If this was unsuccessful, an attempt would have been made
to reschedule an additional interview to complete the questionnaires. If the respondent desired to terminate the interview, no further questions would have been asked, and another respondent would have been scheduled. No interviews concluded prematurely during the present study. Each respondent was debriefed at the conclusion of the interview.

A total Desired Control score was derived by cross-multiplying the Desire subscale scores and the Expectancy subscale scores and summing the products, as suggested by Reid and Ziegler (1981). A total Latitude of Choice score was derived by cross-multiplying the Importance subscale scores and the Choice subscale scores and summing the products, as suggested by Hulicka, Morganti, and Cataldo (1975). In order to ascertain the relationships among these variables, a multiple regression analysis was conducted. Residential setting and perceived choice as well as their interaction were used as predictors, and scores on the Desired Control Measure were used as the criterion. It was hypothesized that all three variables would be significant predictors of Desired Control scores. The less constraining the environment and the greater perceived choice scores, the greater the Desired Control scores. It was not predicted that the Desire subscale scores would differ for the two settings because desire for reinforcements was not expected to be contingent upon degree of constraint. It was also predicted that
perceived choice scores would be significantly lower for the nursing home residents and that the higher the perceived choice score for both groups, the greater the scores on the Desired Control Measure. However, the extent of this relationship should differ as indicated by a significant interaction term in the prediction equation.

Results

Two of the three predictor variables, residence and the interaction between residence and perceived choice, were not found to be significantly related to the criterion variable, Desired Control scores. Perceived Latitude of Choice scores ($M=163$, $SD=77.3$) was the only predictor which reached significance, $F(1,38)=24.28$, $p<.000$. Thirty-nine percent of the variability in Desired Control scores could be predicted by knowledge of these scores. The finding of a nonsignificant interaction variable, $F(1,38)=.140$, was of major importance. For the nursing home sample, the slope of the regression line was found to be $.425$ with a $y$-intercept of $-99.66$, while for the apartment sample a slope of $.61$ with a $y$-intercept of $-132.57$ was found. A significance ($F$) test suggested by Marascuilo and Levin (1983) was employed to determine the degree of parallelism between the two regression slopes. The two slopes were not found to be statistically different, $F(2,37)=1.45$, which accounted for the nonsignificant interaction variable. The means, standard deviations and significance values for each variable appear in Table 1.
Also presented in Table 1 are the results of a number of subsequent comparisons. It was found that the nursing home sample differed significantly from the apartment sample on Latitude of Choice scores, Desired Control scores, and Expectancy subscale scores. As was predicted, the two samples did not differ significantly on the Desire subscale scores.

Discussion

The hypothesized significant relationship between two of the three predictor variables and the criterion variable was not confirmed for this sample of long-living persons. Prevalent research exists suggesting a strong relationship between degree of choice and residential setting (institutional or noninstitutional). The main contribution of this study was to determine the degree of relationship between two residential settings, differing in degree of choice, and the degree of perceived control of certain reinforcements, as reported by the residents. Although perceived choice and residential setting were highly correlated, neither residential setting nor its interaction with perceived choice were significant predictors of degree of perceived control of reinforcements. The interaction was predicted from speculation that not all nursing home residents would perceive little choice and not all apartment residents would perceive greater
choice. This was not the case, however. In general, it can be said that for the participants of this study, the lower the perceived choice, the lower the degree of perceived control over obtaining certain reinforcements. As a group, the nursing home residents indicated significantly lower scores for both variables. Since the interaction was not significant, the two samples cannot be regarded as statistically distinct.

There are several possibilities which may have influenced these findings. Investigation of potential locations and their environments prior to research is one consideration. This particular nursing home is a vanguard among health care facilities of the long-living. It is of interest to note that most of the nursing home residents, without being questioned, indicated a strong preference to remain in that particular residential setting. Attempts were made by the nursing home administration and staff to increase the degree of personal responsibility and the availability of reinforcements. This may have brought the two samples into relative accord, which may have accounted for the nonsignificant results. Another possible influence was the predominance of concern about health. For both samples, frequent comments were made concerning the importance of health and its effect on perceived choice and perceived control of reinforcements. One other possible influence was the relatively small sample
size. These factors are salient examples of variables which may elucidate the relationship between residential setting, perceived choice, and perceived control of reinforcements in future research.

One possible discriminator between the two samples appears to be the extent of the subjects' expectations of realizing reinforcements. Desire for the items was found to be equally strong for each sample. It is suggested that the availability of desired reinforcements would maximize choice and contribute to greater expectancy of obtaining reinforcements and subsequent life satisfaction. Environmental conditions may be enhanced by providing alternative reinforcements which have been selected on a group basis and on an individual basis as well. Consistent with Noelker and Harel (1978), it may be that the subjective perceptions of an environment more than the objective characteristics of that environment are the critical factors for personal well-being. Wolk (1976) has noted that personal control in the long-living person varies with the nature of the setting in which the person has been residing. This continues to present important implications for providing appropriate reinforcements, or providing the notion of their availability, in order to alter (i.e., enhance) personal control expectations among the long-living residing in institutions. The unavailability of desired patterns of activities and reinforcements
Desired Control

may be disadvantageous for the residents. One possible way of removing the effects of high constraining residential settings is to maximize opportunities for control and for obtaining preferred reinforcements.

It is important to note that the long-living are a highly heterogeneous population and the values placed on different reinforcements are as diverse as the individuals themselves. Further understanding of the importance of residential setting and perceived choice is necessary in order to maximize life satisfaction and well-being among the long-living.
References


Desired Control


Appendix A

Consent Form

I understand that Steven R. Shank, a graduate student at the University of Richmond, Richmond, VA will be conducting a study under the supervision of a committee of three faculty members. This study pertains to the importance and perceived availability of selected activities and reinforcements relevant to the long-living. I understand that two paper and pencil questionnaires will be administered to approximately twenty-five participants from this residential setting. Neither the questionnaires nor the interview will pose any physical or psychological risks for the participants. I know that I am giving Steven R. Shank permission to conduct this study and that I, representing __________________________, may decline participation or withdraw consent at any time during this study. I also understand that the name of this facility will not be used in any written reports of this study and that no volunteered information will be discussed with any other person in order to ensure confidentiality.

__________________________
SIGNATURE

__________________________
DATE
Appendix B

Participant Consent Form

I, ____________________, agree to participate in this interview. I understand that I will be administered two paper and pencil questionnaires pertaining to desire and expectancy of reinforcements. Neither the questionnaires nor the interview will pose any physical or psychological risks for me. I understand that Steven R. Shank, a graduate student at the University of Richmond, Richmond, VA will be conducting this interview under the supervision of a committee of three faculty members. I know that I am volunteering for this study, and that I may decline participation or withdraw consent at any time during the interview. I also understand that my name will not be used in any written reports of this study. Also, no volunteered information will be discussed with any other person in order to ensure confidentiality.

_________________________    ____________________________
SIGNATURE                  DATE
Table 1

Means, Standard Deviations, and Significance Values for Each Variable

<table>
<thead>
<tr>
<th></th>
<th>Nursing Home</th>
<th>Apartment</th>
<th>Significance Test (df)</th>
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<tr>
<td>M</td>
<td>120</td>
<td>207</td>
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<td>SD</td>
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<td>65.2</td>
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</tr>
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<td>M</td>
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<td>.500</td>
<td></td>
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<tr>
<td>SD</td>
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<td>.506</td>
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<td>SD</td>
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<td>114</td>
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<td></td>
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<td>Perceived Latitude of Choice</td>
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</tr>
<tr>
<td>M</td>
<td>120</td>
<td>207</td>
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</tr>
<tr>
<td>SD</td>
<td>63.6</td>
<td>65.2</td>
<td>$t(38)=6.04^{***}$</td>
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<tr>
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<tr>
<td>SD</td>
<td>14</td>
<td>11</td>
<td>$t(38)=2.80^{**}$</td>
</tr>
</tbody>
</table>

*p < .05, 
**p < .01, 
***p < .001.
VITA

Steven R. Shank was born on May 17, 1961 and raised in Methuen, MA. He attended Central Catholic High School, where he graduated in 1979, and received an academic scholarship to Merrimack College, North Andover, MA. He majored in psychology and graduated Cum Laude in 1983. In the fall of 1983 he was granted an assistantship from the Graduate School, Department of Psychology, at the University of Richmond and expects to receive his Master of Arts degree in August 1985. He is presently a Vocational Rehabilitation Evaluator in Lawrence, MA., and his career plans include working several years before furthering his education in order to obtain his doctorate in Clinical/ Counseling Psychology.