PREDICTIVE FACTORS FOR COMMITMENT TO THE PRIESTLY VOCATION: A STUDY OF PRIESTS AND SEMINARIANS

By

Yulius Sunardi, M.S.

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ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

ABSTRACT
PREDICTIVE FACTORS FOR COMMITMENT TO THE PRIESTLY VOCATION: A STUDY OF PRIESTS AND SEMINARIANS

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The present study examined factors for priestly commitment and the relationship between priestly commitment and well-being of Catholic priests and seminarians. While evidence for the effectiveness of assessment in identifying the suitability of applicants to the priesthood and evaluating the general psychological health of priests and seminarians has been well documented, the effectiveness of assessment in predicting commitment to the priesthood remains under question. This study addressed such an issue by identifying the individual and sets of factors for priestly commitment using a sample of 120 priests and 52 seminarians.

Through Hierarchical Multiple Regression analyses, the present study examined the extent to which demographic factors (e.g., age and vocational status), social factors (e.g., parental environment, family religiosity, and religious experience), psychological factors (e.g., big five personality traits, defensiveness, gender characteristics, and loneliness), and religious factors (e.g., religious orientation, religious coping, spiritual support, sacred view of the priesthood, and relationship with bishop/superior) affect priestly commitment. And, through Multiple Regression, this study examined a correlation between priestly commitment and well-being.

The results indicated that, when demographic, social, and psychological variables were controlled, an increased level of agreeableness, defensiveness, masculinity, intrinsic religious orientation, sacred view of the priesthood, and relationship with bishop/superior were associated with an increased level of affective commitment, whereas the increased level of parental care, extraversion, and loneliness were associated with a decreased level of affective commitment. Parental overprotection, extraversion, and loneliness positively correlated with thought of leaving the priesthood, whereas masculinity, sacred view of the priesthood, and relationship with bishop/superior had negative correlations. Extrinsic religious orientation had a positive correlation with continuance commitment. In contrast to the previous studies, demographic variables were insignificant. The study also found indirect effects of religious variables on the significant correlations between parental care and affective commitment and between agreeableness and affective commitment.

Specific to well-being, this study found that affective commitment was positively correlated with affect balance, psychological well-being, and religious well-being, while continuance commitment and thought of leaving the priesthood had negative correlations with psychological well-being. Finally, thought of leaving the priesthood was correlated negatively with affect balance.

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CHAPTER I

INTRODUCTION

Background

Psychological assessment has been the focus of most psychological studies of Catholic priests, seminarians, and applicants to the priesthood (Batsis, 1993; McGlone, Ortiz, & Karney, 2010). The goals were to identify one's suitability to the priesthood, to evaluate the general mental health and well-being in the priesthood, and also to predict persistence in the priesthood (Banks, Mooney, Mucowski, & William, 1984; Dunn, 1965; Kuchan, Wierzbicki, & Siderits, 2013; Nauss, 1973; Plante & Boccaccini, 1998; Rossetti, 2011; Weisgerber, 1969). Of these objectives, predicting persistence in the priesthood has been unsatisfactory. Weisgerber (1969) has long reported that psychologists were much better in evaluating mental health and overall adjustment but less and/or unsuccessful in predicting persistence in the priesthood. Kuchan et al. (2013) also noted that "Research that has attempted to predict successful completion of seminary training has reported equivocal results…" and further, "studies that have attempted to predict resignation from the priesthood have had mixed results" (p. 3).

In contrast, studies have provided evidence for the effectiveness of assessing the suitability of applicants to the priesthood (Plante, Manuel, & Tandez, 1996; Schweickert, 1987) and evaluating the general mental health and satisfaction in the priesthood (Palamo & Wauck, 1968; Plante, Aldridge, & Louie, 2005; Zondag, 2001). Others successfully identified the clinical characteristics of priests with sexual and psychological problems (Fones, Levine, Alhof, & Risen, 1999; Keddy, Erdberg, & Sammon, 1990; Loftus &

Camargo, 1993; Plante & Aldridge, 2006). Notably, research has well documented the effectiveness of assessment of suitability to the priesthood and the general mental health and satisfaction in the priesthood. Little, however, is known about the effectiveness of the psychological assessment in predicting persistence in the priesthood (Hoge, 2002; Potvin & Muncada, 1990; Weisgerber 1969).

There have been several studies that attempted to address the issue. Depending on its assumption, each study focused on certain factors thought to be related to persistence. Some studies looked at social factors such as social influences, parental characteristics, and relationships with family (Hoge, 2002; Hoge & Okure, 2006; Hoge & Wenger, 2003; Potvin & Muncada, 1989; Verdiek, Shields, & Hoge, 1988), personality characteristics or psychological traits (Banks, Mooney, Mucowski, & Williams, 1984; Burke, 1947; Callahan & Wauck, 1969; Herr, 1970; Plante, Manuel, & Tandez, 1996; Weisgerber 1969), and values and religious interest including religious orientation (Rulla, Ridick, & Imoda, 1972; Zondag, 2001). Some studies investigated the cognitive factors which are the reasons for remaining in or leaving the priesthood (Hoge, 2002; Potvin & Muncada, 1990; Verdiek, Shields, & Hoge, 1988). Despite a great number of studies examining the various factors for the priesthood and for priestly commitment, it is still risky to make a definitive conclusion. Much of the concluded findings have been equivocal, and further, it does not appear that any study integrates the four clusters of factors for the priesthood and identifies the possible interconnections among those factors in predicting persistence in the priesthood.

Given the equivocal results from the previous studies, it seems critical for a study of the priesthood to consider and integrate the various factors that have been examined in

previous studies. These become a starting point for the future research. This present study is to re-examine those four clusters of factors so as to identify the factors that best predict priestly commitment and to understand its pathways.

Moreover, it is certainly reasonable to view the priesthood as a multidimensional vocation, similar to other professional vocations. There must be certain factors involved in any decision and desire to remain in or leave the priesthood. Accordingly, the various factors that have been investigated in the individual studies must be interconnected to one another and reflect the nature of the priesthood. Therefore, one essential question to ask is how the various factors involved are interrelated to one another in predicting persistence in the priesthood. This question suggests the need for a theoretical framework to integrate the various factors into systematic pathways of how some priests and seminarians remain in while others leave their priesthood. Thus, this study addresses the issue by examining these four clusters of factors (e.g., social cluster, psychological trait cluster, motivational cluster, and cognitive cluster) and identifying the possible interconnections among these clusters to predict the commitment to the priesthood.

Significance

Research on predicting persistence in the priesthood is very challenging, and it is certainly not simple. Therefore, it is understandable that the body of literature on these studies is limited, and the reliability of these studies remains under question as well. In general, little is known about why and how some priests and seminarians persist in the priestly vocation while others do not. Nevertheless, a study that addresses the issue is essential if we are to advance our understanding of the priesthood, especially those

factors which lead some seminarians and priests to remain in and others to leave their priesthood.

Furthermore, advancing our understanding of the priesthood is just the beginning. Research on any given population should go beyond understanding. It is an essential part of research to respond positively to the needs of the society. Given that research is on Catholic priests and seminarians, the real needs of the Church must be of concern. The Church and society have a constant and urgent need for priests who have a strong commitment to the priesthood and a heart for humanity. However, studies showed that, while recruits to the priesthood have dropped significantly, resignations of priests from active ministries and drop-outs of seminarians during the formation stage have also continued steadfastly over the years (Herr, 1970; Hoge, 2002; Hoge, Potvin, & Ferry, 1984; Potvin & Muncada, 1990; Verdiek, Shields, & Hoge, 1988; Zondag, 2001). With these facts in mind, contribution of research to accurately identify the human qualities or factors that are favorable or predictive for the priests and seminarians to remain in the priesthood is crucial and certainly awaited. The study helps the Church not only to reduce the number of resignations from the priesthood and drop-outs from seminary, but also to promote and develop a theological perspective that integrates seriously one's human aspects, including his vulnerability, into the priestly vocation.

There is also a vital pragmatic interest in this study. Most dioceses and religious orders have incorporated psychological assessment into the overall screening process of the priestly candidates and evaluation of priests' and seminarians' general mental health (Batsis, 1993). Accordingly, they have admission boards and also vocation and formation directors responsible for the recruitment and on-going formation. An understanding of

psychological factors that are favorable and predictive for persistence in the priesthood is certainly important. The study will assist the admission boards to select the best possible candidates who are more likely to remain in the priesthood. In addition, the study gives the vocation and formation directors an objective perspective and direction in developing and planning formation programs that are necessary for persistence in the priesthood.

Finally, the study also contributes to the literature on the psychological studies of the priesthood. Given that there is still limited research on the priesthood, the study enriches us with better knowledge of the assessment method, theoretical framework, and the psychological measures that are appropriate for the priesthood. Thus, it is expected that this present study will advance our understanding of Catholic priests and seminarians, and especially what makes them committed to remain effectively in the priesthood. The author argues that a failure in identifying key factors for persistence in the priesthood might also mean a failure in helping current priests and seminarians find the best ways to persist in the priesthood. Examining the key factors for commitment to the priesthood is an initial, important effort to prevent the Catholic Church from the possible loss of resources: priests and seminarians.

CHAPTER II

A REVIEW OF LITERATURE

Psychological research on the priesthood has a relatively long history which can be traced up to the 1930s. Surprisingly, a comprehensive and integrated review of studies examining Catholic priests, seminarians, and priestly applicants is hardly found during the last four decades. Two early reviews could be dated in the 1960s and the early 1970s. Plante and Boccaccini (1996) reported that there was an increased research interest in this population in the 1990s. In order to provide a comprehensive review of the literature and rationales for the study, the following chapter: 1) Presents a brief history of psychological research on the priesthood; 2) Looks closely at the various factors for commitment to the priesthood; and 3) Examines several studies of well-being of priests and seminarians.

A Brief History

Catholic priests, seminarians, and applicants to the priesthood have long been the subjects of scientific studies. The earliest study might be attributed to Moore's article in 1936, with a personality description of this population. Based on a study of priests treated for mental problems, Moore suggested that "prepsychotic" individuals were attracted to the priesthood (p. 497). This hypothesis was disturbing at that time (Dunn, 1965); but at the same time, it promulgated research interest and real need for a screening process or psychological evaluation of priestly or religious candidates (Plante & Boccaccini, 1996). There were many later studies that cited Moore's articles.

Several studies, which were published in the 1940s, further questioned and elaborated Moore's work (Bier, 1948; Burke, 1947; McCarthy, 1942). Administering

multiple tests to seminarians and other students matched by age, McCarthy attempted to find "g" factor that characterized their personalities. The result indicated a greater "neurotic tendency" among seminarians than the control group. Bier (1948) was also interested in identifying "the psychological factors which characterize satisfactory adjustment among students for the priesthood" (p. 90). In an extensive study of the MMPI (the Minnesota Multiphasic Personality Inventory), Bier compared a seminary group to medical, dental, and law students. He concluded that: "The seminary group is the most deviant portion of an already deviant population" (p. 593). Notwithstanding this very disturbing finding, there has paradoxically been a greater interest in the study of this population. Dunn (1965) indicated that many of these studies were unpublished Master's theses and doctoral dissertations, and the majority of the studies used the MMPI as the primary testing tool.

In the late 1960s and early 1970s, there were markedly more extensive efforts in the studies of the personality characteristics of priests and seminarians, as indicated by a growing number of published studies (Bier, 1970; Callahan & Wauck, 1969; Dunn, 1965; Gilbride, 1973; Herr 1970; Nauss, 1973; Palomo & Wauck, 1968; Rulla & Maddi, 1972; Weisgerber, 1966 & 1969). In addition, many of the studies during this time attempted to predict persistence in the priesthood; and similar to the previous research, most of these studies used the MMPI as the main instrument. Dunn reviewed studies of seminarians, reporting two general issues. The first issue was the validity of psychological tests for the religious purposes, and the second issue was about the effectiveness of the instruments to identify the adjustment of seminarians or priests. Addressing these issues, Bier stated that psychological tests, particularly the MMPI, "can be used legitimately and effectively as

an instrument for evaluating the personality adjustment of seminary students, but some modifications in test norms would be needed" (p. 122). In his extensive review, Nauss noted a tendency in most studies "toward deeper clinical interpretations" (p. 81) during this time. Furthermore, Callahan and Wauck suggested that "there seems to be an added dimension which is not just psychological but theological as well" (p. 33).

In the 1980s, despite some studies that investigated the personality traits (Banks, Mooney, Mucoski, & Williams, 1984; Magnano, Schau, & Tokarski, 1985), more studies focused on identifying the psychosocial factors thought to affect the priesthood (Hoge, Potvin, & Ferry, 1984; Potvin, 1985; Potvin & Muncada, 1989; Schoenherr, Young, & Vilarino, 1988; Schweickert, 1987; Verdiek, Shields, & Hoge, 1988). Other studies were more interested in how psychosocial factors have contributed to the decision to leave or to persist in the priesthood. Not surprisingly, social factors such as family relationships, education, religious experiences, modern values, and theological changes became the major topic in many studies of the priesthood. For instance, Verdieck, Shields, and Hoge (1988) critically questioned why a large number of priests resigned from their active ministries after the Vatican Council II. Based on social exchange theory, which views social interaction as an exchange of benefits within the limits of fairness and justice, Verdieck et al. showed the important role of social factors for the priesthood and the commitment to it. Further, they noted the effectiveness of social exchange theory for explaining resignation from the priesthood.

In the last two decades, probably because of the crisis in the Church concerning the sexual and psychological problems faced by some priests, psychological assessment continued to be the focus of most studies. A considerable amount of research examined

personality and clinical characteristics of the priests who had sexual and psychological problems (Camargo, 1997; Cimbolic, Wise, Rossetti, & Safer, 1999; Falkenhain, Ducro, Hughes, Rossetti, & Gfeller, 1999; Gafford, 2001; Greeley, 2004; Keddy, Erdberg, & Sammon, 1990; Loftus & Camargo, 1993; Plante & Aldridge, 2006; Plante, Manuel, & Bryant, 1996; Robinson, 1994). Many studies examined the different types of sexual and psychological problems, identified the causes and treatment models, and examined how they differ from the general population (Langevin, Curnoe, & Bain, 2000; Fones, Levine, Alhof, & Risen, 1999; Mathews, 2007). Surely, there were still numerous studies focusing on the priests with sexual or clinical problems. Plante and his colleagues (1996) stated that "A tremendous amount of media attention has been directed towards sexual abuse perpetrated by Roman Catholic priests in recent years" (p. 129). Not surprisingly, they also noted, "numerous research investigations have been conducted on sexual abuse perpetrators" (p. 129).

On the other side, there were also many studies that examined the general mental health or well-being and psychological functioning of priests and seminarians (Craig, Ducan, & Francis, 2006; Francis, Louden, & Rutledge, 2004; Francis, Robbins, Kaldor, & Castle, 2009; Louden & Francis, 1999; Plante, Manuel, & Bryant, 1996). The studies questioned whether personality types had an effect upon the psychological health of this population; and the majority of the studies used the MMPI to address the issue. Despite focusing on active priests and seminarians, there was a tendency toward clinical interpretations in the studies. Meloy (cited in Plante et al., 1996) suggested that "priests and applicants to the priesthood often experience serious personality and psychological dysfunction" (p. 81). Similarly, Plante, Aldridge, and Louie (2005) questioned: "Are

successful applicants to the priesthood psychologically healthy". This indicates that a research trend on the priesthood in the last two decades has been more clinically oriented.

Obviously, there have been various issues and interests in the studies of Catholic priests and seminarians. While psychological factors for the priesthood and its persistence were the major research interest in the 1970s or before, much research in the 1980s was devoted to examining the social factors. In the last two decades, research has been drawn toward the clinical and mental issues of this population. A considerable number of studies were devoted to address these issues. Inevitably, this research trend leaves other crucial issues untouched. A limited number of studies investigated persistence in the priesthood (Hoge, 2002; Zondag, 2001). More surprisingly, despite the fact that priestly vocation is spiritual and religious in nature, little research was devoted to investigate the spiritual or religious aspects of the priesthood (Hoge, 2002; Mahalik & Lagan, 2001; Zondag, 2001). Callahan and Wauck (1969) noted, "There seems to be an added dimension which is not just psychological but theological as well" (p. 33). Nonetheless, the previous research provides necessary foundation for future research. Therefore, it is vital to take a closer look at what has been done in past research so as to find out what factors are the most likely ones affecting persistence in the priesthood.

Factors for Remaining in and Leaving the Priesthood

As the historical review above indicated, there have been distinctive aspects of the priesthood that have become a great interest in the previous research. These aspects might be best clustered into four factors: a) Social factors, b) Psychological traits, c) Values and Religiosity, and d) Cognitive factors.

Socio-demographic Factors

Social factors refer to the influence of others and of networking systems within the Church and society on the priesthood. These include demographic characteristics, family, religious experiences, social supports, situations and changes within the Church and in society, and sexuality or celibacy.

Demographic characteristics. There have been a number of national surveys that identified demographic characteristics of priests and seminarians, which included ethnic backgrounds, family size, and age (Hemrick & Hoge, 1991; Hemrick & Walsh, 1993; Hoge, 2002; Hoge & Okure, 2006; Hoge & Wenger, 2003; Potvin, 1985). Catholic priests and seminarians in the United States of America came from many different ethnic origins. A survey in 1990 (Hemrick & Hoge) showed that the percentage of the diocesan priests who were of Western European heritage (37%) was slightly higher than those who were of Irish, English, Scottish, or Welsh heritage (34%). In 2002's survey, Hoge found the opposite. While the former was 29%, the latter was 35%. The percentage of priests who are of Eastern European heritage decreased from 12% in 1990 to 7% in 2002. In contrast, there has been an increasing number of Hispanic and Asian priests. Studies indicated that the percentage of Hispanic priests increased from 4% in the 1990s to 9% in the 2000s (Hoge & Okure, 2006). Asian priests made up about 9% of newly ordained priests in the 2000s; and many were Filipinos (Hoge, 2002). Surveys of seminarians resulted also in a similar pattern, which predicts a growing number of these ethnic groups in the coming years (Hemrick & Walsh, 1993; Potvin, 1985).

Another way to look at the distribution of priests and seminarians is by dividing them into two groups: American priests and international priests. The latter refers to the foreign-born priests. With this approach, the distribution looks different. Survey in 1999 indicated that there were 7,600 international priests or 16% of all priests working in the U.S.A. at that time (Froehle & Gautier, 2000). A study (Hoge, 2002) of newly ordained priests showed that the percentage of foreign-born priests increased from 28% in 2003 to 31% in 2004. Their principal countries of origin were Mexico and Poland, followed by Colombia. A similar result was also reported in a study of seminarians, which indicated an increasing number of foreign-born seminarians. A survey in 2004 showed that 22% of seminarians in theology were foreign born. Of all international seminarians, 84% decided to remain in the U.S.A. (CARA Report, 2005). The main countries of origin were Mexico and Vietnam. Hoge and Okure (2006) reported also that, in general, international priests and seminarians are about ten years younger than American priests and seminarians.

Notably, there have been some changes in the distribution of the ethnic groups within this population. Not only has this population become more diverse, but there has also been a growing number of foreign-born priests who serve in the U.S.A. A question to ask might be whether the distributional changes have affected the priesthood such as community life/connectedness and persistence. Schoenherr, Young, and Vilarino (1988) suggested that demographical changes have organizational consequences. However, not much is known about this. A study (Hoge & Okure, 2006) showed that problems faced by international priests are not different from those reported by American priests, except for loneliness, which was found more acutely among international priests. Hoge (2002) found that, of newly ordained priests, 80% were American priests and 20% were foreign

born priests. With that proportion, one might expect that the ratio of resignation would be the same, 80: 20. However, that was not the case. Hoge found that 96% of all resigned priests were born in the U.S.A. and only 4% were foreign born. Despite not having an inferential statistical analysis, the descriptive analysis itself shows a lower rate of resignation among international priests. However, it is still risky to make a conclusion without investigating other demographical characteristics or to explain that phenomena without analyzing the connection with other factors.

Another important aspect to take investigate is the family size of this population. Some studies have indicated that family size contributes to the priestly vocation. There has been a tendency that, on the average, priests and seminarians came from the families who have more children than the general population or most Catholic families (Hemrick & Walsh, 1993; Hoge, Potvin, & Ferry, 1984; Potvin & Suziedelis, 1969). Studies also showed that these families were from middle class (Hoge, Potvin, & Ferry, 1984; Potvin, 1985) and more educated than the average Catholic families in the U.S.A. (Hemrick & Walsh, 1993). Along with a decreasing size of Catholic families, the percentage of seminarians and applicants to the priesthood has dropped over the years (Hoge & Wenger, 2003). In contrast, the growth of Hispanic and Asian, especially Vietnamese, seminarians has been evident over the years (Hoge & Okure, 2006), which might suggest the effect of family size on the priestly vocation. A variation in the size of families did exist (Potvin, 1985), showing that priests and seminarians come from families of all sizes. However, studies suggested that families with more children were more ready to give one child to the Church; and conversely, the families with one or two children were not ready to do so (Hoge, Potvin, & Ferry, 1984).

Finally, attention should be given to an important part of demographical analysis, age distribution. Most social studies of the priesthood included an age factor into their analyses. National surveys indicated that the average age of seminarians and priests has increased over the years (Hemrick & Walsh, 1993; Hoge & Wenger, 2003; Potvin, 1985; Potvin & Suziedelis, 1969). The average age of first year theology students was 25 in the 1960s, 30 in the 1980s, 32 in the 1990s, and 35 in the 2000s. Accordingly, the age of ordination has also been rising. In the 1970s, the average age of ordination was 27, and in 2001 the average age of ordination was 36 (Hoge, 2002). Among those who were commonly called "late or delayed" seminarians, the average age of the first year students in theology was 46, and the average age of ordination was 51. As expected, the age distribution of priests has also changed. A national survey in 2001 (Hoge & Wenger, 2003) showed that the average age of priests was 60 (59 years old for diocesan priests and 64 years old for religious priests), including retired priests. For all priests, 22% were at the ages of 49 or younger, 48% were between 50 and 69, and 30% were at the age of 70 or older. In contrast, a national survey in 1970 showed that more than 70% of priests were at the age of 55 or younger. In addition, data suggested that the percentage of the retired priests in 2001 has increased fivefold in comparison to that from 1970 (Hoge & Wenger, 2003).

The transition in age distribution of seminarians and priests may not be as critical as dispositional factors for the priesthood. However, age factor may suggest not only the atmosphere in which priests and seminarian live but also the internal struggles within the Church, especially among the priest and seminarians. Schoenherr, Young, and Vilarino (1988) argued that the demographic transition, especially the size and age distribution of

the clergy population, is the "driving force for pervasive structural change in the Roman Catholic Church" (p. 499). Moreover, there has been evidence indicating that priests who resigned from the priesthood tend to enter seminary and to be ordained to the priesthood at the earlier age than active priests (Hoge, 2002; Hoge & Wenger, 2003; Schoenherr, Young, & Vilarino, 1988; Verdieck, Shields, & Hoge, 1988).

Schoenherr and Young (1988) reported the critical period of resignation which occurred approximately five years after ordination. With the increased age of ordinations, the highest risk age period also occurred accordingly. Specifically, they pointed out that "the highest risk of resignation was between ages 30 and 34 during 1970-1974, but the highest risk of resignation changed to ages 35-39 during 1980-1984" (p. 471). In a more recent study, Hoge (2002) reported a similar result, showing that the highest peak of resignation was between ages 35 and 39 or within five years after ordination.

Given the increasing age of seminarians and the increasing age at ordination (Hoge, 2002; Hoge & Wenger, 2003; Potvin, 1985; Verdieck, Shields, & Hoge, 1988), one might expect that the rate of resignation from the priesthood would decrease. However, this was not necessarily the case. Hoge (2002) observed an increasing rate of resignation over the years despite the increasing age of ordination. He noted that, since 1994, the resignation rate has increased 3%, from 9% in 1990s to 12% in 2002. With these facts in mind, a common expectation that older seminarians or delayed seminarians who were ordained at an older age would be more likely to remain in the priesthood cannot be guaranteed. Little is known about the mechanism of how age has affected persistence in the priesthood. In addition, an alternative explanation for the resignation cannot be fully ignored. The first five years after ordination might be indeed the highest

risk period of resignation from the priesthood. However, this most risky period might be more related to the initial stage of being a priest, regardless of being ordained at the younger or older age. It is certainly reasonable to see the first five years after ordination as a critical period for developing priestly identity. Maturity level, both psychologically as a person and functionally as a priest, might play a key role in the transition of newly ordained priests to the real world of priestly ministry. If this is the case, other related factors should also be considered in investigating persistence in the priesthood.

Age and stages of the priestly life might not be clearly distinguishable because of their connection to one's ability to deal effectively and resiliently with the developmental tasks. However, age generally refers to one's psychological maturity (VandenBos, 2006), while stages of the priesthood refer to functional maturity (Costello, 2002). Studies of the priesthood (Godin, 1983; Potvin & Muncada, 1990; Weisgerber, 1966 & 1969) linked age to one's psychological development or maturity within the family context, involving parents and family relationships. Stages of the priesthood focused on the role of personal, religious experiences or involvements through which internalization of the priesthood and its functions occurs.

Family. As one's closest social context, family has been considered a critical factor for the development of religiosity. Accordingly, a question of how parents have affected the priesthood and its persistence is important to answer. Many studies showed that the vast majority of seminarians and priests came from Catholic families (Perl & Froehle, 2002; Potvin, 1985) who tended to be religious and faithful in going to Mass (Godin, 1983; Hemrick & Walsh, 1993; Hoge, Potvin, & Ferry, 1984; Hoge & Wenger, 2003; Potvin & Muncada, 1990). It has been also identified that the images of God that

they had resembled those of their preferred parents (Cassibba, Granqvist, Costantini, & Gatto, 2008; Kirkpatrick, 1999). More specifically, a number of studies found that the mother played a significant role in awakening or developing interest in the priesthood (Godin, 1983; Hoge, Potvin, & Ferry, 1984; Potvin & Muncada, 1990; Reinert, 2005), although there was no evidence that the mother has a significant effect on persistence in the priesthood. Potvin and Muncada reported an effect of a strict father on withdrawal among diocesan seminarians. However, they noted that "religiousness of parents had no influence on the withdrawal or perseverance rates of theologians… decision to withdraw or persevere was based on personal factors" (p.93).

Some studies, instead of focusing on the parental figures, attempted to investigate the effect of family relationships on the priesthood. Weisgerber (1968) has reported that seminarians who had poor family relationships were less likely than those who had good family connection to remain in their vocation. The effect of family relationships among priests was different. In a study using the data on 729 priests collected in 1970 and 3,045 priests collected in 1985, Verdieck, Shields, and Hoge (1988) partly examined the effect of a tense family, age, and religious experience on the commitment to the priesthood. The study showed that younger priests (≤40 years old) tend to have tense family relationships, and the younger priests who reported tense families are also less likely to have a personal relationship with God. However, there was no direct effect of tense family relationships on the commitment to the priesthood, which is also similar to what Potvin and Mucanda (1990) indicated. A tense family did have a negative effect on the commitment; but it did so through several pathways, including through age and religious experiences.

Surely, there has been some empirical support that family plays a great role in the development of religiosity and interest in the priesthood. However, studies indicate no evidence for the family role in commitment to the priesthood. Further, little attention was given to examine the underlying mechanism on how parent-child relationships contribute to the development of the priestly or religious interest. Some have suggested that priests and seminarians had first modeled religious beliefs and behaviors of their parents; and then, they had to integrate this religious modeling into their personal concepts and belief systems (Bergeron, 1978; Godin, 1983). Specifically, others suggested that priestly vocation requires certain characteristics to deal with ministerial functions. One of them is a feminine characteristic, as indicated by a higher femininity on the MMPI scores among priests and seminarians than the general population. Accordingly, they speculated further that priests and seminarians had to model and integrate mother's femininity into personal concepts and belief systems, through which they became attracted to the priesthood and to the priestly functions that reflect feminine characteristics (Weisgerber, 1969 & 1977).

With that kind of modeling process, commitment to the priesthood might be more directly related to the personal concept and belief system than to the parents' religiosity. Parents and family relationships are very important; but their role might be more related or specific to promoting and developing vocational interest. However, children might not be passive agents who merely follow their parents' interest. They are active agents who observe, digest, screen, intensify, integrate, and internalize their parents' religious values and interest. With this consideration, commitment to the priesthood might be best viewed as a product of internalization process. Accordingly, the level of commitment is probably dependent on how intrinsic or inherent the desire for the priesthood is. This might

account for why priests and seminarians decide to remain in or to leave priesthood based on personal factors. Research is certainly necessary to evaluate the proposition. If the role of parents or family is specific to developing or promoting religious and vocational interest, there must be other factors contributing to the decision process or to commitment to the priesthood. Studies have suggested the role of personal religious experiences within the schools and the Church.

Religious experience. Personal religious experiences have been found to play a critical role in the development of vocational interest and in the decision process of the priesthood. Religious experiences refer to the religious exposure received from others or the environment, especially the schools and the Church. Studies reported that 50% of seminarians and priests in the 1990s, 44 % in 1984, and 80 % in 1966 attended Catholic schools (Hemrick & Walsh, 1993; Hoge, Potvin, & Ferry, 1984; Perl & Froehle, 2002; Potvin, 1985). Furthermore, Potvin and Muncada (1990) indicated the influential factor of religious experiences during the high school years in generating a strong motivation to the priesthood. Those studies showed that the vast majority of priests and seminarians had been engaged in various religious activities such as being Eucharistic ministers, lectors, and altar servers. Additionally, intensive participation in campus ministry also has a positive effect on awakening and developing the interest to the priesthood (Schweickert, 1987). Moreover, research has indicated that religious experiences were a favorable factor for persistence in the priesthood. Religious experiences such as serving as an altar boy or attending Catholic schools significantly increased the likelihood of seminarians to remain in their vocation (Potvin & Muncada (1990).

Evidently, there has been empirical support for the positive effect of religious experiences or exposure on the initial stage or development of priesthood. Furthermore, although limited, a study indicated that intensive religious involvements or experiences during youth contribute to the commitment to the priesthood. Hoge (2002) reported that many priests had been inspired by a personal experience of spiritual awakening before their entrance to seminary. This occurred at the ages of 15 to 24, when they were involved in religious activities and ministries at school, work, or in the Church. Potvin and Muncada (1990) have stated that "personal experience of serving at the altar appears to generate through anticipatory socialization a predisposition to accept the requirement of the priestly role" (p. 99). If this is the case, how would the religious experiences be different from the parental religious contributions in bringing seminarians or priests to the priesthood? Both are in favor for the priesthood. However, religious experience also plays a further role in remaining in the priesthood. As mentioned, children are active agents. Serving at the altar or ministering the Eucharist might express their sense of being agents, which helps them to cultivate and to internalize their experiences. Commitment to the priesthood might indeed require intrinsic predisposition that has effectively developed through personal, religious experiences or involvements. How persistent is the disposition remains difficult to predict. However if religious experiences have become one's intrinsic predisposition and belief system, it is reasonable to expect a relative degree of stability. Of course, other social factors involved such as encouragement, social supports, and general climate also need to be considered.

Social support. Studies have suggested the important role of encouragement and social support in the priesthood. Encouragement might be different from social support;

but, both represent the relationship role. In a study of religious candidates, Schweicker (1987) found that most of the candidates became motivated to enter religious life because of the encouragement that they received from vocational directors or other priest. She explained, ”encouragement is the simple most influential factor in fostering a religious vocation to brotherhood, priesthood, or sisterhood” (p. 8). Not only did encouragement promote a priestly vocation, but also it had an impact on remaining in and leaving the priesthood. For example, Potvin and Muncada (1990) indicated that seminarians who experienced discouragement and dated women during the formation period in seminary tend to leave their priestly vocation. In contrast, those seminarians who had reported being encouraged, having close friends in seminary, and feeling satisfied with the life of community in the seminary were more likely to remain in seminary. For the seminarians, encouragement might function as validation and support for their priestly vocation.

Similarly, studies have indicated that social supports tend to have positive effects, particularly in protecting against negative consequences of stresses or emotional/social pressure. Social support generally refers to the provision of assistance or companionship. In a national survey of 1,279 active priests, Hoge and Wenger (2003) reported two major sources of satisfaction in the priesthood: “opportunity to work with many people and be a part of their lives” and “being a part of a community of Christians” (p. 25). Hoge (2002) also found that lacking social support increases the likelihood of leaving the priesthood. The findings showed that active priests are more likely to have adequate supports from fellow priests than resigned ones. Obviously, studies have indicated the important role of social supports in remaining in the priesthood. In addition, many studies documented the negative effect of loneliness in the priesthood and its persistence, which also suggests the

critical role of social connections. We will return to the issue of loneliness when we discuss psychological attributes.

Situations and changes within the Church and in society. Other social factors to consider when investigating the priesthood are the general situations and changes occurring within the Church and in society. As noted briefly, structural changes within the Church had a significant effect on the priesthood. A huge number of priests resigned from the active ministry at the end of 1960 to the beginning of 1980. This was a critical period after Vatican Council II, resulting in theological and structural changes in the Church. Many priests experienced confusion and uncertainty about the sacred role of priests that the council proposed. Hoge and Wenger (2003) reported that "there was a widespread loss of confidence" (p. 9), pushing so many priests to resign (Schoenherr & Soresen, 1982; Shields & Verdieck, 1985; Schoenherr & Young, 1990). Schoenherr and Young did a study using a random sample of 36,370 priests (resigned and active) from 1966 to 1984. They noted ",the years spanning 1968 through 1974 were the most pessimistic recorded during the study, with resignation losses ranging from just over 50% to 96%", and "from 1975 through 1984, resignation losses continue to reduce ordination gains substantially, with the proportion lost ranging from 32% to 44%" (p. 476). Studies suggested also that dioceses lost 30% of priests after Vatican Council II to 1984. In addition to the structural changes, some have related the widespread resignation from the active ministries to the procedural change in the laicization of the resigned priests. Schoenherr and Young noted that, before Vatican Council II, the laicization procedure was somewhat complicated and involved a lengthy process. Vatican Council II changed

the procedure and made it an easier process. This huge resignation from the priesthood needs to be placed into its wider context.

In the 1960s to 1970s, there were powerful social and political events such as the Vietnam War, riots, and the sexual revolution. While little was known on how these social events affected the priesthood, some suggested that they became a national issue (Crook & Baur, 2008; Hunter, 1991; Rathus, Nevid, & Ficher-Rathus, 2002). Rathus et al. (p. 18) noted, "Protest against the Vietnam War and racial discrimination spilled over into broader protest against conventional morality and hypocrisy. Traditional prohibition against drugs, casual sex, and even group sex crumbled suddenly." Most recently, John Jay College (2011) examined the cause and context of sexual abuse of minors by Catholic priests in the United States between 1950 and 2010. The result showed, "cultural changes in the 1960s and 1970s manifested in increased levels of deviant behavior in the general society and also among priests of the Catholic Church in the United States" (p. 2).

Looking at the impact of the changes within the Church, it is certainly reasonable to examine the development of actual issues surrounding a priestly life. In the 1980s, there was a serious discussion about the effects of modern values on the priesthood. For example, Verdieck, Shields, and Hoge (1988) suggested that modern values have divided priests into two groups. They found that young priests were more susceptible to modern values. They had a tendency to overly value modernity and were absorbed by modern values. The consequence was that they became less connected to the core values of the priesthood and easily experience loneliness. In contrast, the older priests tended to hold traditional values, maintaining their commitment to the priesthood. However, in more recent years, studies indicated a diminishing effect of modern values on the priesthood.

Studies (Hoge, 2002; Hoge & Wenger, 2003) suggested that younger priests tended to be more traditional and rigid, while older priests were more open and flexible. When asked about their perception of the laity, older priests tended to agree that priests need to be more collaborative and open to the laity. In contrast, younger priests were likely to become cultic priests who see themselves as not only a "man apart" but also ontologically different from the laity. Some have even suggested that there was a polarization among priests and seminarians in more recent years, which is marked by diverse visions of the priesthood between a cultic priesthood mostly supported by young priests and a servant priesthood supported by older priests. Whether this polarization and different attitudes between young priests and older priests have effects on personal and community life of priests and on their commitment to the priesthood remains to be discovered.

One final component that has long been a topic of great interest within the Church and in society is sexuality and celibacy. Sexuality is usually discussed in the context of a celibate life. Accordingly, an issue of sexuality is often thought to be associated with that of celibacy. Recent issues on sexual abuse have drawn a lot of attention and reactions. While there were many priests who believe that these sexual issues are media-driven and subject to distortion, a number of priests considered sexual problems as jeopardizing the Church's mission (Hoge & Wenger, 2003). These different perceptions and responses to these issues might suggest how the issues have affected the priesthood. Empirical studies (Hoge, 2002, Hoge & Wenger, 2003) indeed documented that the issues of sexuality and celibacy have always been on the top list of what priests want to discuss openly. Further, studies showed that both sexuality (falling in love, desiring marriage, and having intimate relationships) and celibacy have continued to be the most common problems and most

common reasons for leaving the priesthood. Not surprisingly, some even suggested that celibacy should not be mandatory. Another related issue is homosexuality, which today draws much attention. Hoge indicated that 49% of resigned priests want the Church to discuss openly and deal wisely with the homosexual issue. Furthermore, Hoge reported that experience of being rejected as gay priests was one of the common reasons for resigning from the active ministry.

Evidently, the recent climate within the Church and in society has been affecting the priestly life. Hoge and Wenger have reported that the recent issues of sexual abuse, homosexuality, and celibacy have deeply threatened the security of American priests and seminarians. It, therefore, is possible that these threatening issues are also responsible for a recent tendency among young priests to become rigid, conservative, and cultic, relative to the older priests. Despite the different responses or reactions to the recent issues, most agree that priests need to integrate their sexuality into a healthy celibate life, regardless of their sexual orientation. Hoge and Wenger (2003) have noted, "Most priests recommend a healthy integration of sexual orientation-whether it be heterosexual or homosexual-into the total celibate life of the priest" (p. 110).

To summarize, studies have documented at least four aspects of the social factors for the priesthood and its persistence. The first aspect is demographic characteristics, which include ethnicity, family size, and age trend. Studies have suggested that age trend is the most sensible variable for the priesthood. The second social aspect is the religious experiences within the family, schools, and the Church. While parents played a great role in developing and promoting the religious interests and priestly vocation, there has been evidence indicating that religious experiences from the schools and Church as a critical

factor for internalization process and persistence in the priesthood. The third social aspect is the important role of social supports and encouragement, and the fourth social aspect is the general climate within the Church and in society.

Given the multiple aspects of the social factors, how much each aspect of the social factors contributes to the priesthood and its persistence becomes a critical question. While there has been no answer to the question, it is argued that the degree to which each aspect of the social factors contributes to the priesthood and to its persistence are dependent on the sensitivity of each factor, on the interconnections between aspects of the social factors, and on the interconnections with other factors, especially personality traits, values, and cognitive factors. With the expected interconnections, the next section will review the studies that have examined how the psychological traits contribute to the priesthood and its persistence.

Psychological Traits

Psychological traits, as VandenBos (2006) defined, refer to "an enduring personality characteristic that describes and determines an individual's behavior across a range of situations" (p. 950). Different from the social factors, which involve external influences or situations, psychological traits refer to the internal predispositions, which are generally stable and predictable. Similarly, Robert and Wood (2006) considered these traits as "the enduring patterns of thoughts, feelings, and behaviors" (p.13). Accordingly, research on the psychological traits of priests and seminarians has mostly focused on these patterns of enduring dispositions.

Most studies that attempted to investigate the personality traits of this population used the MMPI as the main instrument (Dunn, 1965; Nauss, 1973; Plante, 1998; Plante, Aldridge & Louie, 2005). This was in line with what Batsis (1993) reported in a survey of 154 vocation directors from the dioceses and religious orders in the U.S.A. He asked the directors to indicate the psychological tests used by a psychologist. The results showed that the MMPI was reported by the vast majority (91%) of respondents. In the most recent study, McGlone, Ortiz, and Karney (2010) even reported that all psychologists assigned to conduct a psychological assessment of priestly or religious candidates used the MMPI. Other commonly used instruments included Sentence Completion (SC, 57%), Rorschach (45%), the Thematic Apperception Tests (TAT, 34%), the Strong-Campbell (34%), Draw-A-Person (30%), and the Wechsler Adult Intelligence Scale (WAIS, 30%). There were still other instruments reported, but they were used less frequently. With its frequent use, it is wise to pay more attention to what has been found in the MMPI studies.

A considerable number of MMPI studies (Bier, 1948; Dunn, 1965; Kuchan et al., 2013; Nauss, 1973; Plante et al., 1995 & 2005; Weisgerber, 1969) have revealed a high degree of similarity, in that, priests and seminarians tend to have higher scores than the norm on Defensiveness (K), Masculinity/Femininity (Mf), Hysteria (Hy), Psychopathic Deviate (Pd), Psychasthenia (Pt), and Schizophrenia (Sc) scales. Some studies reported that the K and Mf scales were the most elevated scales among priests and seminarians. Accordingly, the following part will first review these two constructs, followed by others. Related findings from other studies using different instruments will also be reviewed and integrated.

Defensive characteristics. Of the psychological traits, defensive characteristics have been one of the most common traits of priests, seminarians, and applicants to the priesthood. The defensive characteristics have often been linked to the findings on the Correction (K) scale of MMPI. This K scale, which was constructed to investigate the response styles or approaches of examinee to a given test, functions as determining the validity of the resulted profiles (Butcher, Graham, Bent-Porath, Tellegen et al., 2001). High scores on this K scale of the MMPI indicate attempts of the examinees to deny or minimize psychological problems and to present themselves in a positive way, while low scores suggest attempts to exaggerate the problems as a way of asking for help (Butcher et al., 2001; Graham, 2006). Accordingly, Graham noted "the higher the scores, the more likely it is that the person was being clinically defensive. In clinical settings, T scores greater than 65 on the K scale strongly suggest a fake-good response set that invalidates the profile" (p. 35).

Studies have consistently reported that, on the average, despite not reaching the clinical range, Catholic priests, seminarians, and applicants to the priesthood endorsed high K scale scores, relative to the general population (Bier, 1971; Herr, 1970; Kuchan et al., 2013; Plante, Aldrige, & Louie, 2005; Plante & Lackey, 2007; Plante, Manuel, & Tandez, 1996; Weisgerber, 1969). Two extensive review studies of MMPI (Dunn, 1965; Nauss, 1973) provided empirical evidence for their defensiveness. Dunn concluded, "A summary of more than 15 years of research seems to confirm the findings of the pioneer studies of the early forties that religious and religious applicants show signs of defensive behavior" (p. 134). Nauss reported also, "an amazing similarity" among Protestant and Catholic seminarians on their high K scale scores (p. 84). Recent studies of successful

applicants to religious orders (Kuchan et al., 2013; Plante et al., 1996, 2005, & 2007) reported the same result, showing identifiable patterns of defensive characteristics.

There have also been studies attempting to examine how defensive characteristics affect adjustment and persistence in the priesthood. The findings, however, have been conflicting. Weisgerber (1969) compared two groups of religious candidates who entered the novitiate in different years: 166 novices in 1950-1954 and 227 novices in 1956-1962. Each group consisted of those who left and those who remained. Similar to other studies, the results indicated a high K scale score on both groups, relative to the norms. A further analysis suggested that those who had lower scores on the K scale and on the Standard Deviation tended to have a poor adjustment and left the novitiate. In contrast, those who had higher K scale scores were more likely to have good adjustment but not necessarily persist in the novitiate. Similarly, Plante et al. (1996, 2005, & 2007) linked high K scale scores to good adjustments. On the other side, many studies indicated that high K scale scores were also common among priests with clinical problems, particularly problems with sexual abuses (Camargo, 1997; Falkenhain, Duckro, Hughes, Rossetti, & Gfeller, 1999; Keddy, Erdberg, & Sammon, 1990; Plante & Aldridge, 2005; Plante, Manuel, & Bryant, 1996). Given the conflicting findings, there has been an issue on how to interpret their defensive behaviors. It has been debated whether the high K scale scores within this population are functional or clinical.

There have been some efforts to address the issue. Dunn (1965) viewed defensive behaviors as reflecting their neurotic personality. He indicated, “Religious and religious applicants show signs of defensive behaviors typical of persons with neurotic tendencies” (p. 134). Further, Dunn interpreted defensive behaviors as a way of coping with anxieties.

In a similar way, Plante et al. (1996 & 2005) associated "defensive (especially repressive) styles" in this population with "coping with perceived negative impulses (such as anger and hostility" (2005, p. 89). Kuchan and his colleagues (2013) considered high K scale scores as "attempting to present a healthy or positive appearance" (p. 8); however, they suggested the possible influence of religious training and evaluation on their defensive tendency. Others have related a high K scale score to ministerial functions and demands. Although studies have reported identifiable patterns of defensive characteristics among priests and seminarians, there has been no agreement in what are the functions of these traits. Much is unknown about how their defensive characteristics have an effect on the priesthood and its persistence. There are some suggestions that low K scores are less or not favorable for adjustment and persistence (Weisgerber, 1969), moderate to high K scores without clinically elevated scores on other scales are in favor for good functioning (Plante et al., 1996 & 2005), while clinically elevated K scale scores are more indicative of being clinically defensive (Camargo, 1997; Falkenhain et al., 1999). Further research, however, is necessary to investigate these possibilities. A specific investigation might be focused on how these defensive characteristics are related to other identifiable patterns of the MMPI.

Feminine characteristics. Another prominent psychological trait among priests and seminarians is feminine characteristics (Francis & Louden, 1999). These feminine characteristics have mostly been linked to the indices of masculine or feminine scale (Mf) of the MMPI, which was constructed to determine one's stereotypical gender preference (Butcher et al., 2001; Graham, 2006). For men, high scores on the Mf scale indicate stereotypical feminine interests. Accordingly, men with high Mf scores tend to be lacking

of masculine interests and often rejecting a traditional masculine role (Butcher et al., 2001). Furthermore, they tend to show aesthetic or artistic interest and to enjoy house-keeping and child-rearing activities. In contrast, women with high Mf scores are typically more masculine, with preferences in sports, hobbies, and competitive activities (Graham, 2006). In addition to the stereotypical gender preferences, some noted also that the larger portion of the Mf scale comes from the altruism subscale, and the smaller portion is from sexual identification (Cardwell, 1967; Dittes, 1971; Francis & Louden, 1999). Therefore, it is noteworthy to consider the two components as a part of the feminine dimension.

A considerable number of MMPI studies have reported feminine characteristics among priests and seminarians. A high degree of uniformity in this population did exist, showing that they tend to have higher scores than the general population on the Mf scale. Some studies reported high femininities among accepted and successful applicants to the religious orders (Kuchan, Wierzbicki, & Siderits, 2013; Plante, Aldrige, & Louie, 2005; Plante, Manuel, & Tandez, 1996), among seminarians either leaving or remaining (Bier, 1971; Dunn, 1965; Herr, 1970; Wauck, 1956; Weisgerber, 1969), among deacons (Plante & Lackey, 2007), and among Catholic and Protestant seminarians (Nauss, 1973). Several studies using different instruments, including the Eysenck Personality Inventory (Francis, Louden, Robbins, & Rutledge, 2000; Louden & Francis, 1999), the Myers–Briggs Type Indicator (Craig, Duncan, & Francis, 2006), the Personality Preference Form (Goldsmith & Ekhardt, 1984), and the Bem Sex Role Inventory (Ekhardt & Goldsmith, 1984) also found a similar pattern of feminine tendency among priests and seminarians. Moreover, Catholic priests and seminarians are typically more feminine, relative to the Protestant

seminarians (Campagna & O'Toole, 1981; Nauss, 1973), to Anglican female clergy (Francis et al., 2000), and to Pentecostal pastors (Francis & Kay, 1995).

Consistent with the two possible components of the Mf scale, there have also been a number of studies that identified personality aspects reflecting feminine characteristics. Some reported that priests and seminarians tend to have preferences for feeling, sensing, and judging, which are typically thought of as feminine (Craig, Duncan, & Francis, 2006; Holsworth, 1984). Validating the altruistic portion of the feminine dimension, Catholic priests and seminarians were found to have high interests and proclivities in nurturance, affiliation, and succorance (Banks, Mooney, Mucowski, & Williams, 1984; Callahan & Wauck, 1969; Louden & Francis, 1999; Nauss, 1973). Callahan and Wauck indicated further that nurturance and affiliation differentiate seminarians from non-seminarian groups although they do not necessarily predict persistence in their vocation. However, they did find that seminarians persisting tend to be more "emphatic" and "inhibited in sex life" (p. 31). On the other side, consistent with the sexual identification as a part of feminine dimension, studies showed that the Mf scale of the MMPI was the most elevated scale among priests who struggle with sexual problems (Camargo, 1997; Cimbolic, Wise, Rossetti, & Safer, 1999; Falkenhain et al., 1999; Keddy, Erdberg, & Sammon, 1990).

Given these consistent findings on the feminine dimension, some have suggested this contributes to the ways in which Catholic priests and seminarians differentiate themselves from others, either from the general population and other groups of seminarians and priests (Francis, Louden, Robbins, Rutledge, 2000; Mahalik & Lagan, 2001; Dunn, 1965). For example, Francis et al. (2000) considered the feminine

characteristics as a projection of "a clerical persona of integrity and stability" (p. 133). They pointed out further that feminine traits might reflect the Christian tradition, which is typically concerned with the interpersonal human values (such as love, harmony, and peace) and the priestly function, which value compassion for others and loving relationships with God. Nauss (1973) suggested that feminine patterns such as nurturance and succorance might be related to "a benevolent characteristic" (p. 82) and to "a characteristic of love on the part of the ministry" (p. 90).

With these possible connections to the clerical persona and to the religious values, one might expect that feminine characteristics are favorable for the commitment to the priesthood. However, there has been no empirical evidence for this. No difference was indicated between non-dropout and dropout seminarians on the nurturance and affiliation (Callahan & Wauck, 1969), and yet, the magnitude of feminine trait was not necessarily favorable for mental health, adjustment, and persistence in the priesthood (Weisgerber, 1969). Some suggested negative effects of rigid or traditional masculinity on the religious commitment and spiritual well-being (Mahalik & Lagan, 2001). However, there has been no evidence that the masculinity and femininity level is predictive of the commitment to the priesthood. It has also been debated whether masculinity and femininity can be seen as a continuum or one continuous dimension. Furthermore, some studies have indicated that a clinical elevation on the Mf scale reflects one's sexual problems and confusions with sexual identity (Camargo, 1997; Falkenhain et al., 1999; Graham, 2006; Keddy et al., 1990). Other studies also linked a high femininity among seminarians and priests to social insecurity and alienation (Dunn, 1965; Plante et al., 1996). Surprisingly, despite the consistent findings on feminine traits, it remains unknown whether the magnitude of

the femininity has different effects on the adjustment and persistence in the priesthood. Therefore, as Weisgerber (1969) has noted, femininity "may deserve attention in future research" (p. 64).

Psychasthenia-schizophrenia type (78/87 code). Following the K and Mf scales, the Pt and Sc scales have consistently been found to be moderately-to-highly elevated in these studies of Catholic priests and seminarians (Banks et al., 1984; Camargo, 1997; Dunn, 1965; Kuchan et al., 2013; Nauss, 1973; Plante et al., 1996 & 2005; Wauck, 1956; Weisgerber, 1969). Nauss reported that the Pt and Sc scales tend to fall between one-half and one standard deviation above the mean. Because of their similar elevations, the two scales were grouped together as a 78/87 code type. Graham (2006) noted that individuals with this code type tend to experience "emotional turmoil" and lack "adequate defenses to keep them reasonably comfortable" (p. 108). It is also common that they feel insecure, inadequate, inferior, and indecisive in social interactions. To compensate for the feelings of deficits, the persons tend to engage in introspection, rumination, and sexual fantasies. Not surprisingly, they also experience difficulties establishing and maintaining interpersonal relationships, struggling with sexual concerns or problems.

There have been a number of MMPI studies of priests and seminarians validating the psychological characteristics that Graham described for the general population with the 78/87 code type (Camargo, 1997; Dunn, 1965; McCarthy, 1943; Plante et al., 1996 & 2005; Wauck, 1956; Weisgerber, 1969). McCarthy has long reported that candidates to the priesthood are typically more submissive, dependent, introspective, and self-conscious in comparison to other Catholic groups at the same age. Therefore, McCarthy suggested that they had "greater neurotic tendency." Similarly, Banks, Mooney, and

Mucowski, (1984) also indicated that applicants to the priesthood often struggle with "problems related to self-image, self-consciousness, insecurity, and inferiority based on their expectations of personal perfection" (p. 83). Dunn did an extensive review of MMPI studies, suggesting that priests and seminarians are typically more "perfectionistic, worrisome, introversive, socially inept, and in more extreme cases, perhaps isolated and withdrawn" (p. 133). With such patterns, Dunn concluded, "a summary of more than 15 years of research seems to confirm the findings of the pioneer studies of the early forties that religious and religious applicants show signs of defensive behavior typical of persons with neurotic tendency" (p. 134).

More recent studies with large samples have attempted to investigate the neurotic personality traits among priests and seminarians. These studies consistently reported that Catholic priests are typically more neurotic and introverted than the general population (Craig, Duncan, & Francis, 2006; Francis, Louden, Robbins, & Rutledge, 2000; Francis, Louden, & Rutledge, 2004; Francis, Robbins, Kaldor, & Castle, 2009; Kosek, 2000; Louden & Francis, 1999). A similar result was found among Catholic seminarians (Piedmont, 1999). Louden and Francis (1999) compared three samples of 1,482 Roman Catholic, 1,071 male Anglican, and 1,239 female Anglican clergy. Surprisingly, the findings showed that Catholic priests and Anglican male clergy were more neurotic, introverted, and feminine than Anglican female clergy and general population. With the neurotic tendency, priests or seminarians are typically, as Eysenck and Eysenck (1991) described, "an anxious worrying individual … and to suffer from various psychosomatic disorders. He is overly emotional…finds it difficult to get back…after each emotionally arousing experience" (p. 4).

In addition, Catholic priests have also high introversion, showing that they are typically more orderly, restrained, and serious. They tend to enjoy private study and prayer, one to one counseling, and hearing confessions. Acceptance of celibacy might also be associated with their introverted traits (Louden & Francis, 1999). Another study (Craig, Ducan, & Francis, 2006) using the Myers–Briggs Type Indicator reported also a high introversion, showing that Catholic priests are "oriented toward their inner world… energized by their inner ideas concepts" (p. 158). Similar to what Louden and Francis have suggested, Craig and his colleagues noted also that these priests "prefer to reflect on a situation …enjoy solitude, silence, and contemplation" (p. 158).

Given its description, one might assume that neuroticism is not favorable for the priesthood. Further research is definitely needed to test such an assumption. Eysenck and Eysenck (1991 & 1985) theorized that neuroticism is essentially a function of activity in the limbic systems. Neuroticism might contain but does not necessarily suggest positive or negative emotions. Neuroticism, according to Eysenck and Eysenck, refers to one's sensitivity to the environmental stimulation. Those with high neuroticisms might have their own strengths but difficulties as well (Francis, Louden, Robbins, & Rutledge, 2000; Louden & Francis, 1999). Louden and Francis suggested the strengths of neuroticism by stating that "a considerable body of empirical evidence points to the positive relationship between higher neuroticism scores and enhanced empathic capability" (p. 72). Moreover, high neuroticism might be favorable for the "pastoral ministry demanding interpersonal sensitivity" (p. 72). On the other hand, as Louden and Francis noted, persons with higher neuroticism are typically "anxious about their health, liable to mood swings and be more likely to experience feelings of loneliness and depression" (p. 72). With this profile, one

might ask how neuroticism is related to the commitment to the priesthood. Studies have well documented a high level of loneliness among priests. We will discuss this later to see how this has an effect on the priesthood and persistence. For now, we take a look at other elevated scales of the MMPI.

Hysteria-psychopathic deviate type (34/43 code). Similar to the Pt and Sc scales, the Hy and Pd scores tend to be higher among priests and seminarians than in the general population. They were not always elevated as pairs, and therefore may not be fully identified as a 34/43 code type. However, due to their frequent and similar elevations in this population, they were grouped together in this review. Graham (2006) suggested that individuals with the 34/43 code type tend to exhibit intense anger, hostile, or aggressive impulses. They often experience difficulty expressing their negative feelings; and if doing so, the persons are inclined to express feelings of hostility towards family members and fears of rejection or criticism. They also "demand attention and approval from others" (p. 103). In social interactions and in dealing with their environment, these persons are more likely to exhibit passive-aggressive behaviors. In addition, although not overtly showing their anxiety or depression, the persons might feel upset at times and experience somatic distresses.

A considerable number of studies (Banks et al., 1984; Bier, 1947; Kuchan et al., 2013; Nauss, 1973; Plante, Aldridge, & Louie, 2005; Wauck, 1956; Weisgerber, 1969) reported a significant elevation on both scales. However, other studies (Plante & Lackey, 2007; Plante, Manuel, & Tandez, 1996) found an elevation on either the Hy or Pd scale. Surprisingly, some studies of priests with mental, especially sexual problems resulted in similar but also clinical elevations either on both scales of Hy and Pd (Camargo, 1997;

Falkenhain et al., 1999) or on one of these two scales (Gafford, 2001; Plante & Aldridge, 2005; Plante, Manuel, & Bryant, 1996; Robinson, 1994). Several studies using different measures reported some aspects of personality traits similar to the Hy and Pd profiles.

Plante and his colleagues (1996 & 2005) validated what Graham described. They found significant elevations on the Hy scale in one study (1996) and on the Hy and Pd scales in another study (2005) of accepted applicants to the priesthood. With the clinical patterns, Plante et al. (2005) noted, "coping with perceived negative impulses (such as anger and hostility) may be an issue of many" (p. 89). Banks et al. (1984) noted that the accepted candidates to the priesthood have a higher score on the aggression scale; but the score on this scale became significantly lower among those who persisted in their priestly vocation. Other studies (Herr, 1970; Weisgerber, 1969) found a similar result, showing a lower score on the Pd scale among seminarians who persisted but a higher score among those who left their vocations. Accordingly, Weisgerber suggested, "Pd tends to be associated with poorer observance of religious discipline and rules" (p. 155). Similarly, Herr linked a high Pd with lacking emotional control. Commenting on a high score of Hy scale, Weisgerber suggested that it was a "favorable profile" for persistence in the priesthood. According to Herr, however, this scale had no effect on persistence in the priesthood.

While there has been evidence that Pd and/or Hy scale scores tend to be clinically elevated among priests with mental and especially sexual problems, not much is known about active priests from the non-clinical population. However, several studies did examine aggression and hostility resembling Pd and Hy profiles which involve, as Graham noted, intense anger and hostile/aggressive impulses. In a large study of 1,468

Catholic priests, Francis, Louden, and Rutledge (2004) examined burnout and personality traits using the Eysenck Personality Questionnaire (Eysenck & Eysenck (1991). They found that priests tend to have higher scores than the general population on the Psychoticism scale. According to Eysenck and Eysenck, an individual with a high score on the Psychoticism scale tends to be "hostile to others, even his own kith and kin, and aggressive, even to loved ones. He has a liking for odd and unusual things, and disregard for danger" (p. 6). In a different way, Francis and his colleagues suggested that Catholic priests with high psychoticism "experience a higher level of emotional exhaustion and depersonalization", but they also "experience a higher level of personal accomplishment than is the case among Anglican parochial priests" (p. 12). In another study with a large sample of 1,168 Catholic priests, Louden and Francis (1999) also reported a similar pattern of high psychoticism, relative to the general population. However, they considered a high level of psychoticism among Catholic priests as being "more toughminded than men in general," although they noted that the toughmindedness "may generate some difficulties for some aspects of ministry" such as in their interpersonal relationships (p. 72).

Notably, several studies have indicated conflicting profiles of Catholic priests. On one side, the priests were identified as experiencing high levels of hostility, aggression, emotional exhaustion, depersonalization, and interpersonal difficulties. On the other side, they were reported to enjoy private study or prayer, solitude, silence, and contemplation, to be toughminded, and to experience high levels of personal accomplishment. While an issue on how such a profile has an effect on commitment to the priesthood can be raised, a classic notion of balanced affect might be relevant. In this regard, emotional exhaustion

and depersonalization might represent negative affect, whereas personal accomplishment might be considered as positive affect. Francis, Robbins, Kaldor, and Castle (2009) have found among priests a common condition of experiencing high degrees of both positive and negative affect. They suggested a certain condition as "warning signs" when "high levels of negative affect coincide with low levels of positive affect" (p. 201). With this in mind, one might expect that unbalanced affect will be negatively related to persistence in the priesthood. If this is the case, it would be critical to investigate how loneliness, which has commonly been found among priests, affects the priestly commitment. Louden and Francis (1999) suggested that loneliness might be related to neurotic personality which, as previously described, characterized Catholic priests.

Loneliness. Loneliness essentially refers to the lack or absence of companionship and/or intimacy. VandenBos (2006) defined loneliness as a painful state (e.g., affective and cognitive discomforts), which results from the unfulfilled basic needs for companionship and/or intimacy. By definition, loneliness might not be considered as a psychological trait or disposition due to its connection to situational factors such as social relationships and supporting networks. However, loneliness represents one's psychological state associated with the vulnerability/susceptibleness which can be different from one person to another. With this in mind, it seems reasonable to include loneliness in this trait factor.

Given the nature of the priesthood that requires celibacy, it is not surprising that loneliness has been a critical issue. Numerous studies have attempted to address the issue; and indeed, there has been evidence that loneliness has negative effects on the priesthood. Verdiek, Shields, and Hoge (1988) investigated large data on resigned and active priests

in 1970 and in 1985. The results indicated that priests who resigned from the priesthood were more likely to experience a higher degree of loneliness than those who remained. Verdieck and his colleagues noted, "in both samples, the most important factor related to desire to marry is loneliness" (p. 531). More recent studies (Felperin, 1995; Hoge, 2002; Hoge & Wenger, 2003) reported the same findings, indicating that loneliness is always among the top problems commonly faced by resigned priests. Hoge and Okure (2006) also reported a high level of loneliness among international priests.

There have also been attempts to examine a specific aspect and mediating role of loneliness on the commitment to the priesthood. Verdiek, Shields, and Hoge (1988) found that, only when young priests perceive loneliness as a personal problem, the likelihood of desiring marriage and leaving the priesthood increases significantly. The study showed no effect of loneliness when priests perceived it not as a personal problem. In addition, loneliness perceived as a personal problem was found to mediate and heighten the effects of other factors (e.g., age or modern value) involved in the commitment to the priesthood. Similarly, Hoge (2002) identified the four most common reasons for leaving the priesthood: falling in love, rejecting celibacy, experiencing disillusion, and feeling rejected as a gay person. He then noted, "all four types have one condition in common–that the man felt lonely or unappreciated. This is a necessary requirement in the process of deciding to resign; when it is absent, resignation from the priesthood is unlikely," (p. 64). Moreover, loneliness has a direct effect on the resignation from the active ministry, and additionally, it mediates other factors involved in the decision to remain in and to leave the priesthood (Felperin, 1995; Hoge & Okure, 2006).

Given the evidence for the roles, especially the moderating role, of loneliness in the resignation from the priesthood, it becomes critical to investigate how loneliness is related to all other factors including social factors and psychological traits that have been discussed. Similarly critical is to examine its possible connection to values and religious orientations which will be presented in the next section. Values and religious orientations are central to the priesthood. In addition, within the literature of personality psychology, both are considered as the second domain of personality whereas personality traits are the first one (Roberts & Wood, 2006). Therefore, it is certainly worth examining values and religious orientations in their relationships with other factors involved in the commitment to the priesthood.

Value and Religious Orientation

Value and religious orientations generally refer to what people would like to be or what they want to do. Value is a desired or ideal state which is different from personality traits that generally refer to what people typically think, feel, and do. Value functions by directing people to the end-state of existence or obtaining the ideal state. Value can take forms of motivations, goals, and preferences (Roberts & Wood, 2006; Rokeach, 1969). Accordingly, value has a hierarchical structure, indicating that the more important the goal, the greater its value within the person's motivation (Richarchs & Birgin, 1997).

Value. Rokeach (1969) identified two types of value: terminal and instrumental. A terminal value is a belief that directs an individual to strive for the idealized end-state of existence, whereas an instrumental value is the ideal mode of conduct that directs the individual to reach the terminal value. In light of this distinction, priestly vocation may be

considered as having instrumental value, especially religious value. Briefly, priestly vocation is a free response to live in union with God and imitation of Christ through the three vows of obedience, chastity, and poverty (Costello, 2002; John Paul II, 1992; Rulla, Ridick, & Imoda, 1989). A desire to live in union with God and in imitation of Christ reflects the terminal values of the priesthood, whereas the three vows are the instrumental values. These vows are instrumental because of their function as a preferable means of achieving or expressing a union with God and an imitation of Christ (Castello; 2002; Haughey, 2004; Rulla, Ridick, & Imoda, 1989).

Studies have indeed validated that values motivate people to reach the ideal end. Those who entered the priesthood are typically motivated by what they would like to be, rather than what they actually believe themselves to be (Costello, 2002; Rulla, Ridick, & Imoda, 1989). Studies have identified three common motivations to enter the priesthood. The first is based on altruistic value, as shown by a strong desire "to help other people" (Potvin & Suziedelis, 1969; Turker, 1983) or "to sacrifice themselves for other people" (Greeley, 2004). Greeley indicated that altruism is the most essential component of the priesthood. The second is based on an existential or personal value as shown by a desire "to give more meaning to life" (Hicks, 1983; Tuohy, 1980) or to "find places in life and achieve immortality" (Greeley, 2004). Hicks and Touhy noted further that this existential meaning-based motivation is typically more prominent among older seminarians or late vocations. They did report "a desire to serve others" as their motivations. However, they placed it on the second rank after the existential meaning. Young seminarians were more motivated to serve others first and secondly to give meaning to life. Finally, the third one is based on a spiritual value, which involves a desire "to serve God," to "imitate Christ,"

and to "serve the Church or the people of God" (Castello, 2002; Rulla, Riddick, & Imoda, 1989). Relative to the laity, priests, seminarians, and applicants to the priesthood tend to exhibit a higher desire to serve God and the Church.

Generally speaking, what motivates people to enter the priesthood is relatively consistent with what the Church expects. With this in mind, one might then think that value-based motivations would positively be related to persistence in the priesthood. Unexpectedly, that was not the case. Several studies suggested that the presence of religious values at entrance did not necessarily predict persistence in the priesthood. Rulla, Riddick, and Imoda (1976) reported that 95% of religious candidates who have strong religious values left after 4 years; and 81 % left after 6-8 years. Similarly, Weisgerber (1969) indicated that "even when candidates give forth the most altruistic and supernatural motives one could wish, there is no assurance of the degree of conviction or intensity" (p. 89). In addition, he suggested that value "did not prove useful in predicting perseverance" (p. 158) although he also noted that "poor or questionable motivations…do not augur well for perseverance in the religious life" (p. 97).

A further investigation on values did show some promising results. Rulla and his colleagues (1972, 1976) examined a consistency between the actual-self (needs), ideal-self (values), and institutional-ideal (religious values) on different levels (conscious and unconscious). The results suggested that religious value-based motivations at the entrance did not predict persistence in the priesthood. However, when religious or ideal values and the actual-self of seminarians were analyzed simultaneously, the study showed that those who have a high inconsistency between their actual self and ideal self are more likely to leave their vocation, notwithstanding their strong religious motivation when entering the

religious life. Conversely, those who have a high consistency are more likely to remain in their vocation. With these findings, Rulla and his colleagues concluded that persistence in the priesthood depends on the degree of consistency between the actual-self and self-and-institutional ideals. Therefore, they pointed out a critical role of the internalization process of religious values (e.g., self and institutional ideals) in order for priests and seminarians to remain in the priesthood. This may imply that commitment to the priesthood involves not only values, but also the attitudes through which values are mediated and manifested into various decisions and actions. If this is the case, religious orientations as an individual's attitude toward or a readiness to respond to religious values and beliefs might contribute to the commitment to the priesthood.

Religious orientation. Religious orientation is often viewed as a way in which people live out their religious beliefs and values (Batson & Ventis, 1982). People might share the same values and beliefs, but they may have different ways of living them out. Therefore, religious orientation might be best considered as religious attitudes rather than as religious content (Zondag, 2001). Allport and Ross (1967) differentiated two types of religious orientation: intrinsic and extrinsic. They briefly explained, "the extrinsically motivated person uses his religion, whereas the intrinsically motivated lives his religion" (p. 434). Accordingly, intrinsic religious orientation refers to motivation that stems from a religious belief itself. People who have intrinsic religious orientation are more likely to identify their religious beliefs and values as an end in itself and the core of their being. They live out religious faith for the sake of faith (Gorsuch, 1990), center their lives on the basis of their religious beliefs (Zondag, 2001), and are more committed to their religious convictions in a self-sacrificing way (McFarland & Warren, 1992). In contrast, extrinsic

religious orientation refers to a utilitarian motivation which stems from social or external values and beliefs (Burris, 1999). People who have extrinsic religious orientation endorse religious beliefs to the extent that they can be used as a way of achieving other goals such as security, sociability, status, or self-justification. Therefore, Allport and Ross suggested that extrinsic religious orientation is a less mature religious orientation than intrinsic one.

Given such distinctions, one might consider intrinsic religious orientation as more favorable for the priesthood and its persistence. Studies have indeed found that religious professionals (religious female or male) and seminarians tend to have a stronger intrinsic orientation and lower extrinsic one than other groups (Mahalik & Lagan, 2001; Reinert & Bloomigdale, 2000). Consistent with their high intrinsic religious orientation, Reinert and Bloomigdale noted that seminarians have higher scores on spiritual support, and spiritual openness, and God consciousness, relative to other college students. In addition, there has also been evidence that people with intrinsic religious orientation are more likely to have strong religious commitment (Donahue, 1985; Markstrom-Adams & Smith, 1996), good adjustment (Haerich, 1992), and also strong empathy for others (Watson, Hood, Morries, & Hall, 1984). Darley and Batson (1973, cited in Hood, Hill, and Spilka, 2009) reported that seminarians who have intrinsic orientation are "guided by preprogrammed helping response" (p. 408).

Furthermore, studies have also provided evidence for the contribution of intrinsic religious orientation to commitment to the priesthood (Donahue, 1985; Mahalik & Lagan, 2001; Zondag, 2001). In a study of 235 clerics from the Roman Catholic Church and the Reformed Churches in Netherlands, Zondag (2001) found that those who score higher on intrinsic religious orientation are also more likely to have strong affective commitment to

the priesthood. In addition, those who have higher scores on intrinsic religious orientation tend to have stronger commitment to the priesthood than those who have lower scores on these scales, even if they reported physical dissatisfaction. To summarize the findings, he noted further, "Pastors with higher scores for affective commitment and cost commitment have a strong intrinsic religious orientation and are satisfied with the pastoral profession" (p. 320). Reviewing studies of intrinsic and extrinsic religiousness, Donahue (1985) also stated, "intrinsic religiousness serves as an excellent measure of religious commitment" (p. 415).

Despite a limited number, the existing studies seem to suggest the positive effect of intrinsic religious orientation on the commitment to the priesthood. Therefore, it might also be worthwhile to investigate how value and religious orientation are interconnected to other factors for predicting commitment to the priesthood. Given that religious value-based motivations are always present at entry to seminary, it might also be critical to examine how priests and seminarians explained their resignations. Their explanations for leaving the priesthood may be helpful in identifying the critical areas that make it difficult for priests and seminarians to remain in the priesthood. For the purpose of this study, their explanations for leaving the priesthood are labelled as the cognitive factors.

Cognitive Factors

Cognitive factors can take all forms of knowing and awareness. These include perceiving, judging, reasoning, or problem solving (VandenBos, 2006). More specific to this review, cognitive factors involve the reasons or explanations given by priests and seminarians in the decision to leave or to remain in their priestly vocations. In addition, these cognitive factors involve recommendations made by resigned and active priests.

Explanation for resignation and drop-out. Some studies have indicated four major explanations for leaving the priesthood. These include falling in love/desiring a marriage, objecting to celibacy, having problems with authority figures and Church administration, and struggling with serious personal or psychological problems (Carrol, 1985; Castello, 2002; Felperin, 1995; Greeley, 2004; Hoge, 2002; Hoge & Okure, 2006; Hoge, Potvin, & Ferry, 1984; Kane, 2006; Maruca, 1993; Potvin & Muncada, 1990; Rulla, Riddick, & Imoda, 1989; Verdiek, Shields, & Hoge, 1988).

Falling in love/desiring marriage is one of the most common reasons/explanations given by resigned priests (Greeley, 2004; Hoge, 2002; Verdiek, Shields, & Hoge, 1988). Verdiek and his colleagues compared two cohorts of priests: a cohort of 1970 (N = 3405) to that of 1985 (N = 929). The results showed a stronger desire to marry among the 1970 cohort, relative to the 1985 cohort. However, in both cohorts, a desire to marry was found to associate equally and strongly with a tendency to resign from the priesthood. The same and even more convincing result was found in a specific study of resigned priests in 1970 and in 2000 (Greeley, 2004). For both groups from different years, a desire to marry was the most noticeable reason for leaving the priesthood. Other studies reported the same result, showing the critical role of falling in love or desiring a marriage in leaving the priesthood (Felperin, 1995; Hoge, 2002). Hoge did an interview with Tom, one of the resigned priests. He met a woman in the parish, who then became his wife. Tom stated:

> …She was a huge help for me in planning youth liturgies. We started doing things together. Soon I know I'm really attracted to her, I knew I am over my head. I'm spending time with her. It was a mutual attraction. … I became sexually involved … it was not right…but I realized that she was what I wanted. (Hoge, p. 67 & 69).

Closely related to the desire to marry or falling in love is rejection of or problems with celibacy (Felperin, 1995; Hoge, 2002; Potvin & Muncada, 1990). Studies indicated celibacy as another common reason that precipitated many priests and seminarians to leave their vocation. In an extensive study of nondropout and dropout seminarians, Potvin and Muncada noted, "irrespective of whether or not the celibacy requirement is the single most important hindrance to recruitment for the priesthood, and there is some evidence that it is, …it is one of the more important factors in withdrawal" (p. 96). Similarly, Hoge reported that this celibacy demand is the second common explanation for leaving after a desire to marry. However, Hoge suggested further that, although a desire to marry and a problem with celibacy were the common explanations for resignation, when loneliness is absent, resignation from the priesthood or dropout from seminary is unlikely. Loneliness is more responsible for the decision process of resignation. As an illustration, Hoge noted a story of Carl, one of resigned priests. Carl said:

> I …never dated a whole lot. You know, how difficult could the celibate thing be? ... It was in my second year after ordination… I was wrong. I think it was more a symptom of what I was going through, the loneliness. I got involved sexually. A very unhealthy relationship…I struggled with the issue of celibacy. (p. 73 & 75).

Another explanation to leave the priesthood is a rejection of authority figures and dissatisfaction with Church administration (Greely, 2004; Hoge, 2002). Greeley reported this as the second most common explanation for resignation from the priesthood in 1970, but not in 2000. Related to this explanation, Kane (2008) also investigated the perception and attitudes of priests towards bishops. The results indicated that they "had lost respect for their bishops" and also "typically mentioned a sense of betrayal by their bishops or feeling distanced from the role of their bishops" (p. 190). Similarly, the international priests were dissatisfied with the way authority is exercised in the Church (Hoge &

Okure, 2006). In addition to this complaint, priests reported dissatisfaction with Church administration. This dissatisfaction was even listed as the third common explanation for resignation after desiring to marry and having celibacy issues (Hoge, 2002).

Finally, struggling with personal or psychological problems has also been another explanation for leaving the priesthood. This included being asked to leave or feeling not being called (Potvin & Muncada, 1990), being rejected as a homosexual (Hoge, 2002), suffering from an illness such as an alcoholism or drinking problem (Felperin, 1995; Hoge, 2002), and experiencing work-related stresses (Felperin, 1995; Hoge, 2002). Of these personal and psychological problems, feeling rejected as a homosexual person was unexpectedly the most difficult one to deal with. This feeling of rejection was the fourth common explanation for resignation from the priesthood. As an illustration, Hoge did an interview with Marc, a homosexual priest who resigned from the priesthood. Marc said:

> I remember when I did my preaching, I would try to make language more gender neutral, and it would upset people in the congregation … if I might make remarks about women's rights or gay rights…people would really get agitated…I realized, this is not a good fit. I can't really be a spiritual leader for these people. (p. 80).

As a summary of those reports, as Hoge (2002) commented, "study was suffused with talk about celibacy, loneliness, desire for intimacy, and homosexuality --- more so than we expected" (p. 102). Despite the evidence for the most critical role of loneliness in the resignation from the priesthood, Hoge pointed out the complex causes of leaving the priesthood as he concluded that: "More than one motivation is present in almost all cases of priestly resignation" (p. 33). Similarly, Rossetti (2011) stated: "When a priest thinks of leaving, it is likely a complex dynamic" (p. 13). The same pattern was reported in Potvin and Muncada's (1989) study of seminarians. Various variables involved in perseverance

and withdrawal are not independent of each other, suggesting also a complex process of remaining in and leaving the priesthood.

Recommendations. Recommendations refer to the advisable or favorable courses of action proposed by either active or resigned priests for the improvement of seminary training and priestly life. Hoge (2002) interviewed both resigned and active priests, and reported four common recommendations, which include: 1) More open discussion about sexuality, celibacy, and homosexuality; 2) More realistic seminary training for real-life experiences such as a pastoral year away and healthy interaction with women; 3) More attention to newly or young ordained priests by providing support from authority figures or older priests; and 4) More support programs to allow them to share their experiences and discuss their real issues.

Hoge noted two recommendations specifically made by resigned priests. These include: "allow married men to serve as priests" and "urge (or require) all seminarians to meet with psychological counselors to help explore issues from childhood" (p. 94). There were other recommendations which generally concern how priests and seminarians need to master their psychosexual developmental tasks. Some believed that mastering these tasks is essential for the commitment to the priesthood (Schuth, 2002 & Sofield, 2002, in Hoge, 2002). These recommendations can be relevant to our discussion because they are suggestive of a possible lack of perceived necessities and capacities for the priesthood and its commitment. Alternatively, they might also reflect one's particular ways of perceiving problems and demands in the priesthood. Research suggested that resigned priests had a tendency to perceive their experience of loneliness privately (Verdiek et al., 1988), which might indicate the importance of attributions in the priesthood, especially in

moderating or mediating the influence of other variables on priestly commitment. With this in mind, the present study will investigate how cognitive modes, especially attribution styles and views of the priesthood affect commitment to the priesthood.

To summarize, four major factors have been identified to be relevant to priestly commitment. They include such factors as social, psychological trait, religious mode, and cognitive mode. These may reflect the multidimensional nature of the priesthood and its commitment. Given these multiple factors for the priesthood, it seems crucial for a study to take an integrative approach. For this reason, this present study takes a closer look at the various variables for the priesthood, investigating to what extent and direction each factor contributes to commitment to the priesthood, and as a whole, how the correlations among variables predict and explain priestly commitment.

In addition, as shown in the literature, there has been a long standing issue related to well-being of priests and seminarians. Studies have consistently shown a tendency in this population to score high on defensive-related indexes and on some clinical scales of the MMPI. It has long been questioned whether their profiles represent clinical patterns. Furthermore, as shown in the literature, there has been a strong tendency toward clinical interpretations in the past research on the priesthood which is suggestive of the need for more objective approach to studying the priesthood. This present study is also to address this well-being-related issue by looking at the correlations between priestly commitment and well-being.

Well-being of Priests and Seminarians

During the recent crisis in the Church, a specific issue related to the well-being of priests and seminarians was frequently raised. Their well-being, which refers to their "state of happiness, contentment, low levels of distress, overall good physical and mental health and outlook, or good-quality of life" (VandenBos, 2007, p. 996), was questioned, as either the possible contributor to or the consequence of the crisis.

In a study of 979 diocesan priests and 540 religious priests who have been in the priesthood for five to nine years, Hemrick and Hoge (1991) reported that religious priests (63 %) and diocesan priests (67 %) were satisfied with their personal health, spiritual life, and psychological well-being. A similar result was reported by the National Organization for Continuing Education of the Roman Catholic Clergy in its survey of new priests in 1984 to 1993. A vast majority of priests were happy with their vocation and felt fulfilled in their work. Hoge (2002) compared three groups of 255 diocesan, 256 religious, and 72 resigned priests who have been in the priesthood for five years or less. Similarly, most of priests were very happy and satisfied in administering the sacraments and preaching the Word of God. In the most recent study of 2,482 priests from twenty three dioceses in the U.S.A., Rossetti (2011) also found a similar result as he concluded, "The overall findings are clear…priests, as a group, are very happy with their lives and their vocations. They are among the happiest people in the country," (p. 202). He noted further, "a combination of psychological and spiritual factors contributes to priestly happiness" (p. 203).

Specific to the commitment, Zondag (2001) reported that priests with general and psychological satisfaction are more likely to have a higher level of affective commitment than those with less satisfaction. He also found that priests who experience more physical

hardship have a higher affective commitment to the priesthood than those who experience fewer physical hardships. Explaining this phenomenon, he stated that a physical hardship in a pastoral ministry may reflect the individual's identification with priestly profession, intensive investment, and commitment to the priesthood. Accordingly, physical obstacles and dissatisfaction such as having physical hardships and having much longer working-hours did not have negative effects on priestly commitment. Rossetti (2011), on the other hand, reported that priests who have frequent thoughts of leaving the priesthood are more likely to be younger, hold more responsibilities, and experience a higher level of burnout. Zondag reported further that priests who have strong affective commitment and intrinsic religious orientation were not affected by physical hardship and longer-working hours.

Chapter Summary: Focus of the Present Study

As evidenced in psychological literature, research on the priesthood has a relatively long history, so does a particular research interest in predicting priestly commitment of priests and seminarians. A considerable number of isolated studies has examined various factors (e.g., socio-demographic, personality, religious, and cognitive) favorable or unfavorable for the priesthood. To a great extent, research seemed to focus on the role of personality variables as reflected in the frequent-used personality test of the MMPI, which might also be responsible for a strong tendency toward a clinical interpretation and relative lack of spiritual dimension in past studies of the priesthood.

In general, the resulted findings were equivocal. For example, the MMPI profiles of priests (e.g., resigned or active and clinical or nonclinical) showed a similar pattern of elevation on several clinical scales. Despite the equivocal findings, however, past studies

provided a clear direction to the potential factors for priestly commitment, which are the targeted variables for the present study. Moreover, they indicated the complex nature of the priesthood, which leads this study specifically into an integrative approach.

The individual studies indicate a number of potential variables for commitment to the priesthood. Social variables particularly parental environment, family religiosity, and childhood religious experience have been found to be important in the early socialization to the priesthood. Support of others, on the other hand, was reported to play a crucial role for later development or maintenance of the priesthood. These social variables are worth of further investigation. Research has also identified personality characteristics relatively common in this population such as a high level of defensiveness, femininity, introversion, and neuroticism. Loneliness has particularly been considered as the most unfavorable for commitment to the priesthood. Other personal characteristics such as young age and first-five years in the priesthood were reported to be critical for commitment to the priesthood. Specific to religious variables, research has also indicated the role of religious orientation for commitment to the priesthood. Finally, studies identified cognitive variables such as reasons or explanations for leaving the priesthood which might be associated with one's attribution and his views of the priesthood. These potential variables for commitment to the priesthood are worthy of further investigation, and these variables are the focus of this present study. Considering conflicting findings between the MMPI-2 clinical profiles and psychological-spiritual health-related measures, it is also worth investigating well-being of priests and seminarians in conjunction with their vocational commitment.

In addition to providing potential variables, past studies show a complex dynamic of the priesthood. Well-being literature indicates that a combination of psychological and

spiritual factors contributes to priestly happiness. Similarly, empirical evidence shows a complex cause of priestly resignation. Given this complex dynamic of the priesthood, the equivocal findings are certainly suggestive of the need for an integrative approach. This study is to integrate those potential factors and examine their correlations in predicting commitment to the priesthood. Stated thus, a general research question for this study is how these various factors are interconnected to one another in predicting commitment to the priesthood and well-being. By examining the interconnections and their influences on commitment to the priesthood, we are able to identify the best factors contributing to priestly commitment and understand the pathways of how priestly commitment develops.

For such an investigation, a theoretical model is certainly needed to systematically integrate and so understand the relational (causal) patterns of various variables involved in priestly commitment. The following chapter will present a tentative model for priestly commitment which is partly adopted from the multidimensional theory of organizational commitment (Meyer & Allen, 1997). All assumptions, specific research questions, and the hypotheses of the present study will also be integrated into the theoretical model.

CHAPTER III

A THEORETICAL MODEL OF PRIESTLY COMMITMENT

Commitment to an organization, an occupation, or a relationship involves both attitudes and emotions (Landy & Conte, 2007). The same is true of the priesthood which can be seen as a psychological bond that includes: 1) acceptance and belief in the values of the priesthood; 2) a willingness to exert effort for meeting the goals or purposes of the priesthood; 3) a persistent desire to remain in the priesthood (Myer & Allen, 1997; Porter, Steers, Mowday, & Boulian, 1974), and 4) moral or spiritual obligation to the priesthood (Wiener, 1987). This psychological bond can have different forms and degrees depending on how it develops across time and situation (Colquitt, LePine, & Wesson, 2009).

Organizational Commitment: Its Forms, Antecedents, and Consequences

Meyer and Allen (1997) identified three forms of commitment: affective, continuance, and normative commitment. Affective commitment refers to as an "emotional attachment to, identification with, and involvement in the organization" (p. 11). Individuals with a high level of affective commitment decide to remain in the organization because they "want to do so." Continuance commitment refers to the awareness of the cost of leaving an organization. In continuance commitment, one might remain in an organization because her/his investments are nontransferable outside the organization. Those with a high level of this commitment decide to remain in the organization because "they have to stay" (p. 11). Normative commitment generally refers to a moral obligation or a generalized value of loyalty to remain a member of an organization. The individuals with a strong normative commitment continue in the

organization because they "ought to remain" (p. 11). These three elements create an overall sense of organizational commitment. Thus, people might have a strong desire to remain in an organization because they want to stay, need to stay, or ought to stay.

In light of commitment development, Meyer and Allen made distinctions between distal and proximal causes/antecedents, depending on whether they have direct or indirect influences on the organizational commitment. Among the distal causes or antecedents are the organization characteristics, personal characteristics of the employees, socialization experiences, management practices, and environmental conditions. The proximal causes or antecedents include employees' work experiences, their role states, and psychological contracts. These distinctions are relevant to understanding the commitment development. The distal causes are the antecedents which have indirect influences on the commitment, through the influences of proximal causes/antecedents. In contrast, the proximal causes are those antecedents which have direct influences on commitment to the organization (Mathieu, 1988; Mathieu & Hamel, 1989; Meyer & Allen, 1997).

Another important aspect of the organizational commitment is the process through which the antecedents operate. Some suggested the importance of attribution in affective commitment. Koys (1991) found the moderating effect of employee's perceptions/beliefs. Those perceiving that the management practices were implemented for their needs tend to have strong affective commitment. Meyer and Allen also reported that, when employees attributed their positive work experiences to the organization, they tended to have strong affective commitment. For normative commitment, socialization and internalization were found to be critical. People learned to internalize what has been socialized, given, valued, and expected by the family, culture, or organization. Through these two processes, they

developed a sense of indebtedness or perceived need to reciprocate, which is an essential element for normative commitment. Finally, continuance commitment developed on the bases on an accumulation (or investment) of an employee's side-bet. Accordingly, Meyer and Allen pointed out that one's perceived cost of loss related to leaving the organization is a critical process for continuance commitment.

Of the three components, affective commitment has been considered as the most preferable commitment (Landy & Conte, 2007; Trimble, 2006; Zondag, 2001). A meta-analysis study (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002) provided empirical evidence for the strongest and desirable correlations between affective commitment and both organizational-relevant outcomes (attendance, performance, or organizational ties) and employee-relevant outcomes (stress or work-family conflict), followed by normative commitment. Other studies, however, found that normative commitment is preferable in the collectivist cultures where social ties, norms, loyalty, or moral obligation were highly valued (Lincoln, 1989; Vardi, Wiener, & Popper, 1989). Empirical evidence from stress literature also reported a similar pattern between affective and normative commitments; they both had negative correlations with measures of stress-related variables (work stress, depersonalization, and emotional exhaustion). In contrast, continuance commitment was unrelated or negatively related to the desirable behaviors, regardless of the cultural values (Meyer et al., 2002; O'Reilly & Orsak, 1991; O'Reilly, Chatman & Caldwell, 1991). In a recent meta-analysis study, Meyer et al. (2012) also found similarities between affective commitment and normative commitment, with the latter having stronger cultural-related influences.

In addition to these three components, this present study also included thought of leaving the priesthood as an aspect of commitment to the priesthood. In this regard, while the three components of commitment reflected the individuals' intensions to remaining in the organization, thought of leaving the priesthood might be considered as a contradictory intention, which simply means the opposite desire for turnover from the priesthood. It is argued that knowing the factors for leaving is as equally important as knowing the factors for remaining in the priesthood. With this, we were to expect that the factors contributing to the two opposite intentions (both commitment to remaining in and thought of leaving the priesthood) would be complimentary to each other in our understanding the priestly commitment.

A Theoretical Model of Priestly Commitment

In reference to the multidimensional model of organizational commitment, commitment to the priesthood might be best understood in light of development process with various antecedents and its consequences. The various factors for commitment to the priesthood are the antecedents. Unlike the organizational commitment model in which well-being is considered as the consequence of commitment, the present study considers well-being as a covariate of priestly commitment. In addition, specifically aiming at predicting priestly commitment, well-being will not be included as a dependent variable of those factors for priestly commitment. We are, instead, to examine its relationship to priestly commitment. Figure 1 below depicts a theoretical model for priestly commitment showing a pattern of relationships among variables involved.

Figure 1

A Theoretical Model of Priestly Commitment

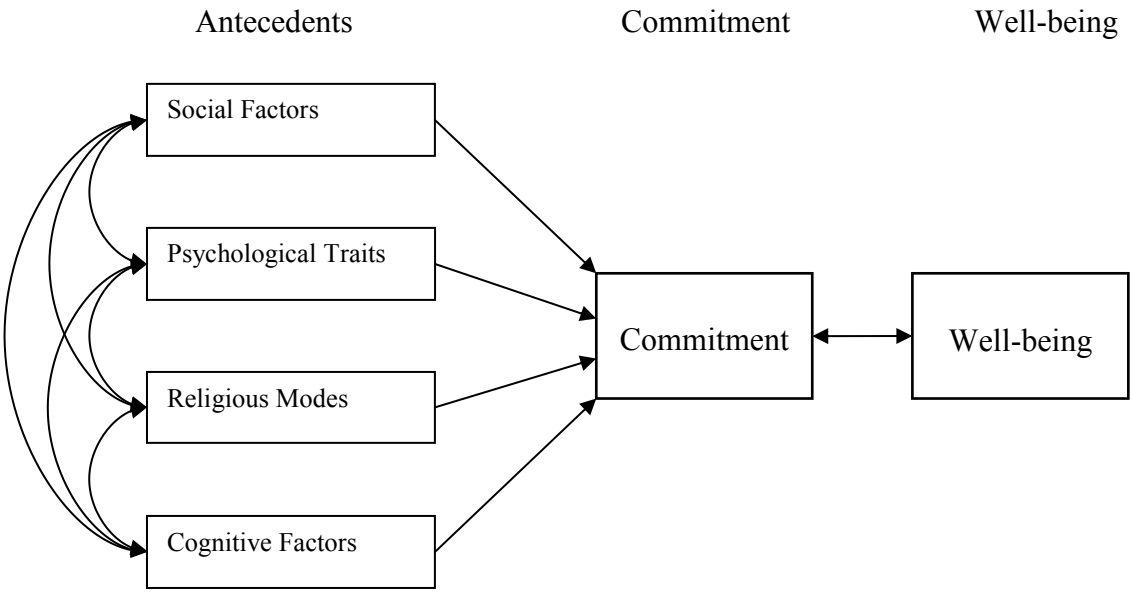


Figure 1. In this theoretical model of priestly commitment, lines with arrowheads at both ends indicate correlations, while lines with unidirectional arrows indicate causal relationships.

The model consists of and integrates all variables involved: antecedents, priestly commitment, and well-being. The antecedents include social factors (parent-child bonds, family religiosity, religious experience, support of others), psychological traits (Big Five Personality traits, defensiveness, gender characteristics, loneliness, and positive/negative affect), religious mode (religious orientation and religious coping), and cognitive mode (attribution and views of priesthood). All four antecedents are connected by curved lines with arrowheads at both ends, which represent correlations among antecedent variables. From antecedents are straight lines with an arrowhead at one end to priestly commitment, taking four antecedents as independent variables and priestly commitment as the dependent variable. All antecedents are the predictor variables for the criterion variable

of priestly commitment. Finally, a straight line with arrowheads at both ends reflects a correlation between priestly commitment and well-being.

Thus, Figure 1 displays: 1) Correlations among four antecedent variables/factors; 2) Causal relationships between antecedents and priestly commitment, and 3) Correlation between priestly commitment and well-being. We assume that four antecedent variables are interrelated to one another. However, the degree to which each predicts commitment might vary, depending on the interconnections among variables. Therefore, by examining the different amounts and directions of their effects and correlations on priestly commitment, we may determine the variables that best predict priestly commitment. Furthermore, by investigating their patterns of relationships, we may then understand pathways of priestly commitment. Finally, we are to identify the correlation between priestly commitment and well-being.

Research Questions

The objective of the present study is three-fold: 1) To identify the factors that best predict priestly commitment; 2) To understand the pathways for priestly commitment; and 3) To investigate the correlations between priestly commitment and well-being. To meet these objectives, the present study looked at factors which include demographic, social, personality trait, religious, and cognitive as the predictor (or independent) variables. Research questions to be addressed are as follows:

1. Related to the demographic factors, are there significant correlations between age and vocational status and priestly commitment?

2. Specific to the social factors, to what extend do parental environments, family religiosity, and religious experience correlate with priestly commitment?
3. Specific to personality factors, to what extent do personality traits (neuroticism, agreeableness, extraversion, conscientiousness, and openness), defensiveness, gender stereo-types, and loneliness correlate with priestly commitment?
4. Specific to religious modes, to what extent do religious orientation, religious coping, and sacred views of the priesthood correlate with priestly commitment?
5. Related to cognitive modes, to what extent do attribution styles correlate with priestly commitment?
6. As a whole, do the proposed models for priestly commitment with four sets of predictors including demographic, social, personality traits, and religious (cognitive factors) fit with the data? Are there indirect effects of newly added predictors to the model on the previously added predictors, thus showing their interconnections in affecting priestly commitment?
7. Finally, is there a significant correlation between priestly commitment and well-being?

Hypotheses

In light of the organization commitment theory, priestly commitment is seen as a multidimensional construct which takes different forms, namely, affective, normative, or continuance. Each form of commitment is assumed to develop on the bases of antecedent variables involving social factors, personality traits, religious mode, and cognitive mode. Accordingly, priestly commitment might be best seen as a function of complex interplay

of multiple, interrelated variables, which are rooted in the individual's experiences. Thus, the major question to answer first in this study is to what extent each factor contributes to priestly commitment, and subsequently, to what extent all selected factors as a whole and their correlations account for priestly commitment. Along with the research questions above, a number of hypotheses categorized into five groups would be tested.

Influence of Demographic Characteristics

In contrast to the reports from organizational literature suggesting relatively weak and/or moderating effects of demographic variables on the organizational commitment (Cohen & Lowenberg, 1990; Mathieu & Zajac, 1990; & Meyer & Allen, 1997), priestly literature indicates a significant influence of demographic variables on the priesthood. Younger age and first five-years in the priesthood have been identified as the critical period of priestly resignation (Hoge, 2002; Schoenherr & Young, 1988). This suggests that age will have a positive effect on affective commitment. Furthermore, Hoge noted that resigned priests are more likely to be "more innovation-minded" in a sense that they did not differentiate themselves from the laity, while active priests, especially diocesan priests, tend to value a specific role and distinctive status of the priesthood, relative to the laity (*p*. 28). Hoge and Wenger (2003) also found that young priests tend to hold a "sacramental and cultic theology of the priests" and emphasize an ontological and institutional distinctiveness of the priesthood, relative to the laity (*p*. 69). These age and vocational status-related roles might reflect the individuals' sense of an obligation to the priesthood, which is essential in normative commitment. Thus, we hypothesize:

Hypothesis 1. *Age and vocational status will positively correlate with affective commitment but negatively correlate with normative commitment.*

Influence of Social Factors

In line with the development process, we argue that priestly commitment develops on the bases of socialization experience (or internalization). One learns to imitate and internalize what is socialized, valued, and expected by the family, culture, religion, or organization (Meyer & Allen, 1997). We consider priestly commitment as a function of socialization through familial environment and religious experience.

Parental environment. Empirical evidence has indicated that the vast majority of seminarians and priests had Catholic parents or families (Potvin, 1985) where Catholic faith was persistently and devoutly practiced (Rovers, 1996), which suggest a significant role of parental environment in the development of the priesthood and its commitment. Specifically, considering the negative correlations between poor family relationships and priestly commitment (Potvin & Muncada, 1987; Verdick et al., 1988; Weisgerber, 1968), and given the positive correlation between dysfunctional family and thinking of leaving the priesthood (Rossetti, 2011), we expect that parental environment will affect priestly commitment, positively or negatively, depending on the quality of parental bonds. Thus, we hypothesize:

Hypothesis 2. *Parental care will positively correlate with affective commitment, whereas parental overprotection will positively correlate with continuance commitment and thought of leaving the priesthood.*

Religious experience and family religiosity. Research has indicated that most seminarians and priests were involved in religious activities such as being an altar boy or server before entering the seminary (Hoge, 2002) and that being an altar boy increased the likelihood to remain in their vocations (Potvin & Muncada, 1990). Given the findings, Potvin and Muncada pointed out the critical role of religious involvement/experience in socializing the persons into the priesthood and its specific roles. Accordingly, religious experience might help them to identify with the priesthood. Similarly, studies indicated that most priests and seminarians came from the families with strong religious devotion (Hemrick & Walsh, 1993; Hoge & Wenger, 2003; Potvin, 1985) which might provide a foundation for their vocational development. Therefore, we hypothesize:

> ***Hypothesis 3.*** *Religious experience and family religiosity will positively correlate with affective commitment and normative commitment, but negatively correlate with thought of leaving the priesthood.*

Influence of Personality Traits

Organization research showed that, when types of work were congruent with the persons' disposition or attitudinal characteristics, their organizational commitment tends to increase (Meyer & Allen, 1997; Wiener, 1982; Vardi, Wiener, & Popper, 1989). In line with such a tendency, empirical evidence has further documented correlations between personality traits and organizational commitment. Given this evidence, we expect the influence of personality traits, especially five personality traits, defensiveness, gender characteristics, loneliness, and affect balance on commitment to the priesthood.

Neuroticism and extraversion. Research has identified neurotic and introverted tendencies among Catholic priests (Burns, Francis, Village, & Robbins, 2013; Francis et al., 2009; Louden & Francis, 2004) and seminarians (Piedmont, 1999). Given the findings that neurotic individuals tend to experience negative affect (Emmons, Diener, & Larsen, 1985), it can be expected that neurotic tendency will weaken positive attachment to the organization and increase the worrisome attachment. Accordingly, neuroticism will have a positive effect on continuance commitment, while extraversion due to its relation to the positive emotionality, is expected to decrease worrisome attachment to the organization. Thus, it will have positive effect on affective commitment. Furthermore, organizational research provided evidence for the connections between neuroticism and continuance commitment and between extraversion and affective commitment (Erdheim, Wang, & Zickar, 2006; Kumar & Bakhshi, 2010). Therefore, we hypothesize:

> ***Hypothesis 4.*** *Neuroticism will negatively correlate with affective commitment but positively correlate with continuance commitment. In contrast, extraversion will positively correlate with affective commitment but negatively correlate with continuance commitment and thought of leaving the priesthood.*

Openness, consciousness, and agreeableness. Openness to experience refers to one's divergent thinking and liberalism (McCrae, 2010), suggesting that those with high scores on openness might not personally value moral or religious beliefs. With this in mind, it can be expected that moral obligation as the core aspect of normative commitment would be weakened. Research on organizational commitment provided evidence for a negative correlation between openness and normative and/or continuance commitment (Erdheim et al., 2006; Kumar & Bakhshi, 2010). Although consciousness

reflects a strong sense of obligation and persistence, those with high consciousness tend to have a strong aspiration level and strive for their own excellence, suggesting an emotional identification with and personal investment in what they do. Thus, consciousness is expected to affect affective commitment. Agreeableness on the other hand reflects the individuals' emotional warmth and responsiveness to others, which are essential in affective commitment and represents also one's need for reciprocal relationships, which is the core of normative commitment. Therefore, agreeableness will be more favorable for affective commitment and normative commitment. Literature in behavioral organization provided some empirical evidence for these patterns (Erdheim et al., 2006; Kumar & Bakhshi, 2010). Thus, we hypothesize:

> ***Hypothesis 5.*** *Openness will negatively correlate with both continuance and normative commitment, whereas consciousness will positively correlate with affective commitment. Agreeableness will positively correlate with affective commitment and normative commitment.*

Defensiveness. Defensiveness refers to one's unconscious attempt to look good or to maintain a positive presentation, which was a common characteristic of priestly applicants (Plante at al., 2005), of deacons (Plante at al., 2007), and of religious and diocesan priests (Kuchan et al., 2013). Studies from the non-clinical population showed good insight among those with defensive tendencies. Similarly, literature on the priesthood provided evidence for good adjustment among priests and seminarians with high defensiveness. Considering the public nature of the priesthood, this defensive personality is also likely to represent an attempt to protect one's self-belief or high standard of personal and moral integrity. With that in mind, defensiveness is expected to

have positive effect on affective commitment and normative commitment. Therefore, we hypothesize:

Hypothesis 6. *Defensiveness will positively correlate with affective commitment and normative commitment.*

Femininity and masculinity. Femininity was another personality trait commonly found among priestly applicants, seminarians, and priests (Craig et al., 2006; Francis et al., 2000; Plante at al., 1996 & 2005). Femininity reflects a preference for feeling, nurturing, caring, and interest in interpersonal relationships. Given its strong connection to positive emotionality, femininity will have an impact on affective commitment. Masculinity, in contrast, is a preference for dominating, controlling, and judging on the bases of right or wrong which reflects moral or normative preference. Thus, we hypothesize:

Hypothesis 7. *Femininity will positively correlate with affective commitment, whereas masculinity will positively correlate with normative commitment.*

Loneliness. Loneliness reflects the absence or lack of intimacy or companionship. The individuals who experience a high degree of loneliness tended to have affective and cognitive discomforts (VandenBos, 2006). This suggests that loneliness contradicts and is incongruent with a positive emotional response which is crucial for affective commitment and with the reciprocal need and institutional value important for normative commitment. Literature has well documented the negative effects of loneliness on priestly commitment (Hoge, 2002). In particular, research showed that when loneliness is viewed as a personal problem or personal defect, the likelihood of desiring marriage and leaving the priesthood

increases (Verdiek et al., 1988). With this mind, loneliness will increase continuance and thought of leaving the priesthood. Therefore:

> ***Hypothesis 8.*** *Loneliness will negatively correlate with affective commitment and normative commitment but positively correlate with continuance commitment and thought of leaving the priesthood.*

Influence of Religious Modes

Given the spiritual nature of the priesthood, we examine the influence of one's religious modes on priestly commitment. Religious-related literature evidenced the critical role of intrinsic/extrinsic orientation, religious coping in religious individuals, and views of the priesthood.

Religious orientation. Religious orientation is a manifestation of spiritual beliefs and values that underline an individual's motivation (intrinsically or extrinsically) for an action. Considering the intrinsic religious orientation as stemming from a religious belief itself (Allport & Ross, 1967), it can be expected that individuals with intrinsic motivation identify themselves with what they personally believe which is consistent with emotional identification essential in affective commitment. Moreover, empirical evidence indicated that intrinsic religiosity is a reliable measure of religious commitment (Donahue, 1985) and also of commitment to the priesthood (Zondag, 2001). In contrast, those individuals with extrinsic religious orientation whose motivation for their religious action is marked by utilitarianism use religion as a tool to achieve other goals. The extrinsically motivated persons might respect their reciprocity with the religious institution. However, due to the utilitarian principles (Burris, 1999), their relationships are characterized by transactional

contract, which reflects the core dimension of continuance commitment (Meyer & Allen, 1997). Thus, we hypothesize:

Hypothesis 9. *While extrinsic religious orientation will positively correlate with continuance commitment, intrinsic religious orientation positively correlates with affective and normative commitment.*

Religious coping. Religious coping refers to one's efforts to understand and deal with life stressors in ways related to the sacred. This religious coping has two forms, positive and negative. The former reflects a secure relationship with a transcendent force, a sense of spiritual connectedness with others, and a benevolent world view. The latter represents spiritual tensions or struggles within oneself, with others, and with the divine (Pargament, Feuille, & Burdzy, 2011). Considering a positive correlation between intrinsic religious orientation and religious coping (Lewis, Maltby, & Day, 2005; Nurasikin, Khatijah, Aini, Ramli, Aida, Zainal, & Ng, 2012), it can also be expected that religious coping will have positive impact on affective and normative commitment. In addition, empirical evidence has indicated a correlation between positive religious coping and religious commitment (Pargamen, 1997; Zwingmann, Müller, Körber, & Murken, 2008). Evidence from priestly literature indicated that priests seriously thinking of leaving the priesthood are those who pray less and go to confession less (Rossetti, 2011). Given the findings, we hypothesize:

Hypothesis 10. *Positive religious coping will positively correlate with affective and normative commitment, whereas negative religious coping will positively correlate with continuance commitment.*

Views of the priesthood and spiritual companionship. In the present study, views of the priesthood refer to the individuals' conviction to the sacredness of the priesthood, specifically regarding priestly celibacy, priestly status, and relationship with bishop or superior. **C**elibacy is one of the priestly values that the Church holds. In this regard, we emphasize the way that seminarians and priests view and experience celibacy. Positive view reflects their acceptance of celibacy as God's call/grace. Literature showed that perceived conflict with organizational values weakened an individual's commitment (Adkins, 1995). Similarly, previous studies of the priesthood documented that desire for intimacy and marriage, which is incongruent with celibacy mandatory, was related to the resignation from the priesthood (Hoge, 2002). In contrast, a positive correlation was found between celibacy commitment and well-being, which is reported to be negatively associated with an intention of leaving the priesthood (Rossetti, 2011). Thus, we expect that the acceptance of celibacy as God's call or grace will have positive correlation with affective commitment.

Perceived status of the priesthood reflects a religious belief or spiritual role which one identifies with and feels attached to which is important for affective commitment. In this study, we focus of the way that priests/seminarians differentiate themselves and their priestly vocation in comparison to the vocation to the laity. Priestly literature showed that younger priests are more likely to see themselves as "men set apart from the laity" (Hoge, 2002) and that diocesan seminarians tend to have interest in a leadership without which they tend to withdraw (Potvin & Muncada, 1987). This might suggest the importance of perceived status of the priesthood to the commitment. Therefore, we expect a positive influence of priestly status on affective and normative commitment.

Obedience to the authority is another priestly value held by the Church. In this study, we examine individuals' perceived relationships with bishops or superiors as a measure of this spiritual value. Given the effect of dissatisfaction with authority on the persistence in the priesthood (Greely, 2004; Hoge, 2002), a positive view of relationships is expected to positively affect priestly commitment. Although obedience reflects one's sense of obligation, which is essential in normative commitment, literature indicated that one's positive perception of leadership related to affective commitment (Meyer & Allen, 1997). For the priests, positive relationships with their bishops/superiors might function as a spiritual validation for their vocation. Rossetti (2010) reported a positive correlation between a relationship with bishop and spiritual exercises (prayer and spiritual direction) and well-being which might indirectly reflect an emotional attachment to the priesthood. Thus, we expect that positive view of the relationships with bishop/superior will have a positive correlation and spiritual companion with affective commitment. Taken together, we hypothesize:

> ***Hypothesis 11.*** *Perceived sacredness of the priesthood, a relationship with bishops/superiors, and a spiritual companionship will positively correlate with affective commitment and normative commitment but negatively correlate with thought of leaving the priesthood.*

Influence of Cognitive Modes

Cognitive mode reflects one's manner of organizing their knowledge to the surrounding world. Specific to this cognitive mode, empirical evidence showed that one's perception of organizational fairness and attribution affected commitment to the

organization (Meyer & Allen, 1997). Thus, it is expected attribution styles will affect priestly commitment.

Attribution styles. Attribution refers to a process through which an individual explains the cause of particular behavior or event. Research has distinguished three causal reasons in terms of locus of causality, stability, and controllability dimensions (Russell, 1982). In this study, we specify to what priests or seminarians attribute their most likely reasons for leaving their vocations. Organizational literature showed that individuals attributing their positive work experience to the organization tended to have strong affective commitment, while those attributing negative work experience to the organization behavior have strong continuance commitment (Meyer & Allen, 1997). Literature of the priesthood, however, showed that perceiving loneliness as a personal problem weakens priestly commitment, and no effect was found when perceiving loneliness as not a personal problem (Verdiek et al., 1988). This might suggest that attributing negative experience to a personal defect having a negative effect on commitment. Therefore, we hypothesize:

> ***Hypothesis 12.*** *Attributing the most likely reasons for leaving the priesthood to internal and stable causes will negatively correlate with affective commitment and will positively correlate with thought of leaving the priesthood and continuance commitment.*

Pathways of Priestly Commitment

Despite the findings of the individual studies on specific variables greatly accountable for priestly commitment, it has been widely known that no single variable

was independent of others. Explaining the parental influence on priestly persistence, Potvin and Muncada (1990) stated that "parent-child relations are relevant for (priestly) perseverance because of their associations with significant personality variables" (p. 85). Hoge (2002), although specifically pointing out loneliness as one necessary condition for the priestly resignation, noted that the cause of the resignation is much more complex. Similarly, Rossetti (2011), while underlying a spiritual factor as one of the most powerful predictors of priestly well-being, expressed a thoughtful interpretation on his findings, "how strongly psychological factors influence one's priestly happiness and whether is thinking of leaving" (p. 139). It therefore follows, that it is reasonable to consider priestly commitment and its aspects as of dynamic function of interconnected and cumulative factors, from the demographic characteristics and parental environment through personality and religious variables. Therefore, we hypothesize:

> ***Hypothesis 13.*** *Three Hypothesized Models of Priestly Commitment with four sets of predictors including demographic, social, personality, and religious variables ordered hierarchically in the regression fit with the data. Subsequently, newly added predictors will have indirect effects on the previously added predictors in in their associations with priestly commitment in the model.*

Correlation between Priestly Commitment and Well-being

Finally, related to the correlations between priestly commitment and well-being, research indicated that affective commitment and normative commitment, despite their distinction, are more alike to one another than to continuance commitment (Meyer & Allen, 1997). In particular, stress-related literature has well documented the negative

correlations between affective/normative commitment and various measures of stress-related indexes including work stress, psychological/physical stress, and depersonalization (Reilly & Orsak, 1991). With this in mind, it is only logical to expect the positive effects of affective commitment and normative commitment on well-being. In contrast, Meyer and Allen noted, those with continuance commitment are likely to experience a high degree of a role conflict and role ambiguity, which can be expected to weaken the individuals' well-being. Similarly, it is only logical that thought of leaving the priesthood will create a cognitive dissonance and a moral conflict for the individuals. Research also showed a positive association between the negative affect for both intention and actual withdrawal from the seminary (Potvin & Muncada, 1990). With this reason, thought of leaving will be likely to affect well-being negatively. Therefore, we hypothesize:

> ***Hypothesis 14.*** *Affective and normative commitment will positively correlate with three measures of well-being, while continuance commitment and thought leaving the priesthood will negatively correlate with three measures of well-being.*

CHAPTER IV

METHODOLOGY

This chapter is to explain the method used to address the research questions and test the specific hypotheses presented above. This method includes a brief description of subjects involved in this study, recruitment process, instruments used to solicit the data, statistical procedures of data analysis, and several ethical considerations. This study was conducted through *Survey Monkey* which is a method of recruitment and data collection via an online survey.

Participants

Participants of the present study were Catholic seminarians and alumni priests recruited from six seminaries which are members of National Association of Catholic Theological Schools (NACTS). The NATCS is a newly named organization from the former Midwest Association of Theological Schools (MATS) whose president-rectors granted permission for this present study. The six major seminaries included: 1) Assumption Seminary in San Antonio, Texas; 2) Blessed John XXIII National Seminary in Weston, Massachusetts; 3) Jesuit School of Theology Santa Clara University in Berkeley, California; 4) Sacred Heart Seminary and School of Theology in Hales Corners, Wisconsin; 5) Sacred Heart Major Seminary in Detroit, Michigan; and 6) Saint Mary's Seminary in Houston, Texas. One seminary did not include their alumni priests since no access to the alumni was available.

The recruitment was done through collaborative work with the president-rectors who informed their seminarians and alumni priests of this online survey. Of the 897

emails officially sent to the seminarians and priests, approximately 95 were undelivered. Of the 802 seminarians and priests solicited, 245 (31%) responded to the survey. However, 73 were excluded from this study because they completed only 6 demographic questions. Thus, a total of 172 responses were included in the final analysis. It is also noteworthy that these participants may not have been entirely from those six seminaries since we requested them to forward the survey link to their fellow priests or seminarians.

In comparison, response rates of major surveys of the priesthood varied from 30% in a sociological study (Gautier, Perl, & Fichter 2012), 42% in the recent liturgical study (Diekmann, 2013), to 65% in a psychological study (Rossetti, 2011). Thus, the response rate of this present study was relatively low but equal with that of the sociology research. Considering the complexity and length of this study, the response rate was not, in fact, unexpected. The sample of the present study, like those major studies, was not randomly selected. However, considering the different locations of these six seminaries, in terms of geographical regions, the sample seemed to provide an adequate estimation of this population.

Measures

Multiple measures of the selected variables for this present study were obtained from the existing instruments which are commonly used for the general population. Of 16 selected instruments, 11 were administered without any modification. However, because of specific characteristics of priests and seminarians for which the instruments became unsuitable, 5 instruments which include family religiosity scale, religious experience scale, MOS-spiritual companionship scale, organizational commitment scale, and view of

the priesthood scale were slightly modified. The instructions for parental bonding inventory and causal dimension scale were also adjusted so as to be operational. Due to the minor modification of the five instruments, factor analyses and reliability tests were performed to ensure their content validity.

The following are 16 instruments briefly described and presented according to its category, namely, demographic, social, personality, religious, cognitive, commitment, and well-being variables. The Cronbach's alphas for the continuous scales would also be included.

Instrument for Demographic Variables

Demographic Questionnaire. The demographic questionnaire consists of five items asking the subjects for information about their age, sexual orientation, ethnicity or race, vocational status, and number of years in the seminary/priesthood (APPENDIX III-A). Age, vocational status, and number of years in the seminary/priesthood were included in the analysis.

Instruments for Social Variables

Family Religiosity Scale (FRS). The FRS is a 6 item instrument designed to measure family religiosity. Three items were taken from the Family Faith Modeling scale (FFM) (Canty-Mitchell & Zimet, 2000) and three new items were added by the author to the FFM. The Cronbach's alpha of FFM is .90. All items ask the participants, during their first 16 years of life, to rate how their parents practiced their faith by rating on a 4-point Likert scale from 1 for "never true" to 4 for "always true." For example, one of the FFM

items asks if parents "showed what it means to be an authentic Christian" or whether they "attended Sunday Mass or holy days of obligation" (APPENDIX III-B). The FRS has excellent internal consistency with an alpha of .84 (APPENDIX V-A4).

Religious Experience Scale (RES). The RES is a 6-item instrument designed to measure one's religious experience during the first 16 years of life. All items ask participants to indicate how often they took part in religious activities. For example, participants are asked to rate how often they "attended Mass or other liturgical celebrations" or "served as an altar boy/lector/Eucharistic minister" on a 4-point Likert scale from 1 for "never" to 4 for "very often" (APPENDIX III-C). The RES has acceptable internal consistency with an alpha of .73 (APPENDIX V-C).

Parental Bonding Inventory (PBI). The PBI (Parker, Tupling, & Brown, 1979) is a 25-item self-report instrument which is designed to measure an individual's perceptions of his/her parents' parenting style during his/her first 16 years. Parenting style is assessed in two dimensions: perceived parental care (care scale) with the opposite being indifference/rejection and perceived parental overprotection (overprotection scale) with the opposite being encouragement of autonomy or independence. For example, one item "was affectionate with me" reflects parental care, while another item "tended to baby me" reflects overprotection. Participants rate their mothers' and fathers' parenting styles separately on a 4-point scale from "very like" to "very unlike" (APPENDIX III-D). Parker et al. reported that the PBI has split-half reliability coefficients of .88 for care scale and .74 for overprotection scale. In this study, the PBI has excellent overall internal

consistency with Cronbach's alphas of .93 for parental care, .89 for parental overprotection (APPENDIX V-G).

Instruments for Personality Variables

BIG Five Personality Inventory (BIF). The BIF **(**John & Srivastava, 1999) is 44-item self-report inventory to assess five major personality traits: extraversion, agreeableness, conscientiousness, openness, and neuroticism. All items ask participants the extent to which they agree that a certain characteristic applies to them, for example, ''I see myself as someone who is...'' by rating them on a 5-level Likert scale from "strongly disagree" to "strongly agree" (APPENDIX III-G). The BIF has alphas of .82 for conscientiousness, .79 for agreeableness, .84 for neuroticism, .80 for openness, and .86 for extraversion (Srivastava, John, Gosling, and Potter, 2003). Test retest reliability within 2-weeks interval was very good: .76 for agreeableness, .76 for consciousness, .80 for openness to experience, .82 for extraversion, and .83 for emotional stability (Gosling, Rentfrow, & Swann, 2003). For this present study, the BIF has high internal consistency with alphas of .84 for extraversion, .77 for agreeableness, .86 for consciousness, .77 for Openness, and .83 for Neuroticism (APPENDIX V-H).

Minnesota Multiphasic Personality Inventory Correction Scale (MMPI-K scale). The MMPI-K scale (Bucher et al., 2001) is a 30-item measure of validity which is designed to detect "faking good" response to the questionnaires. The items were keyed "true" or "false" (APPENDIX III-H). The high K-correction scores indicate a high level of defensiveness, in which an individual tries to give an appearance of adequacy, control, and effectiveness. Therefore, the K-Correction scale was also known as a defensive scale.

Bucher et al. (2001) reported the test-retest reliability coefficients of .84 for men and .81 for women over a one week interval. For the present study, the K-correction scale (27 items) has an alpha of .76, which is adequate (APPENDIX V-I).

Revised Bem Sex Role Inventory (BSRI). The BSR (Colley, Mulher, Maltby, & Wood, 2009) is a 20-item measure of masculinity and femininity. The items were rated on a seven-point Likert scale ranging from 1 for "never or almost never true" to 7 for "always or almost always true" (APPENDIX III-I). Colley and his colleagues (2009) reported that the Keiser-Meyer Olkin measure was adequate at .84. For this study, the BSRI has an alpha of .87 for masculinity and .89 for femininity (APPENDIX V-J).

University of California, Los Angeles, Loneliness Scale (R-UCLA Loneliness Scale). The R-UCLA loneliness scale (Russell, Peplau, & Cutrona, 1980) is a 20-item instrument designed to measure one's subjective feelings of loneliness and social isolation. The scale has 10 positively worded and 10 negatively worded items. The items were rated on a four-point Likert scale ranging from one for "never" to four for "often" (APPENDIX III-J). Russell et al. (1980) reported that Cronbach's alpha ranged from .89 to .94, and test-retest reliability over a 1-year period had an alpha of .73. For this present study, the alpha is .90, which is remarkable (APPENDIX V-K).

Instruments for Religious Variables

Intrinsic/Extrinsic-Revised Religious Orientation (I/E-ROS). The I/E-ROS is a revision of Allport and Ross's (1967) measure of intrinsic and extrinsic religious orientation. The I/E-R is a 14-item instrument asking participants to rate on a 5 point-

Likert-type scale from 1 for “strongly disagree” to 5 for “strongly agree” (APPENDIX III-K). Eight items assess intrinsic orientation (IO), whereas six items measures personal (Ep) and social (Es) categories of extrinsic orientation. The reliability estimate was .83 for IO, .57 for Ep, and .58 for Es, and .65 for Ep/Es (Hill & Hood, 1999). In this study, we used the intrinsic and extrinsic subscales, which have adequate alphas of .71 and .76, respectively.

Brief Religious Coping scale (BriefRCOPE). The Bried RCOPE is a 14-item instrument designed to measure an individual’s positive and negative religious coping. All items ask participants to rate on a 4-point Likert scale: 1 for “not at all”, 2 for “somewhat”, 3 for “quite a bit”, 4 for “a great deal” (APPENDIX III-L). The responses were then summed across items and averaged to produce average item subscale scores. The Cronbach’s coefficient alpha was estimated at .87 for the positive scale and .69 for the negative scale (Pargament, Smith, Koenig, & Perez, 1998). In the present study, the brief RCOPE has high alphas of .83 for the positive religious coping and .81 for the negative religious coping (APPENDIX V-M).

Medical Outcome Study Social-Spiritual Support Survey (MOS-SS-SS). The MOS-SS-SS is an 8-items scale designed to assess one’s perceived social and spiritual support or companionship. The social aspect of support was taken from a 4-item abbreviated version of MOS social support survey (Gjesfjeld, Greeno, & Kim, 2008), whereas the spiritual aspect of support was created (by this author) by modifying the original 18-item MOS social support survey (Sherbourne & Stewart, 1991). Gjesfjed at al. indicated that the alpha coefficient for the abbreviated version of MOS social support

survey is .83. For the spiritual aspect (called "spiritual companionship scale"), the author selected 4 items which represent 4 dimensions of support (e.g., emotional-information, tangible, affectionate, and positive social interaction) and modified them by providing the word "spiritual". For example, the original version is "*someone to get together with for relaxation*", and the spiritually modified version is "*someone to get together with for spiritual enrichment.*" All items ask participants to rate on a 5-point Likert scale ranging from 1 for "None of the time" to 5 "All of the time" (APPENDIX III-F). In this study, the MOS SS-(S)-S has excellent internal consistency with alpha of .88 (APPENDIX V-C).

View of the Priesthood Scale (VPS). The VPS is a 9-item instrument designed to measure one's views of the priesthood which involve celibacy, priestly status, and relationships with bishops or superiors. Four items on view of celibacy and relationship with bishops/ superiors were taken from the 2009 priest wellness survey (Rossetti, 2011), and three items on view of priestly status were from sample survey for seminarians studying theology (Potvin & Muncada, 1990). Two new items, "I don't think God called me to live a celibate life" and "I don't think my bishop or superior understand me," were added by this author for celibacy and relationships with bishop/superior subscales. All items ask participants to rate on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree" (APPENDIX III-O). The Cronbach's alpha was .84 for view of celibacy subscale and .82 for a relationship with bishop or superior subscale (Rossetti, 2011). No data was reported for view of priestly role subscale. In this present study, the overall internal consistency was .76. The relationships with bishop/superior subscale had a Cronbach's alpha of .77 which is adequate. However, the Cronbach's alphas for view of celibacy and for perceived status of the priesthood subscales were .68, which is less than

acceptable. Therefore, they were combined into one subscale, which is called “perceived sacredness of the priesthood”, which resulted in an acceptable Cronbach’s alpha of .75 (APPENDIX V-D).

Instrument for Cognitive Variables

Causal Dimension Scale (CDS). The CDS (Russell, 1982) is a 9-item instrument designed to assess an individual’s perceptions of causal attributions or explanations for an event, in terms of the underlying dimensions which include locus of causality, stability, and controllability. The items ask participants to identify an event and indicate the causes of that event by rating on a 9-point Likert scale the extent to which they perceived its cause. In this present study, participants were first asked to identify “the most likely reason for leaving the priesthood.” Then, they determined, for example, whether the cause was “an aspect of you“ or “an aspect of situation, “permanent” or “temporary,” and “controlled” or “uncontrolled by you/others” (APPENDIX III-N). Russell (1982) reported that the CDS had adequate Cronbach’s alphas of .87 for locus of causality, .84 for stability, and .73 for controllability. In this study, the Cronbach’s alpha for locus of causality was .83, for stability was .73, and for controllability .50 (APPENDIX V-N).

Instruments for Priestly Commitment Variables

Organizational Commitment Scale (OCS). The OCS (Meyer & Allen (1997) is a 23-item self-report instrument which was designed to assess three forms (affective, continuance, and normative) of organizational commitment. All items were rated on a 7-point strongly disagree-strongly agree Likert scale. The OCS has reliability coefficients

of .85, .79, and .73, respectively. Due to the specific characteristics of the priesthood, minor changes on the items were made. For example, one item "I would be very happy to spend the rest of my career in this organization" became "I would be very happy to spend the rest of my life in my priestly vocation" (APPENDIX III-P). With such a modification, the scale was renamed as "priestly commitment scale" (PCS). In this study, the PCS has alphas of .81 for affective priestly commitment, .78 for continuance commitment, and .65 for normative priestly commitment (APPENDIX V-E).

Thought of Leaving the Priesthood Scale (TLP). The TLP is a 3-item instrument to measure one's thought of turnover from or leaving the priesthood. The examples of the statements include "I often think of leaving the priesthood" and "I have looked for an alternative to the priesthood". Participants were asked to rate on a 6-point Likert scale ranging from "strongly disagree" to "strongly agree." The three items were included in the view of the priesthood scale (APPENDIX III-O). In this study, the TLP has an acceptable Cronbach's alpha of .73 (APPENDIX V-O).

Instruments for Well-being Variables

Affect Balance Scale (ABS). The ABS (Bradburn & Noll, 1969) is a 10-item instrument to measure two dimensions of affect: positive and negative affect. Each dimension consists of 5 items asking participants, during the past few weeks, whether they have experienced certain emotions. For example, one of positive affect items is whether they are "particularly excited or interested in something," and that of negative affect items is whether they are "bored". Participant answers "yes" or "no" to each question, and each "yes" on a question is then assigned a score of 1 for positive affect and

-1 for negative affect (APPENDIX III-D). The ABS is scored by summing item responses for each subscale and for the total scale score. According to Bradburn and Noll, the ABS has a Cronbach alpha of .80 or greater. For the present study, the ABS has an alpha of .70 for overall internal consistency (APPENDIX V-F). The alphas for positive affect and negative affect are less than acceptable, which are .61 and .67, respectively. Thus, the overall consistency was used in the analysis.

Psychological Well-Being (RWB). The RWB (Ryff & Keyes, 1995) is an 18-item instrument which was designed to measure an individual's psychological well-being. The instrument has six dimensions (six subscales with 3 items for each) of well-being which includes self-acceptance, positive relationship with others, personal growth, purpose in life, autonomy, and environmental mastery. The items are rated on a 6-point scale that ranges from 1 for "strongly disagree" to 6 for "strongly agree" (APPENDIX III-Q). Joseph, Maltby, Wood, Stockton, Hunt, and Regel (2012) reported that an overall internal consistency of the scale was excellent across samples (.83 in Sample 1, .95 in Sample 2, .93 in Sample 3 Time 1, and .95 in Sample 3 Time 2. In this study, we used the overall well-being scale, which has an adequate alpha of .78 (APPENDIX V-P).

Spiritual Well-Being (SWB). The SWB (Ellison, 1983) is a 20-item instrument designed to measure religious well-being (RWB) and existential well-being (EWB). Each scale has 10 items which are also equally phrased in positive and negative terms. The items ask participants to rate on a 6-point Likert scale from 1 ("strongly disagree") to 6 ("strongly agree"). They rate the extent to which they agree on an item, for example, "I believe that God loves me". To score, the numerical values for each response are then

added for each scale. Ellison reported coefficient alphas of .86 for SWB, .87 for RWB, and.76 for EWB. Test-retest reliability coefficients were .93 for SWB, .96 for RWB, and .86 for EWB. For the present study, however, we used 10 items for Religious Well-being (APPENDIX III-Q). All items were a part of the psychological well-being scale. In this study, the RWB has an adequate alpha of .77 (APPENDIX V-P).

Procedures

The recruitment procedure/process took the following steps: *First*, an initial contact was made (through a phone call and email) to the president rectors of 29 major seminaries which are members of the National Association of Catholic Seminaries. During the initial contact, they were briefly introduced to the study and asked whether they were interested. Thus, the initial contact was made to search for potential seminaries as participants.

Second, the interested were sent further information about the study which included the background of the study, material for research, agreement of consent (explaining the purpose, procedure, duration, risk and benefits, confidentiality, its voluntary and anonymous nature, and the storage of collected data), and a testimonial letter of my religious superior. Provided additional information, they were expected to decide whether or not to give their seminarians and alumni priests permission to participate. We expected a letter of consent for participation in the study (APPENDIX I-A).

Third, considering a common policy of a seminary to deny any direct access to its seminarians and alumni priests, the recruitment process was facilitated by the rectors of

the seminaries. This means that the researcher sent the survey link to the rectors who then informed and forwarded it to their seminarians and alumni priests. With this process, all seminarians and alumni priests whose names were on their directories would receive the invitation and have an equal opportunity to participate. To maximize the response rate, we asked all president-rectors to send a reminder of the survey one month after the first invitation (APPENDIX I-B). One month after the reminder and a week before the expiration date, we asked them again to inform their seminarians and alumni about the approaching date closing the survey (APPENDIX I-C). Thus, the survey was conducted approximately within a period of 9 weeks.

Fourth, the seminarians and priests who opened the link to the survey would immediately find on the first page, AGREEMENT OF CONSENT FOR RESEARCH PARTICIPANTS (APPENDIX II for a complete statement), where they were informed of the purpose, procedures, duration, risks, benefits, confidentiality, voluntary nature of participation, and our contact information. Upon reading this agreement of consent, they were expected to understand and make a decision whether to participate or not. In this regard, we were employing IMPLIED CONSENT by clearly stating that completing this online survey implies consent to participate.

Fifth, they were given a series of questionnaires which would take approximately 45 minutes to complete (APPENDIX III). Each of the questionnaires began with a brief instruction. Upon completing the questionnaires, they received a participation thank you note (APPENDIX R). We also asked them to voluntarily forward the survey link to their fellow priests and seminarians so as to ensure an adequate number of participants. In the

end we expected that all of the seminarians and priests who responded and completed the questionnaires would be considered as test participants.

Data Analysis

Data analysis proceeded in four steps: 1) Descriptive Analyses; 2) Preliminary Analyses; 2) Hierarchical Multiple Regression Analyses; and 4) Multiple Regression Analyses. All analyses were conducted using the IBM Statistic 21.0.

Descriptive Analyses

The first step of data analysis would include missing value patterns, extreme values/outliers, and treatment for missing and extreme values. Methods to treat missing/extreme values, if necessary, would be also presented. Finally, included in this step was a description of demographic characteristics/distributions of the sample used in the present study.

Preliminary Analyses

The preliminary analyses could be seen as a preparatory step for the primary analyses in this present study which involved Hierarchical Multiple Regression and Multiple Regression analyses. Specifically, this step involved Principal Component analyses, Reliability tests, and Pearson's Correlation analyses. The targeted outcomes were the alpha coefficient and correlation tables for the variables qualified for HMR and MR analyses.

As part of the preliminary analyses, factor analyses with principal components as the extraction method were conducted to encompass the commonalities of different concepts (namely, priestly commitment, family religiosity, religious experience, support of others, and cognitive modes). Bartlett's Test of Sphericity was utilized to measure the adequacy of the correlation matrix. The results of this procedure would be included in further analyses such as Hierarchical Multiple Regression.

Preliminary analyses also included a reliability test for each scale. A Cronbach's alpha was used to assess the internal consistency of each scale with an alpha coefficient of .70 as a cut-off-point which is generally considered as adequate or acceptable (Field, 2013). Only the scales or subscales with adequate Cronbach's alphas were included in Hierarchical Multiple Regression or Multiple Regression analyses.

Following the reliability tests, Pearson's Correlation tests would be employed to ensure that all independent variables are related at least to one of the dependent variables and that there was no substantial correlation ($r > .9$) between independent variables. The independent variables, which have significant correlations with dependent variables but have no substantial correlations with other independent variables, were included into the primary analyses. A substantial correlation between independent variables suggests that there is redundancy or multicollinearity problem between the predictors (Field, 2013).

Hierarchical Multiple Regression Analyses

In the third step of data analyses, Hierarchical Multiple Regression (HMR) analyses were employed to identify the factors that best and reliably predict priestly commitment. Specific to this HMR technique was that the researcher specified the entry

of predictor variables (or factors) in the regression equation (Ho, 2014). If qualified, five sets of predictor variables (demographic, social, personality trait, religious, and cognitive ones) would be sequentially (hierarchically) entered into the regression model.

Following the development process of organization commitment, the predictor variables were entered in respect to their temporally determined order. Accordingly, at the first stage, the demographic variables (age and vocational status) were entered in the regression model. Considering the role of parental environment in the early socialization to the priesthood, this social factor was added at the second stage to the regression while controlling for demographic variables. Personality variables were added to the model at the third stage, followed then by religious variables at the fourth stage. Past research has documented the mediating effect of cognitive processes such as attribution on the effect of personality traits and religious variables on organizational commitment. Thus, it seems reasonable to enter cognitive variables at the final model.

To determine whether particular predictor variables have significant effects on the priestly commitment, we observed an increase of *R*-squares in the model. The increase of *R*-squares indicated the amount of unique contributions attributed to the entry of a new set of predictor variables to the priestly commitment model. In this regard, the larger the increase of *R*-square associated with the addition of a new set of predictor variables, the greater the contribution of the new set of predictor variables to the priestly commitment. Thus, through the HMR analyses, the predictor variables having significant and reliable effects on the priestly commitment could statistically be determined.

Multiple Regression Analyses

Finally, in addition to identifying the predictor factors for priestly commitment, this study aimed at examining the effects of priestly commitment on well-being. To meet this objective, three separate Multiple Regression analyses were employed. All variables were entered simultaneously into the regression. The value of adjusted R^2 was used to measure the proportion of the total variance of the dependent variable (well-being) explained by priestly commitment as the independent variable. The *F*-test was used to test if there was a significant regression correlation.

Ethical Considerations

This present study involved human subjects, namely, Catholic priests and seminarians. In respect to all participants, we closely and carefully followed the ethical guidelines of the American Psychological Association (APA) and the Institutional Review Board (IRB) of Marquette University. While this research received a determination of exempt status from Marquette University IRB on February 11, 2014, we were to pay close attention to several important issues involving recruitment process, voluntary participation, anonymity, and data protection.

Recruiting seminarians and alumni priests from certain seminaries as participants of study cannot be done without a consent from their president-rectors. Therefore, prior to sending out the survey, we ensured that they consented and supported the study. On the other hand, although the president-rectors permitted and even supported us to recruit their seminarians and alumni, we needed to ensure that they could not make participation in this research mandatory. Thus, we stated clearly their participation was completely

voluntary, and that all participants would be able to stop participation and withdraw from the study at any time without penalty.

Considering the Church's recent crisis associated with the sexual scandal by some priests, we are fully aware that seminarians and priests are under an extreme and careful scrutiny of public media and society. Therefore, we were also mandated to ensure anonymity and confidentiality. While there was no traceable information collected and no direct contact with participants, we were to ensure that data collected were well protected. Thus, we protected all participants from harm, by insuring confidentiality, assigning data arbitrary code numbers with no access to the key that could identify the records, and ultimately destroyed the protected data upon completion of the research. Finally, with respect to the request of some of the seminaries to have a presentation of the results, I believe these communities will utilize and benefit from the results of this study.

CHAPTER V

RESULTS

The following chapter analyzes the data collected and presents the results of the hypothesis tests. This chapter is organized into four headings following the statistical procedures employed in analyzing the data, which include: 1) Descriptive analysis; 2) Preliminary analysis; 3) Hierarchical multiple regression; and 4) Multiple regression analysis.

Descriptive Analysis

A descriptive analysis was performed: 1) to evaluate missing values, patterns, and extreme values (outliers) so as to identify the complete/valid responses; 2) to determine the best treatment for the missing or extreme values, and 3) to present the demographic distributions of the sample used in this present study.

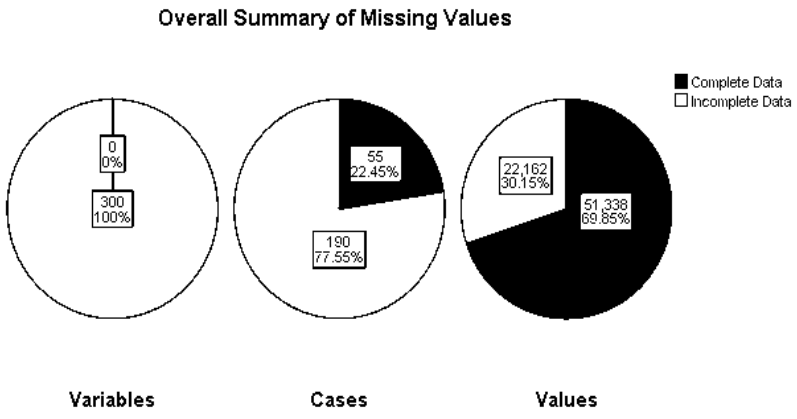
Missing Value Analysis

The following analysis was conducted using a multiple-imputation procedure (from IBM SPSS 21 menus' system, go to Analyze > Multiple Imputation > Analyze Patterns) which "provides descriptive measures of the patterns of missing values in the data, and …an exploratory step." (IBM, 2012, *p*.14). According to Tabachnick and Fidel (2001), a small amount (≤5%) of missing values at random patterns has less serious and insignificant effect on a statistical analysis. With this in mind, we analyzed and displayed the missing value patterns with at least 5% missing values. Figure 2 below displays a summary of the missing variable patterns which include three (e.g., variable, case, and

value) charts. This particular dataset has 300 variables and 245 cases, resulting in a total of 73,500 values (variables × cases).

Figure 2

Missing Values of Data Collected



As the variable chart indicates, each of the 300 analysis variables (or questions) has at least one missing value on one case. The cases chart indicates that 77.5% of all 245 cases have at least one missing value on a variable, and the value chart also indicates that 30.15% of total values of 73,500 are missing. This suggests that listwise deletion might not be a favorable solution for this particular dataset although it might be necessary for cases with a significant amount of missing values. The consequence of listwise deletion is definitely a substantial loss of information from this dataset. With this consideration, an alternative way to treat the missing values seems to be necessary.

Further analysis, therefore, was conducted to specifically examine the patterns of missing values so as to identify where and how extensive they are. The results indicated that 68% of the cases had a very small amount of missing values at random. There were

approximately 3% of cases with missing values on several variables (e.g., Questions 17, 18, 20, and/or 21). Finally, there were approximately 29% of cases with a large amount of missing values on most variables, except on the demographic questions such as "age group" and "years in vocation". The 29% of cases might represent a group of individuals who completed all demographic questionnaires but then decided to disqualify themselves from further participation. For the most part, despite a partial monotonicity in the missing value patterns on certain variables, the missing value patterns seemed to occur at random.

Upon look at the locations of the missing values (or particular cases), there are 67 cases having values only on demographic variables (e.g., age, ethnicity or race, sexual orientation, and vocation status), and 6 other cases have a large amount of missing values on most variables. As a whole, these 73 cases represent approximately 30% of the total responses (N=245) and account for most of the missing values. Given this considerable amount of missing values and self-disqualification, the 73 cases were dropped from the analysis. The summary of the missing value patterns of these cases and the demographic characteristics are documented in APPENDIX IV.

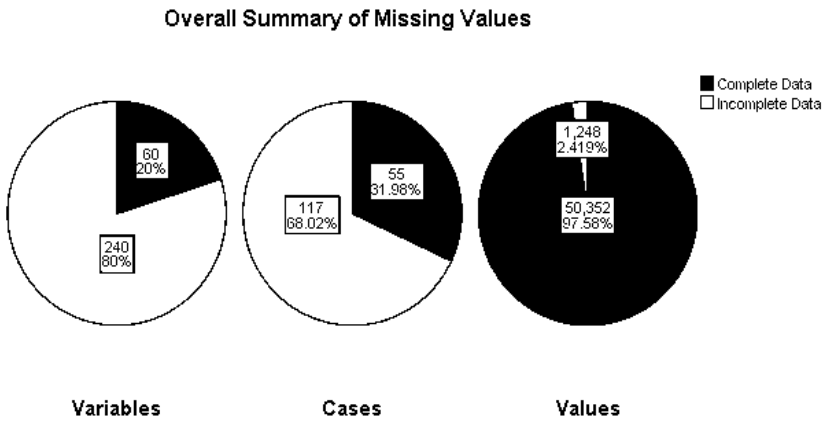
Of 73 subjects excluded, 25 (34.2%) were seminarians or deacons, and 47 (64.4%) were priests. Their ages varied: 16 (21.9%) were 39 years old or younger, 8 (11%) were between 40 and 49 years old, 18 (24.7%) were between 50 and 59 years old, 21 (28.8%) were between 60 and 69 years old, 9 (12.3%) were 70 years of age or older, and 1 (1.4%) did not report his age. Related to their sexual orientation, 53 (72.6%) were heterosexuals, and 14 (19.3%) were homosexuals, 1 (1.4%) was bisexual, 4 (5.5%) were celibate which was recorded as responding differently, and 1 (1.4%) did not provide an answer. Most of them (78.1%) were Caucasians, and the remaining came from other ethnic groups which

include Hispanic/Latin American, African American, African, European, Anglo/Cajun, or Mixed Ethnics.

With the 73 subjects dropped from the analysis, a total sample of 172 participants was included in this study and was further analyzed. Figure 3 below provides a summary of variables with at least 5% missing values.

Figure 3

Missing Values of Sample



The variable chart indicates that 80% of all analyzed variables have at least one missing value whereas the case chart indicates that 68.02% of 172 cases have at least one missing value. Finally, the value chart shows that there is a small portion of 2.42% from the total value of 51,600 that are missing. A significant decrease from 30.15% to 2.42% suggests that these 73 cases dropped from the analysis are indeed responsible for the considerable portion of missing values.

However, although the missing value patterns of the 172 remaining cases were less noticeable and occurred at random, the small amount (2.42%) of the missing values is not without consequence. Given that 80% of all variables with at least 5% of missing value in

the analysis has at least one missing value, the likelihood for one case to be omitted from the analysis is relatively significant when the listwise deletion method is used. Similarly, the use of pairwise deletion to deal with the missing values may lead to a potential bias. It has been documented that there is a known danger to applying different parameters from one analysis to another due to the different sets of variables and sample sizes resulting from the pairwise deletion. On the other hand, replacing those missing values with the grand means reduces the variability and distorts the underlying distribution of the dataset (Ho, 2014). In addition, this method adds no new information and reduces the standard error (Howell, 2007). With this consideration, a multiple imputation procedure is used for missing value treatment, which, according to Howell, has increasingly been considered as the most favorable approach to treating missing values. He predicted, ”It is likely that MI would be the solution of choice for the next few years until something even better comes” (p.223).

Multiple-Imputation

Multiple-imputation (MI) is a statistical procedure of replacing (imputing) incomplete or missing values. This method has been considered as superior to other methods such as listwise and pairwise deletion (Howell, 2007; IBM, 2012). The general idea of MI is:

> To generate possible values for missing value, thus creating several “complete” sets of data. Analytic procedures that work with multiple imputation datasets produce output for each “complete” datasets, plus pooled out that estimates what the results would have been if the original datasets had no missing values. These pooled results are generally more accurate than those provided by single imputation methods. (IBM, p.13).

Thus, rather than filling a single value for each missing value on one variable, it creates several sets of multiple imputations from the original dataset, each of which reflects the uncertainty about the right value to impute and represents the sample variability. This procedure is available on the IBM SPSS 21 (go to Analyze > Multiple Imputation > Impute Missing Data Values).

For this particular data, we used the default number (M=5) of multiple imputation with Fully Conditional Specification (FCS) method, which is "an iterative Marcov chain Monte Carlo (MCMC) method" ….particularly used for "arbitrary missing value patterns, either monotone or nonmonotone" (IBM, 2012). We also used the default number of ten iterations (I=10) as the maximum iteration (step). The FCS method fits:

> A univariate (single dependent variable) model using all other available variables as predictors, then imputes missing values for the variable being fit. The method continues until the maximum number of iterations is reached, and the imputed values at the maximum iteration are saved to be the imputed dataset. (IBM, p. 19).

As the result of 5 imputations selected as the number of imputation (M=5), there were also 5 datasets which were simultaneously and automatically created by the system. This means that, in each analysis performed in this study (involving descriptive analysis, factor analysis, reliability test, hierarchical multiple regression analysis, and also multiple regression analysis), there would be 6 outputs, of which one is the original dataset and 5 others are the imputed datasets. Several analyses also produced a pooled output, which is considered the most robust outcome because it represents the average of the 5 imputation outputs (IBM, 2012). For this reason, the pooled output, when available, was used for the reports. It is worthy to note that the pooled output provides only the numerical results; no

graph or PP-plot is available from it. In this case, all graphs and plot-related outputs to be reported were taken from the fifth imputed dataset.

Demographic Characteristics

The descriptive analysis was performed to examine the demographic distributions of the sample. Table 1 presents a summary of descriptive characteristics of the sample.

Table 1

Demographic Distributions

Demographics	Frequency	Percent	Cumulative Percent
Present Age			
≤ 39	29	16.9	16.9
40-49	20	11.6	28.5
50-59	40	23.3	51.7
60-69	51	29.7	81.4
≥ 70	32	18.6	100
Total	172	100	
Sexual Orientation			
Heterosexuals	135	78.5	78.5
Homosexuals	25	14.5	93.0
Bisexuals	7	4.1	97.1
Unsure	3	1.7	98.8
Respond differently	2	1.2	100
Total	172	100	
Race/Ethnicity			
Caucasian	136	79.1	79.1
Hispanic/Latin American	8	4.7	83.7
African American	4	2.3	86.0
African	2	1.2	87.2
Asian American	2	1.2	88.4
Asian	2	1.7	89.5
European	8	3.5	93.0
Anglo/Cajun	2	1.2	94.2
Mixed Ethnic/Race	9	5.2	99.4
Carribean	1	0.6	100
Total	172	100	
Vocational Status			
Seminarian/Deacon	52	30.2	30.2
Priest	120	69.2	100
Total	172	100	
Year in Seminarian/Ordination			
1St Half Years in Seminary	23	13.4	13.4
2nd Half Years in Seminary	20	11.6	25.0
First-5 years in ordination	30	17.4	42.4
6 to 15 years in ordination	44	25.6	68.0
16 to 30 years in ordination	40	23.3	91.3
31 ≤ years in ordination	16	8.7	100
Total	172	100	

The sample for this present study has 172 subjects of which 29 (18.9%) were 39 years old or younger, 20 (11.6%) were between 40 and 49 years old, 40 (23.3%) were between 50 and 59 years of age, 51 (29.7%) were between 60 and 69 years old, and 32 (18.6%) were 70 years of age or older. Of their sexual orientations, 135 (78.5%) were heterosexuals, 25 (14.5%) were homosexuals, 7 (4.1%) were bisexuals, 3 (1.7%) were unsure, and 2 (1.2%) were celibate which was recorded as responding differently. The majority of participants were Caucasians (n=136; 79.1%). The remaining participants were from other ethnic groups including Hispanic or Latin American (4.7%), African American (2.3%), African (1.2%), Asian (1.2%), Asian American (1.2%), European (3.5%), Mixed Ethnic (5.2%), and Carribbean (0.6%).

Specific to the vocational status, the seminarians, either diocesan or religious, and deacons, both transitional and permanent were categorized into one group of seminarians/ deacons, whereas priests, either diocesan or religious were categorized into one group of priests. Of 172 participants, 120 (69.8%) were priests, and 52 (30.2%) were seminarians/ deacons. In regard to the number of years currently in seminary or since ordination, there were 23 (13.4%) in the first half (3) years in the seminary, while 20 (11.6%) were in the second half (3) years in the seminary. Of 120 priest participants, 30 (17.4%) were in the first five years in ordination, 44 (25.6%) were between 6 and 15 years, 40 (23.3%) were between 16 and 30 years, and 15(8.7%) were more than 31 years in the priesthood.

Since two of demographic variables which are age and vocational status would be included into the Hierarchical Multiple Regression analysis, independent sample t-tests were conducted to compare age and vocation status in the 73 subjects excluded and the 172 subjects included in this study. The result showed no significant difference in age for

the excluded (M=2.99, SD=1.35) and the included (M=3.21, SD=1.34) subjects, t (242) = 1.21, p=.78. No significant difference was observed in vocational status for the excluded (M=1.65, SD=.48) and for the included (M=1.70, SD=.46) subjects, t (241) = .66, p=.21.

Preliminary Analyses

Following the descriptive data analysis, we conducted further preliminary analysis which involved a factor analysis for the five variables and reliability testing for all the variables, except the demographic variables. Analyzing the factorial construct and the reliability of variables used in this study is critical to prevent us from fudging the data so as to ensure valid results and meaningful interpretations. Specific to the factor analysis, the principal component procedures were used for five constructs, followed by reliability tests.

Principal Component Analysis

Because of the partial modifications made on and several new items added to the original measurement items, five constructs which include family religiosity, religious experience, social-spiritual support, views of the priesthood, and priestly commitment were subjected to a principal component analysis (PCA). The PCA was selected as an extraction method, instead of a common factor analysis (CFA). The two methods are similar, in that, both are used to identify clusters of variables, so as "to reduce a set of variables into a smaller set of dimensions (which are called "factors" in CFA or "components" in PCA (Field, 2013, p.666-667). According to Ho (2012), the PCA is used "to obtain the minimum number of factors needed to represent the original set of

data," whereas the CFA is used to "identify theoretically meaningful underlying dimensions" (p. 240). In this analysis, the primary objective is simply to verify the existing component, and not to discover latent variables or to estimate the underlying factors. In this regard, the PCA seemed to be an appropriate method to re-identify the assumed component from the measured variables, and thus to validate whether or how a particular variable contributes to the component.

Specific to the rotation method, oblique rotation was used, instead of orthogonal rotation, with the assumption that the extracted components are correlated. Distinguishing the two methods, Ho (2012) wrote "orthogonal rotation assumes that the extracted factors are independent" whereas "oblique rotation allows for correlated factors" (p.242). Using the oblique method, we were able to examine the pattern matrix and structure matrix. The former represents "the regression coefficients for each variable on each factor," while the latter represents "the correlations between variables and factors" (Field, p 672). We used both scree plot and eigenvalue of ≥ 1 as a criterion for retaining a component. Following Ho's recommendation, we used a minimum value of .33 for a factor loading from which we expect to display a variable or item with at least 10% or more of variance accounted for by its component.

Family Religiosity Scale. Prior to conducting a principle component analysis on 6 items for the family religiosity scale, a regression analysis was performed to examine the possible issue with multicollinearity. This resulted in a variance inflation factor (VIF)'s value significantly lower than 10 with Tolerance's value of $\geq .2$, suggesting that there is no multicollinearity. Through the principle component analysis on the 6 items for family religiosity scale, one component was retained. The Kaiser-Meyer-Olkin (KMO)

measure of sampling adequacy resulted in a value of .83, which is meritorious (Field, 2013). The Bartlett's Test yielded a value of 408.93 at a significant level of .001, which suggests an excellent correlation matrix. The resulted component has eigenvalues of 3.35, accounting for 55.77% of a total variance. The scree plot also shows one component solution. The summary of the correlation matrix can be found on APPENDIX V-A.

The reliability test was then performed, resulting in a Cronbach's alpha of .80 (m=.80 for all six datasets). This suggests a meritorious overall internal consistency on the six item scale representing family religiosity. The Corrected Item-Total Correlation between items varies from .34 to .72, and the Cronbach's Alpha If Item Deleted also indicates that a deletion of the lowest correlation would increase an overall consistency to .84. Thus, we conducted another reliability test for five items by deleting one item with the lowest value. The Cronbach's alpha is .84 with the Corrected Item-Total Correlation ranging from .53 to 76. The summary of the correlation matrix for this scale can be found on APPENDIX V-A.

Religiosity Experience Scale. A collinearity diagnostic was first taken on the 6 items scale for religious experience. Both VIF and Tolerance's values fell within normal levels. The principle component analysis indicated that the KMO's measure verified a sampling adequacy with a value of .72, which is acceptable (Field, 2013). The Bartlett's Test yielded a value of 235.59 at a significant level of .001, which suggests an adequacy correlation matrix. Although this analysis resulted in two components with eigenvalues of 2.65 and 1.05 accounting for 44.07% and 17.45%, respectively, of the total variance, the scree plot shows one component solution. One variable (item 2) uniquely contributed to component 2, and two items were cross-loaded with component 1. Thus, another analysis

with one fixed factor was conducted by removing that item. The result is one component loading with eigenvalues of 2.47 which accounted for 49.13% of the total variance. The summary of the correlation matrix is on APPENDIX V-B.

The reliability test on religious experience scale (5 items) was then conducted, resulting in a Cronbach's alpha of .73, which suggests an acceptable overall internal consistency on these five measurement items representing the religious experience. The Corrected Item-Total Correlation between items ranges from .46 to .63. The Cronbach's Alpha If Item Deleted indicates a deletion of any item would significantly decrease the overall internal consistency. This obviously indicates that the internal consistency of this five-item scale for the religious experience is very robust. The summary of the correlation matrix is on APPENDIX V-B.

Spiritual Companionship Scale. A collinearity diagnostic showed that there was no multicollinearity problem on 8 items for the social-spiritual support scale as indicated by the VIF value of ≤10 and Tolerance value of ≥ .2. The PCA showed that the MKO's measure verified the sampling adequacy with a value of .88 which is meritorious (Field, 2013). The Bartlett's Test yielded a value of 774.34 with a significant level at 001 which suggests an excellent correlation matrix. The PCA yielded one component loading with eigenvalues of 4.73 accounting for 59.16% of the total variance. The scree plot indicates also one component loading. The summary of the correlation matrix is on APPENDIX V-C.

The reliability test for the social-spiritual support scale resulted in a Cronbach's alpha of .90 (m=.90 for all six datasets), showing an excellent internal consistency for the 8 measurement items for social-spiritual support. The Corrected Item-Total Correlation

among items is also invariable (.87 to .90), and the Cronbach's Alpha If Item Deleted further indicates that deletion of any item would reduce the overall internal consistency, providing evidence that the internal consistency is robust and marvelous (Field, 2013). The summary of the correlation matrix for these scale items is on APPENDIX V-C.

View of the Priesthood Scale. Prior to the PCA, a collinearity diagnostic was done on the 9 items chosen for view of the priesthood scale. No multicollinearity was observed as reflected in the VIF value of ≤10 and Tolerance value of ≥ .2. The PCA was then performed on these 9 items with three-fixed components. The Kaiser-Meyer-Olkin measure verified the sampling adequacy with an acceptable value of .74. Bartlett's Test yielded a value of 452.13 at a significant level of .001, also indicating an adequate correlation matrix. The analysis resulted in three component loadings with eigenvalues of 3.31, 1.61, and 1.01 which account for 36.83%, 17.91%, and 11.17%, respectively, of the total variance, for a total of 65.90%. However, the point of inflection on the scree plot indicates a two or three-component solution.

The pattern matrix from the oblique rotation with Kaiser Normalization revealed three components of which each contains three contributing variables/items. Component 1 has three variables with regression coefficients of .78, .75, and .71, respectively, which represents the perceived status of the priesthood subscale. Component 2 which represents relationship with bishop/superior contains three variables with regression coefficients of .90, .80, and .78. Lastly, component 3 which represents view of celibacy has three other variables with regression coefficients of .78, .78, and .75. As described above, this pattern matrix contains a unique variance of each variable for each component. A summary of pattern matrix is found on APPENDIX V-D.

The structure matrix of oblique rotation with Kaiser Normalization indicates some shared variance between components, especially between component 1 and component 3. Each has two variables with shared variance, and one independent variable, which shows that the two subscales (view of celibacy and perceived status of the priesthood) shared greater variance. Component 2 has less correlation with the two other components since it has one shared variance. A summary of the structure matrix is on APPENDIX V-D.

A reliability test on view of the priesthood scale was then conducted, resulting in a Cronbach's alpha of .78 which is acceptable for an overall internal consistency of 9 scale items. The Corrected Item-Total Correlation among the items ranges from .35 to .55. Cronbach's Alpha If Item Deleted indicates that a deletion of any item would reduce the overall internal consistency of the scale, suggesting that the overall internal consistency of these 9 scale items is very robust. The reliability test for component 1 (3 items), relationship with bishop/superior subscale, resulted in an alpha value of .79 which is acceptable (Field, 2013). The alpha value for component 2 (3 items), perceived status of the priesthood subscale, is .68 which is unacceptable. The alpha value for component 3 (3 items), view of celibacy subscale, is also .68 which is inadequate. Considering that the two components have more shared variance, they were combined into one subscale called perceived sacredness of the priesthood. The reliability test of the six items resulted in a Cronbach's alpha of .75 which is acceptable. The Cronbach's Alpha If Item Deleted indicated that a deletion of any item would significantly reduce the internal consistency. This shows that this combination of 6 items for perceived sacredness of the priesthood is quite robust. The summary of the correlation matrix is on APPENDIX V-D.

Priestly Commitment Scale. A multicollinearity diagnostic was conducted using a regression analysis on 23 items for priestly commitment scale. No multicollinearity was observed as shown in the VIF value of ≤10 and Tolerance value of ≥ .2. The PCA was performed for the 23-item priestly commitment scale and its three subscales (affective, normative, and continuance). In this analysis, we used 3 fixed numbers of components for extraction. The result confirmed Kaiser-Meyer-Olkin measure of the sampling adequacy with a value of .82 which is meritorious (Field, 2013). The Bartlett's Test yielded a value of 1316.92 at a significant level of .001 which suggests an adequate correlation matrix. Although three fixed components retained have eigenvalues of ≤ 1, four variables share a relatively small amount (≤ .26) of commonalities. In addition, the structure matrix shows that 2 variables which were expected to represent continuance commitment contributed greater variance to normative commitment. In the end, we dropped 6 variables and conducted another PCA with 3 fixed components on 17 variables.

The analysis resulted in a three components solution with KMO's value of .82 for the sampling adequacy. The Bartlett's Test yielded a value of 937.62 at the significant level of 0.001. All 17 other variables shared an acceptable amount of commonalities with coefficients of > .30. The three components retained have eigenvalues of 4.57, 2.86, and 1.44, accounting for 26.90%, 16.84%, and 8.49% of the variance, respectively, for a total of 52.23%. The summary of eigenvalues and variance is on APPENDIX V-E.

The pattern matrix with Kaiser Normalization indicates that component 1 called affective priestly commitment has 7 contributor variables with regression coefficients of .81, .79, and .76, 73, 72, 61, and 48, respectively. Component 2 called continuance priestly commitment contains 5 contributor variables with regression coefficients of .82,

79, .78, .64, and 60, respectively. Finally, component 3 representing normative priestly commitment has 5 contributor variables with regression coefficients of .80, .76, .55, 54, and .46, respectively. The pattern matrix indicates that each variable contributes unique variance to its component. APPENDIX V-E provides a summary of the pattern matrix.

The structure matrix with Kaiser Normalization suggests some shared variances between components as evidenced in the correlations, especially between component 1 (affective priestly commitment) and component 3 (normative priestly commitment). Component 2 (continuance priestly commitment) has a shared variance with component 1 but not with component 2. The structure pattern is also consistent with the organization commitment research suggesting that affective commitment and normative commitment tend to be highly correlated (Meyer & Allen, 1997). Moreover, some studies indicated that the two subscales (affective and normative) are not consistently or clearly differentiated, suggesting that they shared significantly more variances with one another than that shared with the continuance commitment. The summary of the pattern matrix and structure matrix can be found in APPENDIX V-E.

The reliability test of the priestly commitment scale was then conducted, resulting in an adequate Cronbach's alpha of .81 for affective commitment. The Corrected Item-Total Correlation among items ranged from .45 to .71. The continuance commitment had an adequate Cronbach's alpha of .78 with the Corrected Item-Total Correlation among items ranging from .48 to .65 which is also acceptable. In contrast to that of the affective and continuance commitment, however, the Cronbach's alpha for normative commitment was .65, which is unacceptable, and thus excluded from the analysis. Further analysis on the Cronbach's Alpha If Item Deleted showed that a deletion of one variable or item on

affective and continuance commitment subscales would reduce the internal consistencies, suggesting their robust internal reliability (APPENDIX V-E).

Since thought of leaving the priesthood subscale would be included as an aspect of priestly commitment, a reliability test was provided in this section. This 3 item scale for thought of leaving the priesthood has an acceptable Cronbach's alpha of .73 with the Corrected Item-Total Correlation among items from .51 to .65, which is also satisfactory. Furthermore, a deletion of any item or variable would reduce the internal consistence of this three-item scale (APPENDIX V-E).

Altogether, excluding normative commitment subscale would potentially create three separate Hierarchical Multiple Regressions of affective commitment, continuance commitment, and thought of leaving the priesthood. Further analysis would be conducted to ensure that they are adequately related to each other. Their correlations and those of independent variables would be analyzed using the Pearsons' Correlation tests. For this, however, the reliability of the instruments for the independent variables first needs to be analyzed and verified.

Reliability Tests of Continuous Variables

Following the PCA and reliability tests for the five instruments above, we also conducted reliability tests for all instruments for independent variables as well as for well-being. To facilitate this, both Corrected-Total Correlation and Cronbach's Alpha If-Item Deleted were used as a measure of the adequacy for each variable to be included in the overall scale or subscales. The item correlations for all scales or subscales resulted in adequate Cronbach's alphas which can be found in APPENDIX V: F-Q.

Of the 33 scales/subscales tested, 28 variables had satisfactory Cronbach's alphas. Table 2 below displays these 28 continuous variables. The first three variables (affective commitment, continuance commitment, and thought of leaving the priesthood subscales) would be the dependent variables in the Hierarchical Multiple Regression analyses, while the following 22 variables were (potentially) the predictors or the independent variables. Finally, the last three variables (affect balance, psychological well-being, and religious well-being) would be the dependent variables in the Multiple Regression analyses with priestly commitment as the predictors or the independent variables.

As Table 2 shows, Cronbach's alphas for normative commitment and controllable attribution variables were not adequate; therefore, they were marked with "*" to indicate that both were dropped from the analysis. View of celibacy and priestly status variables were marked with "+", indicating that they would be combined into one variable called perceived sacredness of the priesthood. The number of scale items and the examples for each scale/subscale were included to briefly illustrate the content of each construct. It is necessary to mention that not all of the variables would be automatically included in the HMR or MR analyses. They would further be examined whether they have acceptable Pearson's correlations. Of the 22 variables with acceptable Cronbach's alphas, only the predictors having adequate Pearson's correlations with the dependent variables would be qualified for the HMR analyses. Similarly, the three measures of priestly commitment would be taken as independent variables if they have adequate Pearson's correlations with well-being.

Table 2

Cronbach's Alphas for All Scales (N=172)

Instruments	# Items	Sample Items	α
Priestly Commitment			
Affective Commitment	7	…happy to spend …in my vocation....	.81
Continuance Commitment	5	…few options to consider leaving…	.78
Though of Leaving	3	…often think of leaving priesthood.	.73
Normative Commitment	5	…priestly …deserves my loyalty.....	.65*
Social Factors			
Religious Experience	6	Being an altar boy	.73
Family Religiosity	6	Showed me …an authentic Christian	.84
Parental Care	22	Was affectionate to me	.93
Parent Overprotection	26	Was overprotective of me	.89
Personality Trait			
Extraversion	8	Is talkative	.84
Agreeableness	9	Is generally trusting	.77
Consciousness	9	Does things efficiently	.86
Openness to Experience	10	Has an active imagination	.77
Neuroticism	8	Worries a lot	.83
Defensiveness	26	At times I feel like swearing	.76
Femininity	10	Sensitive to needs of others	.89
Masculinity	10	Defend my own beliefs	.87
Loneliness	18	I am no longer close to anyone	.90
Religious Modes			
Extrinsic Religious Orientation	11	Pray …cause… been taught to pray	.76
Intrinsic Religious Orientation	9	My religious …lie behind my life	.71
Positive Religious Coping	7	Sought God's love and care	.83
Negative Religious Coping	7	Wondered …God had abandoned me	.81
Spiritual Support	8	Someone to share spiritual life with	.90
View of Celibacy	3	…celibacy has been a grace for me.	.68+
View of Priestly Status	3	…a priest is ..."man set part" by God	.68+
Sacred View of the priesthood	6	…God called me to live a celibate life	.75
Relation w/ bishop/superior	3	…relationship with bishop/superior	.77
Cognitive Modes			
Internal Attribution	3	…cause is …something about you	.83
Stable Attribution	3	…cause is …stable over time	.73
Controllable Attribution	3	…cause is …uncontrollable	.50*
Well-Being			
Affect Balance	10	On top of the world-Bored	.70
Psychological Well-being	16	…like most parts of my personality	.78
Religious Well-being	10	…God loves me and cares about me	.77

Note: *Excluded due to an inadequate alpha; +combined into one variable.

Pearson's Correlations of Continuous Variables

Following the reliability tests, simple Pearson's correlations for all continuous variables were conducted to ensure the acceptable correlations between independent variables and dependent variables. Of 22 potential variables, 4 variables (e.g., religious experience, family religiosity, openness, and causal locus of attribution) were unrelated to affective commitment, continuance commitment, and thought of leaving the priesthood, suggesting that the four variables did not belong to the priestly commitment. By dropping the locus of attribution and internal attributions, there would be one style of attribution remaining for the cognitive factor. Considering a potential bias, we also dropped the stable attribution and, henceforth, the cognitive factor from the final analysis. This ultimately would provide 17 predictor variables grouped into four sets of factors for Hierarchical Multiple Regression analyses. Additionally, several hypotheses would likewise not be tested. The hypotheses, related to the excluded variables, would be later placed in the parentheses (…) to indicate that they were not tested.

To summarize, the Hierarchical Multiple Regression analysis would involve three measures of priestly commitment (affective commitment, continuance commitment, and thought of leaving the priesthood) as the dependent variables and four sets of factors as the independent variables. These factors included: 2 demographic variables (age and vocational status), 2 parental variables (parental care and overprotection), 8 personality trait variables (extraversion, agreeableness, consciousness, neuroticism, defensiveness, femininity, masculinity, and loneliness), and 7 religious variables (intrinsic religiosity, extrinsic religiosity, positive religious coping, negative religious coping, spiritual companionship, sacred view of the priesthood, and relationship with bishop/superior).

Four tables below summarize the Pearson's correlations, descriptive statistics, and Cronbach's alphas of three measures of commitment (affective commitment, continuance commitment, and thought of leaving the priesthood) as the dependent variables and 17 continuous variables as the independent variables. The correlations within the dependent variables are displayed on Table 3, and the correlations within the independent variables are presented at Table 4. As Table 3 indicates, three measures of priestly commitment are statistically correlated with one another: between affective commitment and continuance commitment (r = -.24), affective commitment and thought of leaving the priesthood (r = -.67), and continuance commitment and thought of leaving the priesthood (r = .34) at the significant level of p = < .01. Similarly, each predictor variable (Table 4) is correlated with at least five other predictor variables from r = .13 to r = .57 at p= < .05 or p = <.01.

Table 3

Pearson's Correlation and Descriptive Statistics of Priestly Commitment Variables (N=172)

	Variables	1	2	3
1.	Affective Commitment	-		
2.	Continuance Commitment	-.24**	-	
3.	Thought of Leaving	-.67**	.34**	-
	Mean	41.14	13.16	4.99
	Standard Deviation	6.87	6.28	2.30
	Alpha	.81	.78	.73

Note: **) Significant at p = < .01 (1-tailed)

Table 4

Pearson's Correlations and Descriptive Statistics of Predictor Variables (N=172)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Parental Care	-																
2.	Parental Protect[1])	-.38**	-															
3.	Extraversion	.02	-.11	-														
4.	Agreeableness	.26**	-.31**	.24**	-													
5.	Consciousness	.24**	-.27**	.13*	.42**	-												
6.	Neuroticism	-.21**	.36**	-.38**	-.48**	-.37**	-											
7.	Defensiveness	.16*	-.15*	.28**	.27**	.18**	-.42**	-										
8.	Femininity	.24**	-.21**	.34**	.51**	.22**	-.34**	.13*	-									
9.	Masculinity	.05	-.08	.54**	.02	.25**	-.27**	.21**	.30**	-								
10.	Loneliness	-.40**	.16*	-.38**	-.23**	-.28**	.46**	-.35**	-.37**	-.24**	-							
11.	Intrinsic Religiosity	.20**	-.22**	-.01	.16**	.05	-.09	.12	.09	.01	-.10	-						
12.	Extrinsic Religiosity	-.07	.12	.10	-.01	.10	-.03	-.07	.14*	.13*	.03	-.29**	-					
13.	Positive RCOP[2)]	.13*	-.22**	.13*	.22**	.14*	-.20**	.08	.33**	.14*	-.24**	.24**	.12	-				
14.	Negative RCOP[2)]	-.28**	.24**	-.03	-.19**	-.20**	.15*	-.13*	-.10	-.01	.15*	-.19**	.15*	.04	-			
15.	Spiritual Comp[3)]	.31**	-.09	.29**	.158	.18**	-.31**	.19**	.31**	.04	-.57**	.12	.18**	.24**	-.11	-		
16.	Sacredness[4)]	.23**	-.16*	-.08	.10	-.04	-.20**	.11	.02	-.04	-.14*	.41**	-.07	.31**	.18*	.11	-	
17.	Relation w Bishop[5)]	.31**	-.20**	.09	.06	.12	-.23**	.09	.22**	.06	-.39**	.09	.10	.32**	.33**	.33**	-	
	Mean	3.21	1.88	3.31	3.97	3.84	2.49	15.66	58.28	50.22	35.05	34.68	15.32	22.58	7.85	14.12	23.14	11.89
	SD	.52	.42	.71	.48	.64	.64	4.34	6.88	8.62	9.90	3.86	4.20	3.84	2.77	3.40	4.44	2.80
	Alpha	.93	.89	.84	.77	.86	.83	.76	.89	.87	.90	.71	.76	.83	.81	.73	.75	.77

Note: * Significant at $p = < .05$ (1-tailed); ** Significant at $p = < .01$ (1-tailed); [1]) Parental overprotection; [2)] Religious coping; [3]) Spiritual companionship; [4]) Sacred view of the priesthood; [5]) Relation with Bishop/Superior

Table 5

Pearson's Correlations and Descriptive Statistics of Priestly Commitment, Parental, and Personality Variables (N=172)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Affective Commitment	-												
2. Continuance Commitment	-.24**	-											
3. Thought of Leaving	-.67**	.34**	-										
4. Parental Care	.27**	-.15*	-.29**	-									
5. Parental Overprotection	-.26**	.14*	.37**	-.38**	-								
6. Extraversion	.15*	-.15*	-.13*	.02	-.11	-							
7. Agreeableness	.35**	-.16*	-.32**	.26**	-.31**	.24**	-						
8. Consciousness	.20**	-.06	-.20**	.24**	-.27**	.13	.42**	-					
9. Neuroticism	-.35**	.13	.38**	-.21**	.36**	-.38**	-.48**	-.37	-				
10. Defensiveness	.35**	-.26**	-.30**	.16*	-.15*	.28**	.27**	.18	-.42**	-			
11. Femininity	.34**	-.06	-.36**	.24**	-.21**	.34**	.51**	.22	-.34**	.13*	-		
12. Masculinity	.19*	-.01	-.28**	.05	-.08	.54**	.02	.25	-.27**	.21**	.30**	-	
13. Defensiveness	-.49**	.21**	.36**	-.40**	.16*	-.38**	-.23**	-.28	.46**	-.35**	-.37**	-.24**	-
Mean	41.14	13.16	4.99	3.21	1.88	3.31	3.97	3.84	2.49	15.66	58.28	50.22	35.05
SD	6.87	6.28	2.30	.52	.42	.71	.48	.64	.64	4.34	6.88	8.62	9.90
Alpha	.81	.78	.73	.93	.89	.84	.77	.86	.83	.75	.89	.87	.90

Note: * Significant at $p < .05$ (1-tailed); ** Significant at $p < .01$ (1-tailed).

Table 6

Pearson's Correlations and Descriptive Statistics of Priestly Commitment and Religious Variables (N=172)

Variable	1	2	3	4	5	6	7	8	9	10
1. Affective Commitment	-									
2. Continuance Commitment	-.24**	-								
3. Thought of Leaving	-.67**	.34**	-							
4. Intrinsic Religiosity	.29**	-.21**	-.25**	-						
5. Extrinsic Religiosity	.05	.32**	.08	-.29**	-					
6. Positive RCOPE+)	.27**	-.09	-.21**	.24**	.12	-				
7. Negative RCOPE+)	-.17*	.09	.23**	-.19**	.15	.04	-			
8. Spiritual Companionship	.31**	-.11	-.19**	.12	.18	.24**	-.11	-		
9. Sacred View of the Priesthood	.34**	-.21**	-.35**	.41**	-.07	.31**	.18*	.11	-	
10. Relation W/ Bishop/Superior	.52**	-.11	-.31**	.09	.10	.32**	.33**	.33**	33**	-
Mean	41.14	13.16	4.99	35.05	34.68	15.32	22.58	7.85	14.12	23.14
SD	6.87	6.28	2.30	3.86	4.20	3.84	2.77	3.40	4.44	2.80
Alpha	.81	.78	.73	.71	.76	.83	.81	.73	.75	.77

Note: * Significant at $p < .05$ (1-tailed); ** Significant at $p < .01$ (1-tailed).
+) Religious Coping

Table 5 above presents the correlations between priestly commitment and parental and personality predictor variables, and Table 6 presents the correlations between priestly commitment and religious predictor variables. Of the 17 predictor variables, 16 variables have significant Pearson's correlations with affective commitment and thought of leaving the priesthood, whereas 9 variables correlate significantly with continuance commitment, including one variable which is unrelated to affective commitment and thought of leaving the priesthood. Pearson's correlations between 3 dependent variables and 17 independent variables ranged from .13 to .57 at the significant levels of $p = < .05$ and $p = <.01$. Given these small yet significant correlations, the overlap between the predictors is unlikely.

Hierarchical Multiple Regression Analyses

In this next section, three separate Hierarchical Multiple Regression (HMR) analyses were performed to determine the variables that best and reliably predict priestly commitment. Three measures of priestly commitment (affective, continuance, and thought of leaving the priesthood) were taken as the dependent variables. Each HMR had 4 sets or models of the predictor variables involving demographic, parental, personality, religious factors. Each set of predictor variables was added subsequently to the regression equation. Accordingly, controlling for the sets of predictors previously added to the first, second, and third model, the predictors with significant effects in the fourth model would be considered as the reliable predictors for priestly commitment. For this purpose, four assumptions were first examined.

Assumption Tests

There are four assumptions in the hierarchical multiple regression involving the linearity (multicollinearity), independence of error terms/residuals, homoscedasticity, and normality of distribution (as well as outliers), of which each needs to be met in order for the model to be valid and interpretable (Field, 2013; Ho, 2013). To test the assumptions, the Multiple Regression residuals which are "the differences between the values of the outcome predicted by the model and the values of the outcome observed in the sample" (Field, *p*. 305) would carefully be analyzed.

Linearity in regression analysis assumes that the outcome (dependent variable) is linearly related to the predictor which is the independent variable. If this is not the case, then the model is uninterpretable. This assumption is the most essential, upon which all other assumptions have their relevance to the model. Unless it is true, the model is invalid (Field, 2013). For testing the linearity, we examined the *R*-Square (R^2) and the *F*-ratio (ANOVA) with a significance level of $\leq .05$. The R^2 indicates whether the amount of variance explained by the models is significant, whereas the *F*-ratio of ANOVA shows if the models are better at predicting than guessing the outcome. The resulted outcomes of the regression analysis indicted significantly systematic R^2 changes from Model 1 to Model 4, which range between R^2 of .05 ($p < .05$), .13 ($p < .001$), .37 ($p < .001$), and .56 ($p < .001$). The significant linear increases on R^2 are consistent with the *F*-ratios (ANOVA) from 4.1 ($p < .02$), 6.02 ($p < .001$), 7.97 ($p < .001$), to 10.75 ($p < .001$). Statistically, both R^2 and *F*-ratios indicate that these models of analysis predict the outcome better, relative to guessing or not to fitting the model, providing evidence to reject the null hypothesis that there is no linear relationship.

Related to the linearity is a multicollinearity problem, which is "the situation where the independent/predictor variables are highly correlated" (Ho, p. 296). Given the number of predictor variables in the regression analysis, several statistical measures were used to ensure its independent contribution to the model. For this purpose, we examined Pearson's correlations of all continuous predictor variables (≥ .90) and used a Tolerance value of > .10 and a VIF value of < 10. Field wrote, "If there is no multicollinearity in the data then there should be no substantial correlations (r > .9) between predictors" (p. 335). Ho (2013) and Field advised that a Tolerance value below .10 and a VIF value above 10 should cause concern.

The resulted Pearson's correlation analyses were displayed at Table 4 above. As indicated, the correlations between a pair of predictor variables were weak to moderate, ranging from r = .13 (p = < .05) to r = .57 (p = < .01). Given the small, but nevertheless significant correlation coefficients, it is very unlikely that there is a problem with multicollinearity in this data. The Collinearity Diagnostics resulted in Tolerance values of .41 to .84, which are much greater than a critical value of .10. Similarly, the resulted VIF values ranged between 1.18 and 2.44, which are well below a critical value of 10. Taken together, they show that each predictor variable has a unique variance for the model, and that redundancy among predictors is unlikely in this particular data.

As the Pearson's Correlation matrix (Table 5 & 6) shows, 16 predictor variables have significant correlations with both dependent variables of affective commitment and thought of leaving the priesthood. Their correlations ranged from r = .15 at p =. < .05, to r = .52 at p =. < .01 for the former, and from r =.13 to r = .51 at p=< .05 to r = .51 at p = < .01 for the latter. Ten predictor variables were correlated with the dependent variable of

continuance commitment with r =.14 at $p = < .05$ to r = .34 at $p = < .01$. The existing correlations between and/or within predictor variables and the dependent variables verified the suitability of the data for the Hierarchical Multiple Regression analysis.

The second assumption is the independence of error terms, which is an idea that "the predicted value is not related to any other prediction; that is, each predicted value is independent" (Ho, p. 296). To test the violation of this assumption, the Durbin-Watson (*d*) statistic, whose value varies from 0 to 4, was used. This *d* test specifically examines whether the adjacent residuals are correlated. If independent or uncorrelated, their pattern will be random. According to Field (2013), any values less than 1 or greater than 3 should cause concern. Ho suggested more conservative values which are between two critical values of 1.5 and 2.5 to ensure the independence of error terms or residuals. The Durbin-Watson tests for affective commitment, continuance commitment, and thought of leaving the priesthood yielded *d*-values of 1.79, 1.96, and 2.09, respectively, of which each fell within the critical values. Therefore, the assumption for the independence of residuals was statistically met.

Homoscedasticity is another assumption which refers to equal variances between pairs of predictor variables. That is, according to Field, "at each level of the predictor variable (s), the variance of the residuals terms should be constant" (p. 311). To examine the assumption of unequal (heteroscedasticity) or equal variances (homoscedasticity), the residual plots can be used, namely, "a plot of standardized residuals against standardized predicted values" (p.348). According to Field, if there are equal variances, the scores are concentrated in the center looking as "a random array of dots" (p. 348). Figure 4 displays scatterplots for affective commitment (4a), continuance commitment (4b), and thought of

leaving the priesthood (4c) which show no relationship patterns, thereby suggesting that the equal variance for three dependent variables can be reasonably assumed.

Figure 4a

Scatterplot of Affective Commitment

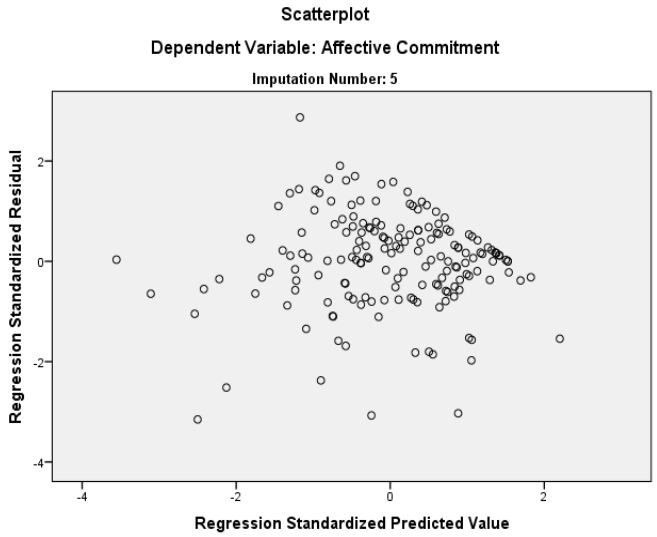


Figure 4b

Scatterplot of Continuance Commitment

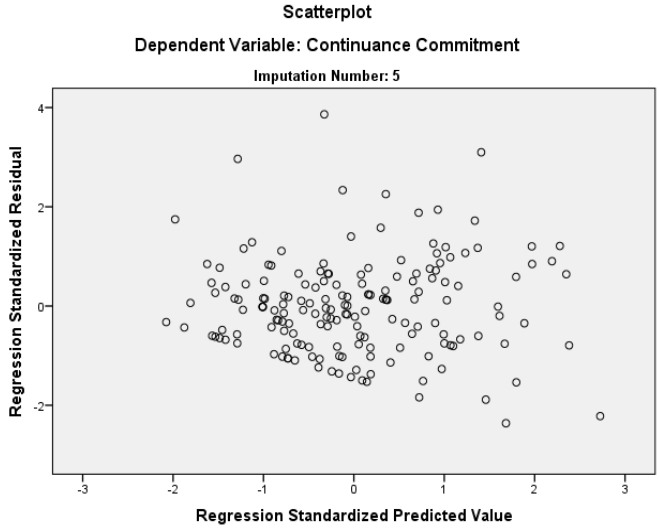
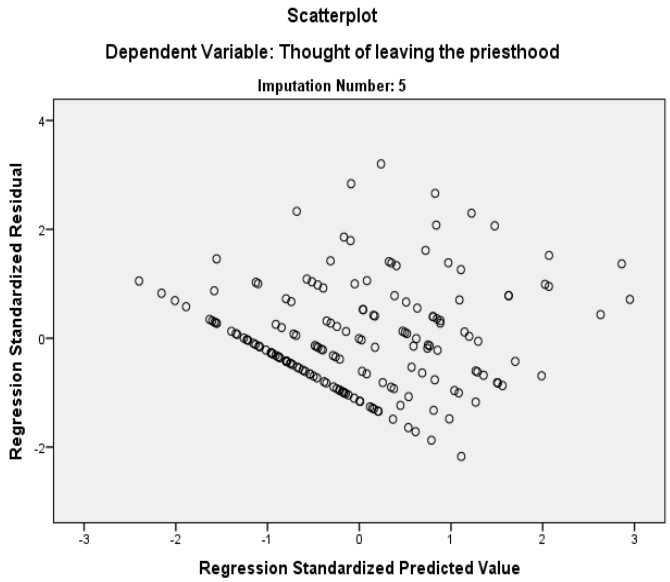


Figure 4c

Scatterplot of Continuance Commitment



As Figure 4 shows, most of the residual scores were concentrated around the center with a random pattern. This pattern indicates that the assumption for homoscedasticity was not violated, which means that the equal variances between pairs of predictor variables can be assumed.

The fourth assumption is the normality of distribution which can be detected by looking at the Histogram and Normal Probability Plot (P-P) of Regression Standardized Residuals. Figure 5 displays the histograms for affective commitment (5a), continuance commitment (5b), and thought of leaving the priesthood (5c), each of which is relatively normal, suggesting no violation of the assumption.

Figure 5a

Histogram of Affective Commitment

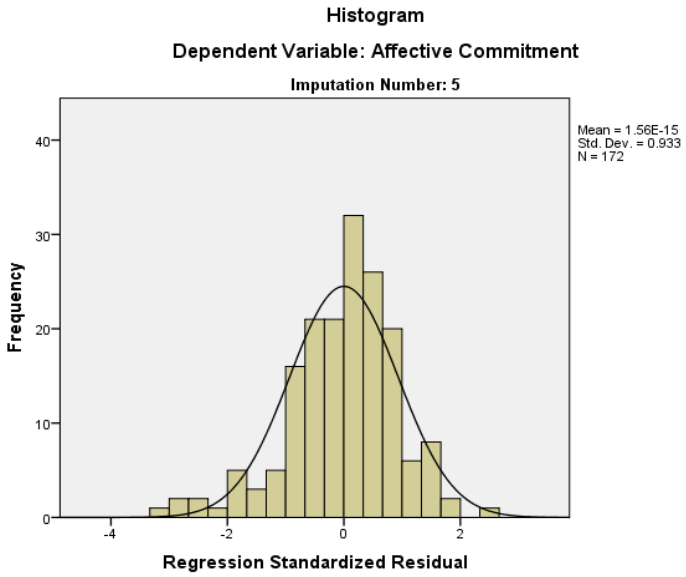


Figure 5b

Histogram of Continuance Commitment

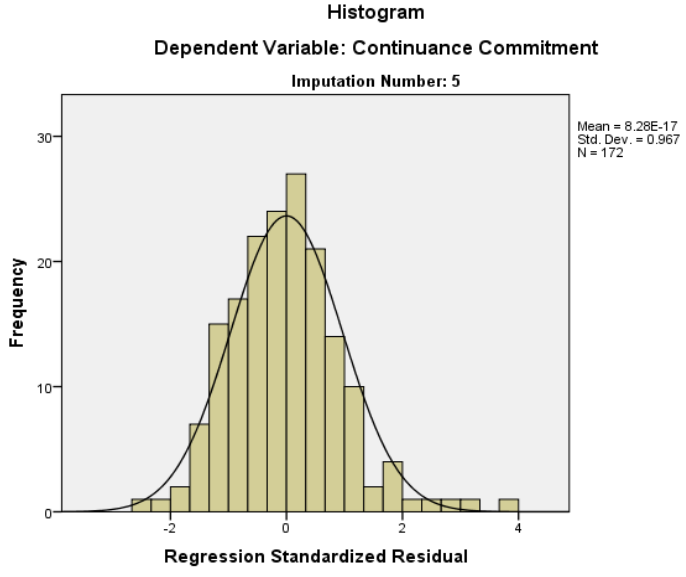
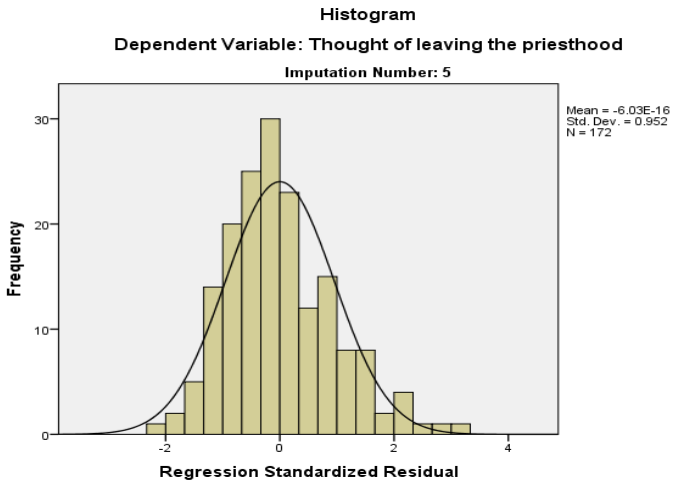


Figure 5c

Histogram of Thought of Leaving the Priesthood



This normality of distribution was also consistent with its normal P-P below. Figure 6 showed normal P-P for affective commitment, continuance commitment, and thought of leaving the priesthood.

Figure 6a

Normal P-P of Affective Commitment

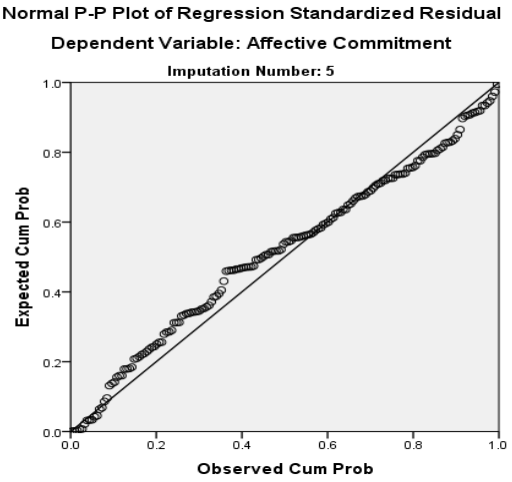


Figure 6b

Normal P-P of Affective Commitment

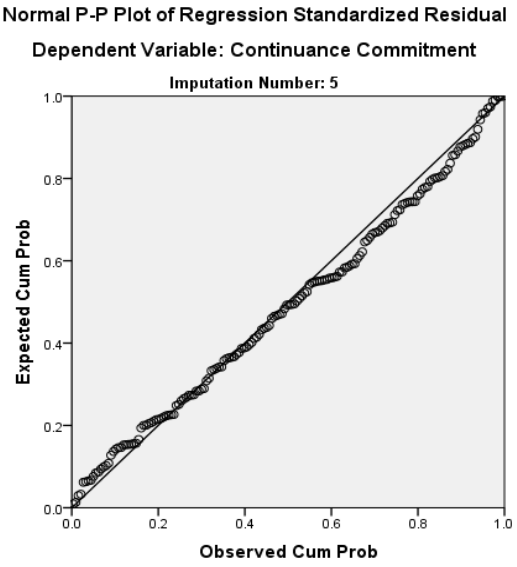
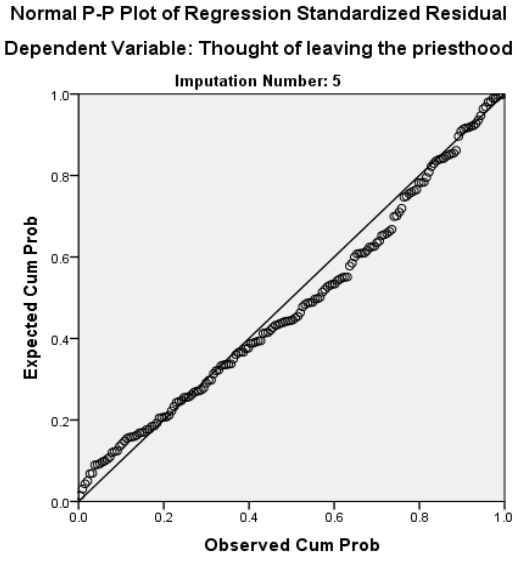


Figure 6c

Normal P-P of Thought of Leaving the Priesthood



Similar to the histogram, normal P-P of Regression Standardized Residuals verified the normality of distribution. As Figure 6 displays, the residual plots for three dependent variables of affective commitment, continuance commitment, and thought of leaving the priesthood fit well with the expected patterns as also reflected in the relatively straight diagonal line from the lower left corner to the upper right corner.

Returning once more to the scatterplots of Figure 4 above, some residual scores appears outside the center. Therefore, the Casewise Diagnostics were conducted to examine further the potential biases from the outliers/extreme cases. According to Field, in an ordinary sample, it is reasonable to expect 5% of cases to have the standardized residuals outside the limits. With this consideration, we rechecked the potential cases which have the standardized residuals of ±3. The Casewise Diagnostics showed that there were 3 cases on each imputed dataset of the affective commitment model having standardized residuals of 3.03 to 3.15. On the continuance commitment model, there were 2 cases on each imputed dataset with the standardized residuals of 3.10 and 3.8, and there was 1 case on each imputed dataset of thought leaving the priesthood model having the standardized residual of 3.2. In each model, the number of cases with the standardized residuals of > 3 is less than 2% of the total sample of 172 which has a statistically acceptable percentage.

However, Field (2013) advised that any cases having the standardized residuals of > 3 are sufficient enough for further investigation. Hence, Cook's distance, "a measure of the overall influence of a case on a model" (p.872), of these cases above was examined to find if their impacts were real. As a cutoff point, Field quoted Stevens' suggestion, "If a point is a significant outlier on Y, but its Cook's distance is < 1, there is no real need to

delete that point since it does not have a large effect on the regression analysis" (p.309). The analysis showed that none of the Cook's distance was greater than 1, suggesting that there was no real impact on the model. In summary, with the assumptions confirmed, this dataset is statistically suitable to conduct Hierarchical Multiple Regression analysis and to ensure interpretable results.

Tested Models for Priestly Commitment

This section delineates the outcomes of three separate Hierarchical Multiple Regression analyses (HMR) performed on three dependent variables, namely affective commitment, continuance commitment, and thought of leaving the priesthood. As shown above, each of the HMR analyses has four models which represent four sets of factors for the priestly commitment. These include demographic, parental, personality, and religious variables.

Affective commitment. The four Hierarchical Multiple Regression (HMR) models were used first to determine the variables which are most capable and reliable in predicting affective commitment. In the first model, 2 demographic variables (age and status of vocation) were entered, followed by the second model which contains the 2 parental variables (parent caring and parent overprotective). On the third model, 8 personality trait variables (extraversion, agreeableness, consciousness, neuroticism, defensiveness, femininity, masculinity, and loneliness) were entered, followed by the fourth model involving 7 religious variables (intrinsic and extrinsic religious orientation, positive and negative religious coping, spiritual companionship, perceived sacredness of the priesthood, and relationship with bishop/superior).

The results of the HMR models of affective commitment are displayed on Table 7 below. The first entry of demographic variables in Model 1 accounted for 5% of variance (*R* square) which is significant, F (2, 169) = 4.11, $p < .05$. The entry of parental variables in Model 2 increased an *R* square change ($R^2\Delta$) of 8% on the total variance to 13% which is significant, F (2, 167) = 7.60, $p < .001$. The addition of personality variables to Model 3 increased an *R* square change of 25% in the total variance to 37%, which is significant, F (8, 159) = 7.95, $p < .001$. The final entry of religious variables in Model 4 contributed an *R* square change of 18% to the total variance of 56%, which is significant, F (6, 153) = 10.55, $p < .001$.

As a whole, the HMR model of affective commitment showed that personality variables contribute the greatest variance ($R^2\Delta = .25$), followed by religious variables ($R^2\Delta = .18$) and parental variables ($R^2\Delta = .8$). The effects of personality variables were relatively robust and moderately enhanced by the addition of religious variables to the final model. With the addition of religious variables to the model, there were also significant changes on the standardized (β) coefficients of parental care from $\beta = .18$ ($p = .02$) on Model 2 to $\beta = -.04$ ($p = .58$) on Model 3, and $\beta = -.15$ ($p = .03$) on Model 4. Statistically, the β changes suggest the moderating effect of religious variables on parental care in reducing affective commitment to the priesthood.

Table 7

Summary of Hierarchical Regression Analysis for Variables Predicting Affective Commitment (N = 172)

	Model 1			Model 2			Model 3			Model 4		
Variable	*B*	*SE B*	*ß*	*B*	*SE B*	*ß*	*B*	*SE B*	*ß*	*B*	*SE B*	*ß*
Group of Age	1.45	.514	.28**	1.12	.50	-.22*	.21	.46	.04	.36	.41	.07
Status of Vocation	-3.26	1.51	.22*	-2.54	1.49	-.17	-.21	1.36	.01	1.36	1.27	.09
Parental Care				2.37	1.05	.18*	-.56	1.01	-.04	-1.93	.92	-.15*
Parental Overprotection				-2.67	1.28	-.16*	-2.21	1.18	-.14	-1.36	1.06	-.08
Extraversion							-.28	.10	-.23*	-.22	.09	-.18*
Agreeableness							.36	.15	.23**	.44	.13	.28***
Consciousness							-.13	.09	-.11	-.08	.08	-.07
Neuroticism							.03	.12	.02	.13	.10	.10
Defensiveness							.25	.11	.16*	.26	.10	.17**
Femininity							.07	.08	.07	.02	.07	.02
Masculinity							.13	.07	.17*	.13	.06	.17*
Loneliness							-.30	.06	-.43***	-.21	.06	-.31***
Intrinsic Religiosity										.24	.11	.14*
Positive Religious Coping										-.09	.12	-.05
Negative Religious Coping										.16	.16	.07
Spiritual Companionship										.14	.15	.07
Perceived Sacredness of the Priesthood										.22	.11	.14*
Relation with Bishop/Superior										1.00	.16	.41***
R^2			.05*			.13***			.37***			.56***
F for Change in R^2			4.11*			7.60***			7.95***			10.55***

Note: *Significant at $p = < .05$; **Significant at $p = < .01$; ***Significant at < .001

The standardized coefficients of the individual predictors showed that 9 variables survived and had significant effects in the final model. From the highest to the lowest, these variables included relationships with bishop/superior (*ß*= .41*)*, loneliness (*ß*= -.31*)*, agreeableness (*ß*= .28*)*, extraversion (*ß*= -.18*)*, defensiveness (*ß*= .17*)*, masculinity (*ß*= .17*)*, parent caring (*ß*= .15*)*, intrinsic religiosity, (*ß*= .14*)*, and perceived sacredness of the priesthood (*ß*= .14*).* With their significant contributions, these nine variables can be considered statistically as belonging to the model of affective commitment. Compared to other predictors, relationship with bishop/superior is the strongest and most favorable predictor, while loneliness is the most unfavorable predictor for affective commitment to the priesthood.

Continuance commitment. Table 8 below presents the results of the second HMR analysis of continuance commitment with four models of predictors involving 2 demographic variables, 2 parental variables, 4 personality trait variables, and 3 religious variables.

As Table 8 indicates, the first entry of 2 demographic variables in Model 1 accounted for 5% of the variance, F (2, 169) = 8.95, $p < .001$. An addition of 2 parental variables to Model 2 contributed small R square change of 2% to a total variance of 7%, F (2, 167)= 1.81, which is insignificant. An entry of 4 personality variables in Model 3 explained an R square change of 5% for a total variance of 12%, F (8, 159) = 5.24, $p < .05$. In the final model, an entry of 3 religious variables explained an R square change of 10% for the total variance of 23% which is significant, F (6, 153) = 6.55, $p < .001$.

Table 8

Summary of Hierarchical Regression Analysis for Variables Predicting Continuance Commitment (N=172)

Variable	Model 1			Model 2			Model 3			Model 4		
	B	*SE B*	*ß*	*B*	*SE B*	*ß*	*B*	*SE B*	*ß*	*B*	*SE B*	*ß*
Group of Age	-1.00	.49	-.21*	-.86	.49	-.18	-.59	.50	-.12	-.56	.47	-.12
Status of Vocation	4.05	1.41	.30**	3.73	1.40	.27**	3.05	1.44	.22*	2.63	1.39	.19
Parental Care				-1.01	.99	-.08	-.56	1.07	-.05	-.29	.02	-.02
Parental Overprotection				1.32	1.21	.09	.84	1.23	.06	-.14	.09	-.13
Extraversion							-.08	.09	-.07	-.14	.09	-.13
Agreeableness							-.06	.12	-.04	-.06	.12	-.04
Defensiveness							-.25	.12	-.17*	-.19	.11	-.13
Loneliness							.03	.06	.04	.02	.06	.03
Intrinsic Religiosity										-.06	.13	-.04
Extrinsic Religiosity										.44	.11	.30***
Perceived Sacredness of the priesthood										-.16	.11	-.13
R^2		.05***			.07			.12*			.23***	
F for Change in R^2		8.95***			1.81			5.24*			6.55***	

Note: *Significant at $p = < .05$; **Significant at $p = < .01$; ***Significant at < .001

Overall, religious variables explained greatest variance (R^2= .10, p= .001) for the model which was followed by personality variables (R^2= .5, p= .05). Looking closely at the standardized coefficients of the individual predictors, however, there was only one variable in the final model, namely, extrinsic religious orientation, which contributes a significant effect on continuance commitment. The extrinsic religious orientation has a *ßeta* value of .30 with t= 4.02 at $p < .000$ which suggests that an increased score in extrinsic religious orientation strengthened continuance commitment. This effect pattern, however, was true only when demographic, parental, and personality variables were kept constant. No effect of other predictors on continuance commitment was evident, which statistically suggests that they might not belong to the model.

Thought of leaving the priesthood. For the third HMR analysis, thought of leaving the priesthood was the dependent variable. Four models of predictor variables were regressed to determine their effects on thought of leaving the priesthood. The regression began with an entry of 2 demographic variables in Model 1, followed by 2 parental variables in Model 2, 8 personality trait variables in Model 3, and 4 religious variables in Model 4. Table 9 summarizes the results of the regression analysis.

As Table 9 shows, the first entry of demographic variables in Model 1 accounted for 10% of the variance, F (2, 169) = 8.95, p < .001, which is significant. An addition of parental variables to Model 2 provided an *R* square change of 13% for the total variance to 23%, F (2, 167) = 14.46, p < .001. In the third model, personality variables contributed an *R* square change of 16% to the total variance of 39% which is significant, F (8, 159) = 5.24, p < .001. The entry of religious variables in Model 4 explained an *R* square change of 9% for the total variance of 49%, F (6, 153) = 6.55, at the significance of p < .001.

Table 9

Summary of Hierarchical Regression Analysis for Variables Predicting Thought of Leaving the Priesthood (N = 172)

	Model 1			Model 2			Model 3			Model 4		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Group of Age	-.63	.17	-.37***	-.49	.16	-.29**	-.23	.16	-.14	-.21	.15	.12
Status of Vocation	.52	.49	.10	.24	.46	.05	-.25	.44	.05	-.75	.44	-.15
Parental Care				-.69	.33	-.16*	-.07	.33	-.01	.27	.32	.06
Parental Overprotection				1.53	.40	.28***	1.32	.39	.24***	1.13	.38	.21**
Extraversion							.10	.03	.24**	.08	.03	.19*
Agreeableness							-.05	.05	-.10	-.06	.05	-.11
Consciousness							.04	.03	.11	.02	.03	.06
Neuroticism							.04	.04	.08	.01	.04	.02
Defensiveness							-.07	.04	.12	-.06	.04	-.12
Femininity							-.04	.03	-.13	-.04	.03	-.12
Masculinity							-.06	.02	-.23*	-.06	.02	-.22**
Loneliness							.05	.02	.23*	.04	.02	.17*
Intrinsic Religiosity										-.03	.04	-.05
Spiritual Companionship										-.04	.05	-.05
Perceived Sacredness of the Priesthood										-.13	.04	-.24***
Relation with Bishop/Superior										-.11	.06	-.14*
R^2		.10***			.23***			.39***			.59***	
F for Change in R^2		8.95***			14.46***			5.24***			6.55***	

Note: *Significant at $p = < .05$; **Significant at $p = < .01$; ***Significant at $p = < .001$

Relative to other predictors, personality trait variables contributed the greatest variance ($R^2\Delta$= .16) to the final model, followed by parental variables ($R^2\Delta$= .13) and religious variables ($R^2\Delta$= .9). Controlling for demographic and parental variables, the model showed robust and reliable influence of personality variables on thought of leaving the priesthood. In contrast to the HMR model of affective commitment, the introduction of religious variables to the final model did not significantly change the standardized coefficients of parental and personality variables. Moreover, there was no change in the directional effect of parental variables on thought of leaving the priesthood which was observed in affective commitment.

Specifically looking at the standardized coefficients of the individual predictor variables, there are 6 variables in the final model with statistically significant effects on thought of leaving the priesthood. From their highest to the lowest *ß* coefficients, these variable include perceived sacredness of the priesthood (*ß*= -.24*),* masculinity (*ß*= -.22*),* parental overprotection (*ß*= .21*),* extraversion, (*ß*= .19*),* loneliness (*ß*= .17*),* and finally, relationship with bishop/superior (*ß*= -.14*).* The *ß* coefficient of the individual variable indicated that the strongest and most protective variable to prevent the thought of leaving the priesthood is perceived sacredness of the priesthood, whereas the most predictive one is parental overprotection.

Tested Hypotheses

As previously described, the three HMR analyses, each of which has four models, were to test specific hypotheses of the present study. Again, it is noteworthy mentioning that the hypotheses in the parentheses were not tested due to the exclusion of the related variables.

Hypothesis 1. *Age and vocational status will positively correlate with affective commitment (but negatively correlate with normative commitment).* As hypothesized, the Beta weight (or standardized regression coefficient) in Model 1 indicated a significantly positive correlation between age and affective commitment, *ß=.28, t=2.82, p < .01.* Unhypothesized, age was found to negatively correlate with continuance commitment, *ß= -.21, t=-2.06, p < .05* and with thought of leaving the priesthood, *ß= -.37, t=-3.74, p < .001.* The results suggest that an increased level of age is associated with an increased level of affective commitment, but a decreased level of continuance commitment as well as of thought of leaving the priesthood. Vocational status was hypothesized to correlate positively with affective commitment. In contrast to this hypothesis, however, vocational status was found to negatively correlate with affective commitment (*ß= .22, t=-2.16, p< .05).* Unhypothesized, a positive correlation was observed between vocational status and continuance commitment, *ß= .30, t=2.88, p < .01.* These correlations between age and vocational status, however, were true or significant only when they were entered in the model independently prior to the entry of other sets of variables. After the addition of 6 religious variables to Model 4, while controlling for parental and personality variables, age and vocational status did not have significant correlations with priestly commitment.

Hypothesis 2. *Parental care will positively correlate with affective commitment, while parental overprotection will positively correlate with continuance commitment and thought of leaving the priesthood.* As hypothesized, when demographic variables were kept constant, the result indicated that parental care positively correlates with affective commitment, *ß= .18, t=2.25, p< .05,* suggesting that the more the subjects experience parental care, the stronger their affective commitment. Consistent with the hypothesis,

parental overprotection was found to correlate positively with thought of leaving, *ß= .28, t=3.79, p < .05*. Parental overprotection was also hypothesized to correlate positively with continuance commitment. However, no correlation was found. Unhypothesized, the study found that parental overprotection correlates negatively with affective commitment, *ß= -.16, t=-2.08,* and also with thought of leaving, *ß= .16, t=-2.11,* each of which is at the significant level of < .05.

However, after adding 8 personality variables to Model 3, while also controlling for demographic variables, no correlation was evident between parental predictors and affective commitment. In the final model, when 6 religious variables were introduced to Model 4, while also controlling for demographic and personality variables, parental care affective commitment were correlated. Unexpectedly, however, their correlations were negative, *ß= -.15, t=-2.09, p< .05,* suggesting indirect effect of religious variables on the correlation between parental care and affective commitment.

After adding 8 personality variables to Model 3, while simultaneously controlling for demographic variables, parental overprotection continued to correlate positively with thought of leaving the priesthood *ß= .24, t=3.36, p < .001*. Similarly with the entry of 6 religious variables to Model 4, a positive correlation between parental overprotection and thought of leaving the priesthood was reliably observed, *ß= .21, t=2.99, p < .005*. This shows that the increased level of parental overprotection is associated with an increased level of thought of leaving the priesthood.

Hypothesis 3. *Religious experience and family religiosity will positively correlate with affective commitment and normative commitment, but will negatively correlate with*

thought of leaving the priesthood. Since religious experience and family religiosity were not related to any components of priestly commitment, no hypothesis test was conducted.

Hypothesis 4. *Neuroticism will negatively correlate with affective commitment but positively correlate with continuance commitment. In contrast, extraversion will positively correlates with affective commitment but negatively correlate with continuance commitment and thought of leaving the priesthood.* In contrast to the hypotheses, after controlling for demographic and parental variables in Model 3, neuroticism did not have a correlation with priestly commitment. It was also hypothesized that extraversion will positively correlates with affective commitment but negatively correlate with continuance commitment and thought of leaving the priesthood. In contrast, however, extraversion was found to correlate negatively with affective commitment, $\beta = -.23, t = -2.68, p < .01$ and to correlate positively with thought of leaving, $\beta = .24, t = -2.82, p < .005$. After the entry of religious variables in Model 4, while controlling for other variables, extraversion continued to correlate negatively with affective commitment, $\beta = -.18, t = -2.42, p < .02$ and correlate positively with thought of leaving the priesthood, $\beta = .19, t = 2.30, p < .05$. This suggests that extraversion reliably belongs to both models. We hypothesized that neuroticism would correlate negatively with affective commitment and positively with thought of leaving. In contrast to the hypothesis, no correlation was found.

Hypothesis 5. (*Openness will negatively correlate with both continuance and normative commitment), while consciousness will positively correlate with affective commitment. Agreeableness will positively correlate with affective commitment (and normative commitment).* As hypothesized, controlling for demographic and parental

variables, the model showed a positive correlation between agreeableness and affective commitment, *ß= .23, t=2.44, p< .01.* Similarly, after the entry of religious variables in the final model, agreeableness continued to correlate positively, to an even greater extent, with affective commitment, *ß= .28, t=3.33, p< .001.* This shows that an increased level of agreeableness is associated with an increased level of the affective commitment. The increasing value of *ßeta* coefficient from Model 3 to the final model gives evidence that agreeableness statistically belongs to the model. It was hypothesized that consciousness will positively correlate with affective commitment. However, no significant correlation was found in the model.

Hypothesis 6. *Defensiveness will positively correlate with affective commitment (and normative commitment).* As hypothesized, controlling for demographic and parental variables, the model showed a positive correlation between defensiveness and affective commitment, *ß= .16, t=2.21, p< .03.* This correlation continued to be significant, even to a greater extent, *ß= .17, t=2.67, p< .008,* when religious variables were added to the final model. This clearly suggests that an increased level of defensiveness is associated with an increased level of affective commitment. Unhypothesized, the model showed a negative correlation between defensiveness and continuance commitment, *ß= -.17, t=-2.11, p< .05.* However, the correlation was insignificant when religious variables were added to the final model. Taken together, defensiveness seemed to reliably belong to the affective commitment model but not to the continuance commitment model.

Hypothesis 7. *Femininity will positively correlate with affective commitment, whereas masculinity will positively correlate with normative commitment.* In contrast to

the hypothesis, when demographic and parental variables were kept constant, the model showed that masculinity positively correlates with affective commitment, *ß=.17, t=1.92, p<.05.* Unexpectedly, no significant correlation was observed between femininity and affective commitment. Unhypothesized, the result showed a negative correlation between masculinity and thought of leaving the priesthood, *ß= -.23, t=-2.73,* at significance level of < *.01.* The correlations between masculinity and affective commitment and thought of leaving the priesthood remained significant after the entry of religious variables in Model 4, *ß= .17, t=2.14, p< .03* and *ß= -.22, t=-2.70, p< .01,* respectively. The results suggest that the increased level of masculinity strengthens the affective commitment but weakens thought of leaving the priesthood. The significant effect at Model 3 and Model 4 showed that masculinity reliably belongs to affective commitment model and thought of leaving the priesthood model. This relational pattern, however, was true only when demographic and parental variables were held constant.

Hypothesis 8. *Loneliness will negatively correlate with affective commitment (and normative commitment) but will positively correlate with continuance commitment and thought of leaving the priesthood.* As hypothesized, when demographic and parental variables were held constant, loneliness was found to negatively correlate with affective commitment, *ß= -43, t=-4.99, p< .001,* but positively correlate with thought of leaving the priesthood, *ß= .23, t=-2.71, p< .01.* In contrast to the hypothesis, loneliness had no correlation with continuance commitment. The significance of loneliness was persistent in weakening affective commitment, *ß= -.31, t=-3.81, p< .001* and increasing thought of leaving the priesthood, *ß= -.17, t=-1.98, p< .05* through the final model, when religious variables were introduced. There was a decrease in *ß* standardized coefficients from *-.41*

to -.31 on affective commitment and *ß= .23 to .17* on thought of leaving the priesthood when religious variables were added to the final model. However, the effects of religious variables were not statistically sufficient to reduce the worsening effect of loneliness on affective commitment and thought of leaving the priesthood, indicating that loneliness reliably belongs to both models.

Hypothesis 9. *While extrinsic religious orientation will positively correlate with continuance commitment, intrinsic religious orientation will positively correlate with affective (and normative commitment).* As hypothesized, extrinsic religiosity was found to positively correlate with continuance commitment, *ß= .44, t=4.02, p< .001,* showing that the increased level of extrinsic religiosity is associated with an increased level of continuance commitment. Consistent with the hypothesis, intrinsic religious orientation positively correlated with affective commitment, *ß= .14, t=2.20, p< .03,* suggesting that the increased level of intrinsic religiosity is associated with an increased level of affective commitment. This correlational pattern of religious orientation, however, was true only when demographic, parental, and personality variables were held constant.

Hypothesis 10. *Positive religious coping will positively correlate with affective commitment (and normative commitment), while negative religious coping will positively correlate with continuance commitment.* In contrast to the hypothesis, no correlation was found in the model. This indicated that religious coping does not belong to the priestly commitment model.

Hypothesis 11. *Perceived sacredness of the priesthood, a relationship with bishop/superior, and spiritual companionship will positively correlate with affective*

commitment (and normative commitment) but will negatively correlate with thought of leaving the priesthood. As hypothesized, perceived sacredness of the priesthood and a relationship with bishop/superior had positive correlations with affective commitment, *ß= .14, t=2.01, p< .05* and *ß= .41, t=6.11, p< .001,* respectively. It was hypothesized that spiritual companionship will positively correlate with affective commitment. No correlation, however, was found. We also hypothesized that perceived sacredness of the priesthood and a relationship with bishop/superior will negatively correlate with thought of leaving the priesthood. The model provided evidence for their significant correlations, *ß= -.24, t=3.36, p< .001* and *ß= -.14, t=1.91, p< .056,* respectively. It was expected that spiritual companionship will negatively correlate with thought of leaving the priesthood. However, no support for the hypothesis was found. As whole, these results suggest that an increased level of perceived sacredness of the priesthood and of a relationship with bishop/superior are associated with an increased level of affective commitment and also a decreased level of thought of leaving the priesthood. The correlational patterns were true, however, only when demographic, parental, and personality variables were kept constant.

(Hypothesis 12. *Attributing the most likely reasons for leaving the priesthood to internal and stable causes will negatively correlate with affective commitment and will positively correlate with thought of leaving the priesthood and continuance commitment).* Since attribution styles were dropped from the final analysis, there was no test for this hypothesis.

Hypothesis 13. *Three Hypothesized Models of Priestly Commitment with four sets of predictors including demographic, social, personality, and religious variables*

ordered hierarchically in the regression fit with the data. Subsequently, newly added predictors will have indirect effects on the previously added predictors in their associations with priestly commitment in the model. As predicted, the Hierarchical Multiple Regression (HMR) models of priestly commitment fit well with data. Three hypothesized models of priestly commitment (Affective commitment, continuance commitment, and thought of leaving the priesthood) were significantly better than a random guess or without a model as evident in the statistical significance observed.

The first hypothesized model tested was that the HMR of affective commitment with four sets of predictors including demographic, social, personality trait, and religious variables ordered hierarchically in the regression fit with the data. In consistence with the hypothesis, the affective commitment model was statistically significant and represented adequately by four sets of predictor variables. The demographic variables accounted for 5% variance, F (2, 169) = 4.11, at the significance of < .05, parental variables accounted for 8% variance, F (2, 167) = 7.60, at the significance of < .001, personality variables accounted for 25% variance, F (8, 159) = 7.95, at the significance of < .001, and religious variables accounted for additional 18% variance, F (6, 153) = 10.55, at the significance of < .001, in affective commitment model. As a whole, a total variance of 56% accounted for the model.

The second hypothesized model was that the HMR of continuance commitment with four sets of predictors including demographic, social, personality trait, and religious variables ordered hierarchically in the regression fit with the data. The result showed that three out of four sets of predictor variables for continuance commitment model were significant. The demographic variables accounted for 5% variance, F (2, 169) = 8.95 at

the significance of < .001. Parental variables explained only 2% variance in continuance commitment which is insignificant. Personality variables accounted for additional 5% variance in the model, F (8, 159) = 5.24, at the significance of < .05, and the religious variables accounted for 10% variance, F (6, 153) = 6.55, at the significance of < .001. As a whole, a 23% total variance accounted for the continuance commitment model.

Finally, the third hypothesized model was that the HMR of thought of leaving the priesthood with four sets of predictors including demographic, social, personality trait, and religious variables ordered hierarchically in the regression fit with the data. Similar to the affective commitment, the model was significantly accounted for by all four sets of predictor variables, showing the goodness of fit with the data. Demographic variables accounted for 10% variance, F (2, 169) = 8.95 in the thought of leaving the priesthood model at the significant level of < .001, and parental variables accounted for additional 13% variance, F (2, 167) = 14.46 at the significant level of < .001. Personality variables explained 16% variance, F (8, 159) = 5.24, at the significant level of .001, and religious variables added 9% variance, F (6, 153) = 6.55, in thought of leaving the priesthood at the significant level of .001. As a whole, a total variance of 49% accounted for thought of leaving the priesthood model.

The statistical results indicated that the probability of priestly commitment models to be wrong is less than 5% when looking specifically at two predictor variables, namely, demographic predictors for affective commitment model and personality predictors for continuance commitment model. Far more convincing, the statistical descriptions showed that 9 out of 12 sets of predictor models had a significant level of .001, meaning that the probability for these models to occur just by chance was 0.1%, which is highly unlikely.

Statistically, with the significant goodness of fit with the data, all hypothesized models, especially the affective commitment and thought of leaving the priesthood models, are meaningfully interpretable.

Individually, affective commitment model and thought of leaving the priesthood model accounted for 56% and 49%, respectively, of the total variance, meaning that each has about 50% of unexplained variance. In contrast, continuance commitment with a total of 23% explained variance had more than 75% of unexplained variance. With these total variances, the affective commitment model and thought of leaving the priesthood model are equally informative, and they are also much more accountable than the continuance commitment model for the priesthood.

In addition to testing the model as a whole, the intercorrelations between variables in predicting priestly commitment are examined. Subsequently, it was hypothesized that *the newly added variables will have indirect effects on the previously added variables in their correlations with priestly commitment in the model*. Affective commitment model provided partial support for this hypothesis as reflected in the indirect effects of parental care and agreeableness through their correlations with the significant religious variables.

Added to Model 2, while controlling for demographic variables, the two parental variables had statistically significant correlations with affective commitment, F (2, 167) = 7.60, $p < .001$. Parental care and affective commitment were positively correlated, $\beta = .18$, $t = 2.25$, at the significant level of $< .02$, while parental overprotection and affective commitment were negatively correlated, $\beta = -.16$, $t = -2.08$, at the significant level of $< .04$. Their correlational patterns, however, were suppressed and insignificant when personality trait variables were added to Model 3. In the final model which supported the hypothesis,

when religious variables were introduced, parental care and affective commitment were negatively correlated, *ß= -.15, t=-2.09*, at the significant level of <.03. Statistically, while personality trait variables suppressed the correlational effect of parental care on affective commitment, religious variables revived the effect of parental care on reducing affective commitment. Stated differently, parental care and affective commitment were negatively correlated via their positive associations with religious variables in the model. However, this is true when the demographic, parental, and personality trait variables in the model were kept constant.

Further support for the hypothesis was found through the effect of agreeableness on affective commitment in Model 3 which was observed to be statistically positive, *ß= .23, t=2.44,* at the significant level of < *.03.* With the introduction of religious variables to Model 4, while controlling for the previous variables, the positive correlation between agreeableness and affective commitment became much stronger, *ß= .28, t=3.33,* which is at the significant level of <.001. The significant increase of *ßeta (23 to 28) values*, *t* (2.44 to 3.33) values, and *p* (.03 to .001) values from Model 3 to Model 4 due to the addition of religious variables suggests that the magnitude of correlation between agreeableness and affective commitment was moderated by their positive correlations with the significant religious variables in the model. Thus, when all demographic, parental, and personality variables were kept constant, the degree to which agreeableness increases the affective commitment is relative to the degree to which religious variables increase the affective commitment in the model.

Multiple Regression Analysis

Finally, the following Multiple Regression analysis are to test the hypotheses related to well-being, namely, that there would be significant correlations between three measures of priestly commitment (affective commitment, continuance commitment, and thought of leaving the priesthood) and well-being involving affect balance, psychological well-being, and religious well-being. The analysis began with the assumption tests which involve linearity, multicollinearity, independence of error terms, homoscedasticity, and normality of distribution.

Assumption Tests

The three separate Multiple Regression analyses resulted in significant R^2 values of .22 ($p < .001$) on affect balance, .31 ($p < .001$) on psychological well-being, and .29 ($p < .001$) on religious well-being. The significant R^2 values were also consistent with the F-ratios (ANOVA) of 16.03 ($p < .001$), 25.52 ($p < .001$), and 23.04 ($p < .001$), respectively, for affect balance, psychological well-being, and religious well-being. This significance suggests that the regression models predict well-being better in comparison to guessing or not to attempting to fit the model, which provides empirical evidence to reject the null hypothesis that there is no linear relationship between priestly commitment and well-being.

Related to the multicollinearity, Pearson's correlations between six variables were weak to moderate, ranging between -.14 ($p < .05$) and -.67 ($p < .01$), suggesting that there is no real multicollinearity between the variables. Table 10 below presents their Pearson's Correlations, as well as the alpha and descriptive statistic. Additionally, the Collinearity

Diagnostics resulted in Tolerance values of .55 to .88 which are greater than the critical value of .10. Similarly, the VIF values ranged between 1.13 and 1.93 which are below the critical value of 10. Thus, each predictor contributes a unique variance to the model, and no redundancy among predictors is evident.

Table 10

Pearson's Correlation and Descriptive Statistics of Well-being and Priestly Commitment Variables (N=172)

	Variables	1	2	3	4	5	6
1.	Affective Commitment	-					
2.	Continuance Commitment	-.24**	-				
3.	Thought of Leaving	-.67**	.27**	-			
4.	Affect Balance	.44***	-.14*	-.41***	-		
5.	Psychological Well-being	.48***	-.30**	-.51***	.49***	-	
6.	Religious Well-being	.51***	-.25**	-.44***	.41***	.53***	-
	Mean	41.14	13.16	4.99	6.43	87.86	54.74
	Standard Deviation	6.87	6.28	2.30	3.81	8.74	5.23
	Alpha	.81	.78	.73	.70	.77	.76

Note: *Significant at p= < .05 (1-tailed); **Significant at p= <.01

The Durbin-Watson (*d*) Statistic Test for affect balance, psychological well-being, and religious well-being resulted in *d*-values of 2.13, 2.10, and 1.95, respectively, which fell between the two critical values of 1.50 and 2.50. Thus, there was statistical evidence to assume an independence of the residuals. The plots of standardized residuals against standardized predicted values showed that there was no clear relationship pattern between

the residuals and predicted values of three domains of well-being, showing that an equal variance could be assumed. Both Histograms and Normal P-P of Regression Standardized Residuals also verified the normal distributions for the three dependent variables.

Finally, the Casewise Diagnostics reveal that no case has a standardized residual greater than 3 for the dependent variable of psychological well-being. There were 2 cases for dependent variables of religious well-being and 3 cases for that affect balance on each imputed output with standardized residual greater than 3. However, the Cook's distances of those cases were less than 1, suggesting no reasonable concern (Field, 2013). Taken together, with no real concern of violating the assumptions, this data provided a statistical suitability for three Multiple Regression analyses to be reliably or validly conducted so as to provide interpretable outcomes. Table 9 presents a summary of three MR analyses.

Tested Hypothesis

As Table 11 displays, three separate Multiple Regression analyses fit well with the data. The Multiple Regression models of affect balance, psychological well-being, and religious well-being accounted for 22%, 31%, and 29%, respectively, of each total variance, which was significant at $p = <.001$. As a whole, the three variables of priestly commitment were reliably predictive of well-being. With this goodness-of-fit of the models, the related hypothesis could be verified.

Hypothesis 14. *Affective (and normative commitment) will positively correlate with three measures of well-being, while continuance commitment and thought leaving the priesthood will negatively correlate with three measures of well-being.*

Table 11

Summary of Multiple Regression Analysis for Priestly Commitment Variables Predicting Affect Balance, Psychological and Religious Well-being (N=172)

DVs	IV	R^2	*F*	*B*	*SE*	*ß*
Affect Balance		.22***	16.03***			
	Affective Commitment			.17	.05	.30***
	Continuance Commitment			.00	.04	-.01
	Thought of leaving			-.34	.16	-.21*
Psychological Well-being		.31***	25.52***			
	Affective Commitment			.30	.11	.24**
	Continuance Commitment			-.19	.09	-.14*
	Thought of leaving			-1.17	.34	-.31***
Religious Well-being		.29***	23.04***			
	Affective Commitment			.29	.07	.39***
	Continuance Commitment			-.09	.06	-.10
	Thought of leaving			-.34	.20	-.15

Note: *Significant at $p = < .05$; ***Significant at $p = < .001$

Consistent with the hypothesis 14, affective commitment was found to positively correlate with all aspects of well-being, which include affect balance*, ß= .30, t=3.29,* at the significant level of < .01*,* psychological well-being*, ß= .24, t=2.72,* at the significant level of < .01*,* and religious well-being*, ß= .39, t=4.39*, which is at the significant level of < .001. This indicates that an increased level of affective commitment is associated with the increased level of affect balance, psychological well-being, and religious well-being.

It was also hypothesized that *continuance commitment and thought leaving the priesthood will negatively correlate with three measures of well-being.* Partial support for the hypothesis was found. Consistent with the hypothesis, the model indicated that continuance commitment correlates negatively with psychological well-being, *ß= -.14,*

t=2.03, which is at the significance of < .05. This suggests that an increased level of continuance commitment is associated with a decreased level of psychological well-being. In contrast to the hypothesis, however, no correlation was observed between continuance commitment and both religious well-being and affect balance.

Finally, it was hypothesized that thought of leaving the priesthood will negatively correlated with three measures of well-being. The model provided support for negative correlations between thought of leaving the priesthood and psychological well-being, *ß= -.31, t=3.46,* at the significant level of < *.001* and between thought of leaving and affect balance, *ß= -.21, t=2.19,* at the significant level of < *.05.* This suggests that an increased level of thought of leaving the priesthood is associated with a decrease in psychological well-being and affect balance. No correlation between thought of leaving and religious well-being was evident.

Unhypothesized, the Multiple Regression models of well-being were quite robust, each of which fit well with the data at the significant level of <.001. The three measures of priestly commitment (affective commitment, continuance commitment, and thought of leaving) accounted for a total variance of 22% in the affect balance model, of 31% in the psychological well-being model, and of 29% in the religious well-being model of priests and seminarians.

To summarize the analyses above, the Hierarchical Multiple Regression Model of priestly commitment and Multiple Regression Model of well-being fit nicely with the data which also provided empirical bases to test the individual hypotheses of this study. In regard to the priestly commitment model, the resultant findings indicated that affective commitment and thought of leaving models were equally accountable for the priesthood,

each of which accounted for approximately 50% of the total variance. While several hypotheses were not or only partially supported by the model, substantial findings were consistent with research hypotheses, which signify that there were individual variables that significantly predict priestly commitment. Thus, those two models and the individual predictor variables deserved further discussion. Furthermore, it is noteworthy stating that affective commitment, relative to both continuance commitment and thought of leaving the priesthood, was the most reliable and sensitive predictor for well-being. Statistically, affective commitment was a favorable construct not only for commitment to the priesthood, but also well-being of Catholic priests and seminarians. With this, affective commitment deserves elaborate discussion.

CHAPTER VI

DISCUSSION

This present study was primarily aimed at: 1) Identifying the factors that best and reliably predict priestly commitment; 2) Understanding the paths of priestly commitment; and 3) Identifying the correlation between priestly commitment and well-being. The first two objectives were met through three separate Hierarchical Multiple Regression (HMR) analyses, each of which had four sets of predictor variables. The third objective was met by conducting three separate Multiple Regression (MR) analyses, each of which was with three measures of priestly commitment as the independent variables. The chapter presents a summary of the HMR and MR analyses and discusses the findings, followed by critical and reflective thoughts of the implications and limitations of this study. This chapter will begin with a discussion on the dependability of this particular sample and the responses.

Dependability of the Sample and Responses

Scientifically speaking, the results of any study are not interpretable unless the sample and responses are dependable and trustworthy. Thus, how do we confidently trust in this particular sample and the variables used for this study? These inevitable questions need answers, especially considering a relatively low response rate for the survey and a large percentage of cases dropped from the final analyses. For these reasons, a brief review of the demographic characteristics of the sample in comparison to those of other samples in similar studies of the priesthood, the reliabilities of the individual variables and Pearson's correlations, and assumptions of Multiple Regression should be useful.

The demographic characteristics contain critical information relevant to analyzing possible biases from the sample. With no definitive information on why not many priests and seminarians responded to the survey and why many respondents who only completed a small portion of the survey, caution should be carefully exercised. In this regard, a close look at the demographic characteristics, relative to other samples of similar studies, might provide a comparable measure for the dependability of this sample.

Demographic characteristics of Catholic priests and seminarians, particularly their sexual orientation and ethnic background, have been reported in the previous studies. In a study of Canadian seminarians, Rovers (1995) reported that 74% were heterosexual, 12% were homosexual, 6.5% were bisexual, and 6.5% were unsure. In Murphy's (1992) study of priests, 72% were heterosexual, 18.6% were homosexual, and 9.2% were bisexual. As Table 1 (p. 102) indicated, the sexual orientation of priests and seminarians in the present study was relatively comparable to that of the earlier reports, with a similar percentage of heterosexuals (75%) as in Rovers' report, and with the percentage of homosexuals (14%) falling within the two samples. The percentage of bisexuals (4.7%) was lower than the other two samples. However, this might be due to the percentage of those responding differently or giving no answer in this study. In addition, Rovers and Murphy did not appear to give an option to a different response. With this in mind, the sexual orientation of this sample did show a similar distribution to that of other samples.

Due to the different ways of grouping the ethnic and racial backgrounds of priests and seminarians, precise comparisons might not readily be made. In two studies of priests ordained the first five years and five to nine years, Hoge (2002 & 2006) found that about 80% or 83% of diocesan and religious priests were born in the U.S.A which resembles

the percentage (79.1%) of those considering themselves as a Caucasian in this study. The percentage of Hispanic (4.7%) and of Asian/Asian American (2.9%) was lower than Hoge's reports (about 9% for Hispanic and 6% for Asian/Asian American), while that of African/African American (4%) was higher than Hoge's report (1%). Thus, there was a slightly different demographic distribution of those in the non-Caucasian groups, relative to that of other studies. However, considering the small percentage of these groups, the difference seemed to be peripheral and within an ordinary range, indicating comparable characteristics to other samples and showing no real concern for sample bias regarding the ethnic characteristics.

In addition to the demographic characteristics, the individual responses may be relevant to examining the dependability of the sample. As previously mentioned, 73 cases were excluded from the analyses due to the significant amount of missing values, and yet, 172 remaining cases had a missing value of 2.42%. With this, how could these remaining values or responses be confidently trusted? As has been noted, there is a small amount of missing values occurring at random. Tabanick and Fidel (2001) stated that a small portion ($\leq 5\%$) of missing values in a random pattern has an insignificant effect on a statistical analysis. Thus, while certain information was unavailable on how those 73 cases would affect the analyses and results, if included, there was no real cause of concern for the remaining cases and values. Moreover, independent sample t-tests showed no difference in age and vocation status between the 73 excluded and the 172 included subjects.

In addition, the reliabilities of the individual variables and Pearson's correlations verified further the degree to which the sample and responses could be trusted. As shown previously on both Table 2 and Table 4, most of the individual variables had adequate to

excellent reliabilities which provided statistical evidence that the responses were mostly valid. Furthermore, not only did the individual variables have a high reliability, but each pair of variables had adequate correlations within a reasonable range, which suggest a unique contribution of each individual variable. Thus, there were statistical bases for the reliability of responses from this sample.

Finally, the dependability of this sample and variables could be also verified from the consistent patterns with the assumptions of Multiple Regression. Four assumptions of the regression analyses which involved linearity, homoscedasticity, independence of error terms, and normality were adequately met. The random patterns between the standardized residuals and standardized predicted values (Figure 4, pp. 124-125) were consistent with the assumptions of linearity and homoscedasticity. Furthermore, the Probability Plots of Standardized Residuals (Figure 6, pp. 127-128) suggested relatively normal distributions. The Durbin-Watson Statistic Test also verified the independent residuals as reflected in the value within the two critical values of 1.5 and 2.5. Additionally, none of the identified outliers had a Cook's distance of >1, indicating no serious effect on the models, and thus, there was no real issue that the data departed the assumptions of Multiple Regression.

Taken together, despite the relatively low response rate for the present survey and the relatively large number of excluded cases from the final analyses due to their missing values, there was neither real issue nor reasonable concern that this particular sample and its responses were unreliable. In contrast, there was much evidence that the final sample and variables were relatively dependable or reliable, and therefore, the findings may be deemed interpretable and meaningful.

Predictive Factors for Priestly Commitment

The major findings of this present study identified the best and most reliable factors for commitment to the priesthood determined through the Hierarchical Multiple Regression analyses. Four sets of factors which involved demographic (Model 1), parental (Model 2), personality trait (Model 3), and religious variables (Model 4) were hierarchically or subsequently regressed on three measures of priestly commitment, including affective commitment, thought of leaving the priesthood, and continuance commitment. Three HMR analyses fit well with the data. However, the first two regressions were notably much more accountable, relative to the latest. Respectively, they accounted for a total variance of 56%, 49%, and 23%. This means that both affective commitment and thought of leaving models provide much more relevant and meaningful information relative to continuance commitment for the priesthood.

That total amount of explained variance also means that the affective commitment and thought of leaving the priesthood models had about 50% of unexplained variance left or remaining. This unexplained variance, theoretically, is one explained by other factors outside the models. In contrast, with less than 25% of its explained variance, continuance commitment had more than 75% of variance from other factors outside this model. With much larger amount of explained variance, affective commitment and thought of leaving the priesthood models are more capable (informative) of explaining priestly commitment.

Literature has documented the reliability and sensitivity of affective commitment in measuring one's organizational behaviors, which appeared also to be more robust than normative and continuance commitment (Meyer & Allen, 1997; Meyer & Maltin, 2010). Following Meyer and Allen's organizational commitment theory, affective commitment

to the priesthood is specifically defined as one's emotional attachment to, identification with, and involvement in the priesthood. The present study indicated its applicability and sensitivity of affective commitment. Complimentary to affective commitment, thought of leaving the priesthood was included as an additional measure of the priestly commitment. Thought of leaving the priesthood refers to a reflection of the subjective probability that a priest or seminarian will change his priestly vocation within a certain time period (Sousa-Poza & Henneberger, 2002). The study evidenced that thought of leaving was equally but distinctively accounted for by most predictor variables that were accountable for affective commitment.

With its Pearson's negative correlation of -.67 with affective commitment (Table 3, *p*. 116), thought of leaving the priesthood variable might represent the opposite of affective commitment. Moreover, 5 of 8 variables accounting for affective commitment attributed contradictorily to thought of leaving the priesthood. On the other hand, the two models had different paths. Parental care, extraversion, and agreeableness were relevant to affective commitment, but irrelevant to the thought of leaving the priesthood model. And vice versa, parental overprotection was relevant to thought of leaving but not to affective commitment. With these different paths, it seems unlikely that they simply represent two contradictory models.

Thought of leaving the priesthood might be suggestive of a "cognitive" aspect of priestly commitment. Looking at the items measuring the thought of leaving construct, participants were specifically to rate if "they often or already have thought of leaving the priesthood". Thus, participants were to indicate their frequency of "intention" to leaving which might reflect a cognitive, rather than, affective nature. While more investigation

and validation are necessary, thought of leaving the priesthood was proven to be as good and sensitive as affective commitment to the various predictors in the model. Table 12 presents a summary of the most reliable, favorable, and unfavorable variables or factors for priestly commitment. As reflected by the number of reliable variables, a combination of affective commitment and thought of leaving the priesthood models would be much more accountable/informative and more useful for the priesthood.

Table 12

A Summary of Most Reliable Factors for Priestly Commitment

	Factors or Variables	
Priestly Commitment	*Most Reliable, Favorable*	*Most Reliable, Unfavorable*
Affective	Relation w/ bishop/superior (*ß*=.41) Agreeableness (*ß*= .28) Defensiveness (*ß*= .17) Masculinity (*ß*= .17) Intrinsic Religiosity (*ß*= .14) Sacred View of the Priesthood (*ß*= .14)	Loneliness (*ß*= -.31) Extraversion (*ß*= -.31) Parental Care (*ß*= -.15)
Thought of Leaving the Priesthood	Sacredness of the Priesthood (*ß*= -.24) Masculinity (*ß*= -.22) Relation w/ bishop/superior (*ß*= -.14)	Parent Overprotective (*ß*= -.21) Extraversion (*ß*= .19) Loneliness (*ß*= .17)
Continuance		Extrinsic Religiosity (*ß*= .30)

In contrast to affective commitment model and thought of leaving the priesthood model, continuance commitment model is less informative for the priesthood. Only one variable

reliably predicts it. With this, the individual predictor variables for affective and thought of leaving the priesthood models will be worthy of more elaborate discussion.

Demographic Variables

The demographic variables including age and vocational status significantly correlated with priestly commitment only when they were analyzed independently, that is, prior to the addition of other variables to the model. No correlation was evident, however, when other predictor variables were present. The findings seemed to be inconsistent with the previous reports documenting the significance of young age in priestly resignation (Hoge, 2002; Schoenherr & Young, 1988; & Verdieck, Shields, & Hoge, 1988). The inconsistence is in fact not unexplainable. The inability of demographic variables to survive in the final model might simply suggest that demographic variables do not fully belong to the model and/or do not reliably predict priestly commitment.

On the other hand, given the hierarchical order of four predictor variables in the present study, it was not unlikely that more enduring variables would affect demographic effects. In this case, the disappearing effect of demographic variables might be due to suppression by more enduring variables such as parental, personality trait, and religious variables. This pattern was, in fact, consistent with the findings from previous studies of organization commitment showing that the effects of demographic factors are generally weak, and if existent, it is mostly moderated by other variables, specifically personality trait variables (Meyer & Allen, 1997).

Alternatively, priestly commitment is not simply a product of natural maturation, but it might be a complex interplay and function of the individual's parental experience,

personality characteristic, and religiosity beliefs. A closer look at each of the standardized Beta coefficients indicates that the parental variables suppressed demographic effects on commitment to the priesthood. However, parental variables did not completely eliminate demographic effects. In contrast, the individuals' personality and religiosity suppressed and paralyzed the effects of demographic variables completely. Supporting what Potvin (1989) and Rossetti (2011) have suggested, priestly commitment may reflect a dynamic function of parental environment, personality trait, and religiosity variables.

Parental Variables

As the HMR analyses show, parental care and overprotection significantly and reliably predicted affective commitment. When demographic variables were kept constant and before personality and religious variables were included, parental care and affective commitment were positively correlated. The addition of personality variables to the model, however, not only paralyzed the impact of parental care, but also changed the direction of its effect on affective commitment, $\beta = .04, t = -.55$. In the final model, when religious variables were included, while controlling for demographic and personality variables, the correlation between parental care and affective commitment was negatively significant, $\beta = .15, t = -2.09, p < .05$. Such a negative direction was quiet unexpected, considering the positive correlation of parental care with intrinsic religious orientation (r =. 29, p <. 01), perceived sacredness of the priesthood (r =. 34, p <. 01), and relationship with bishop/superior (r =. 52, p <. 01).

Statistically, the correlation between parental care and affective commitment was not independent of other predictor variables. Instead, the correlation and direction were

significantly suppressed and changed by personality variables, but, it was then revived and significantly moderated by religious variables. Therefore, parental care is relevant to affective commitment due to its association with the significance of religious variables in the model, which replicated the previous report (Potvin & Muncada, 1990). As summary, the pattern leads one to predict that the stronger the positive correlation between religious variables and affective commitment, the stronger also is the negative correlation between parental care and affective commitment to the priesthood.

In contrast to the impact of parental care, that of parental overprotection was quite independent of other variables. The HMR analyses showed that, after controlling for age and vocational status, parental overprotection and thought of leaving the priesthood were positively correlated. Moreover, the positive correlation, as shown by its *ßeta coefficients* of .28, .24, and .21 in the last three models, was significant and relatively reliable after personality trait variables were added to Model 3 and after the introduction of religious variables to Model 4. Evidently, with or without personality trait and religious variables, the increased level of parental overprotection is associated with an increased level of the thought of leaving the priesthood which is consistent with the earlier findings that a tense relationship with parents had a negative influence on the priesthood and its commitment (Rossetti, 2010; Verdieck, Shields, & Hoge, 1988; & Weisgerber, 1969). This suggests that one's experience of parental overprotection is always relevant to thought of leaving the priesthood whether or not personality trait and religious variables were included in the model.

As a whole, the present study provided evidence for the roles of parental care and parental overprotection on priestly commitment. The unexpected effect of parental care

might be explained in two ways. First, affective commitment to the priesthood might not be simply an extension of one's parental care, but rather a unique, paradoxical expression of the individual's spiritual preference to the priesthood. Some biblical messages may be relevant to explaining such seemingly contradiction as "If anyone comes to me and does not hate his father and mother…, yes, even his own life- he cannot be my disciple (Luke, 14: 26) or "Anyone who loves their father or mother more than me is not worthy of me" (Matthew 10: 37). Within these paradoxical messages, the detachment from parental care to the attachment to affective commitment to the priesthood might reflect one's way of valuing and prioritizing the priesthood.

Alternatively, the individual's experience of parental care might be necessary but not the right foundation for priestly commitment. As Table 7 (p.131) indicates, prior to the entries of personality trait and religious variables in the model, there was a positive correlation between parental care and affective commitment. However, with the entry of religious variables to the model, the effect of parental care paralyzed by the previous addition of personality variables became negatively significant. Thus, religious variables might not merely mediate, but transform the effect of parental care on priestly commitment. Stated differently, religious variables may represent an individual's way of reinterpreting and integrating parental experiences into the priesthood. In this case, parental care becomes relevant to affective commitment due its association with the significance of religious variables to the affective commitment (Potvin & Muncada, 1990).

Parental overprotection seems to have a different role in the priestly commitment. An individual's experience of parental overprotection is statistically unfavorable for the

priestly commitment by increasing the thought of leaving the priesthood. Different from the correlational effect of parental care on affective commitment, the effect of parental overprotection on thought of leaving the priesthood was reliably significant, with/without personality and religious variables. Potvin and Muncada (1990) have long documented the negative and enduring influence of strict parents on persistence in the seminary. The seminarians reporting to have strict parents were less likely to persist in their vocations. Similarly, this study found a correlational pattern, the stronger the experience of parental overprotection, the stronger the individual's thought of leaving the priesthood. Evidently, parental overprotection was unfavorable for the priesthood which might be explained in two different ways.

Parental overprotection might prevent an individual from developing or mastering an adequate sense of agency which might also create an extreme need for independence/ freedom which is incongruent with the priesthood, especially its value of obedience held by Church. With an inadequate sense of an active agent, the individual might also lack an ability to maintain an ownership of and commitment to his vocational decision. In this case, the positive Pearson's correlation between parental overprotection and neuroticism as well as between parental overprotection and negative religious coping may account for this. These existing correlations may reflect the individual's emotional vulnerability and poor capacity to persist in their vocation.

Alternatively, with a strong experience of parental overprotection, one might then develop an extreme need for independence/freedom which appears to be reflected to the significant Pearson's correlation between parental overprotection and both agreeableness and relationship with bishop/superior (Table 4, p.117). With the idea of an extreme need

for independency, parental overprotection should be negatively related to agreeableness and to relationship with authority figures. This was precisely what the present study indicated, that is, the negative correlations between parental overprotection and agreeableness ($r = -.31$, $p < .01$) and between parental overprotection and relationship with bishop/superior ($r = -.20$, $p < .01$). The logical consequence is parental overprotection becomes unfavorable for the priesthood by increasing the thought of leaving the priesthood.

Personality Variables

Of the eight personality trait variables which qualified for the HMR analyses, 5 variables which include extraversion, agreeableness, defensiveness, masculinity, and loneliness reliably predicted priestly commitment. When demographic and parental variables were held constant, extraversion and loneliness weakened affective commitment, whereas agreeableness, defensiveness, and masculinity enhanced affective commitment. The patterns remained significant after the inclusion of religious variables which proved the reliable roles of these 5 personality predictors. Similarly for thought of leaving the priesthood, of 8 personality predictor variables in the model, 3 variables were significantly correlated. Controlling for demographic and parental variables, extraversion was positively correlated, whereas masculinity and loneliness were negatively correlated with thought of leaving the priesthood. The patterns remained with the entry of religious variables in the final model. As a whole, consistent with the earlier findings, the present study provided further evidence for the significant contribution of personality factors in

the organizational commitment (Meyer & Allen, 1997) and in the priestly commitment (Zondag, 2006, Potvin & Muncada, 1990).

In contrast to the literature on the organizational commitment showing a positive correlation between extraversion and affective, continuance, and normative commitment (Erdheim et al., 2006; Kumar & Bakhshi, 2010), this study showed the opposite, that is, extraversion had a negative correlation with affective commitment but a positive one with thought of leaving the priesthood. This relational pattern might suggest the unique nature of the priestly commitment. Literature on the organizational commitment also showed no or weak correlation between agreeableness and any forms of commitment. This study, on the other hand, indicated its positive effect on affective commitment, which might further reflect the uniqueness of priestly commitment. The importance of obedience held by the Catholic Church might be accountable for the positive association between agreeableness and affective commitment. In this regard, agreeableness might represent the individuals' disposition in accepting and internalizing the Church value of obedience.

Alternatively, the unfavorable impact of extraversion and favorable influence of agreeableness on affective commitment might suggest the adaptive function of the two personality variables. The previous studies on the priesthood commitment consistently showed a tendency among Catholic priests to be introverted (Burns et al., 2012, Craig et al., 2006, & Macdaid et al., 1986). Burns and his colleagues have suggested "Introverted priests might be particularly good at promoting a reflective spirituality, at dealing with selected individuals on a one-to-one basis, and at preparing well for public events", (*p*. 242). In addition, although the individuals in the priesthood were considered as public figures, much of what the individuals do deal with the personal lives of their people such

as ministering the sacrament of reconciliation and providing consultation, which might also promote an introverted life style. In this regard, an introverted preference might be more favorable for the priesthood. Overall, the study provided (at least indirect) evidence that introversion and agreeableness are more favorable and adaptable for the priesthood and its commitment. Finally, given the contradictory effect on the priestly commitment, in comparison to that on the organizational commitment, extraversion and agreeableness might further differentiate the priestly commitment from the organization commitment.

Defensiveness and masculinity also are worthy discussing, given their reliable correlation with priestly commitment. Previous studies have well documented a common pattern of Catholic priests and seminarians to be defensive and feminine (Kuchan et al., 2013 & Plante et al., 2005). This study provided further evidence for the positive role of defensiveness on affective commitment. However, in contrast to the previous findings on femininity among priests, no correlation was evident with the priestly commitment. The present study, instead, showed that masculinity was positively correlated with affective commitment and negatively related to thought of leaving the priesthood. Put differently, the increased levels in defensiveness and masculinity is associated with an increased level of affective commitment but with a decreased level of thought of leaving the priesthood. Obviously, both defensiveness and masculinity are desirable for the priestly commitment.

The pattern might be explained in several ways. First, considering the Church's requirement for the Catholic priests to be male and to observe the Church's teachings, the positive correlations between masculinity and defensiveness and affective commitment might represent the individuals' goodness of fit with the demands of the priesthood. The previous studies consistently reported that more educated individuals with a high level of

defensiveness as measured by the MMPI-2 tend to have a good adjustment. This study provided evidence for the positive contribution of defensiveness and masculinity to the priestly commitment. Given their positive correlation (Table 4, p.117), it might be the case that defensiveness and masculinity reflect one's hardiness or toughmindedness. Louden and Francis (1999) have reported that Catholic priests are "more toughminded than men in general" although their toughmindedness "may generate some difficulties for some aspects of ministry" (p. 72).

Furthermore, literature on organizational commitment has well documented the association between personality trait and vocation interest (Meyer & Allen, 1997), which showed that the closer the goodness of fit between personality and vocational interest, the stronger the individuals' commitment to their vocational interest. In this regard, these two personality traits of masculinity and defensiveness might fit well with the nature as well as demands of the priesthood. That is, with these personality traits, the individuals might comfortably adapt to or positively identify with the priesthood and its demands, and so as to suppress or reduce their thought of leaving the priesthood.

Specific attention should be paid to loneliness which has been well documented as the most reliably unfavorable variable for priestly commitment (Hoge, 2002; Schoenherr & Young, 1988; Verdieck, Shields, & Hoge, 1988). As indicated in the literature review, Hoge categorized four different types of reasons for leaving the priesthood, and of these four types, loneliness was found to be the most common condition necessary for leaving the priesthood. The present study provided evidence for the negative effect of loneliness on priestly commitment. The increased level of loneliness was not only associated with a decreased level of affective commitment, but also associated with an increased level of

thought of leaving the priesthood. Furthermore, this study documented that, even with the entry of religious variables in the final model which were expected to suppress its impact, loneliness remained statistically capable of both weakening affective commitment and increasing thought of leaving. Thus, loneliness was undeniably the most unfavorable variables for the priesthood.

Previous studies (Hoge, 2002; Verdiek, Shields, & Hoge, 1988) have documented the correlation between loneliness and the increase of the desire to marry among priests deciding to resign. Verdieck et al. compared the resigned and active priests from two different samples taken in 1975 and 1985. They found that in both samples of resigned priests the crucial factor for desiring marriage is loneliness. While it was not the intent of this present study to look at the impact of desire to marry on the priestly commitment, an unexpected result about the ineffectiveness of spiritual companionship and relationship with bishop/superior in preventing the negative effect of loneliness might be relevant to this discussion. A relevant question is simply why. It might be case that loneliness in the priesthood is so strongly connected to the increased desire for marriage that even spiritual companionship was incapable of breaking it. The resulting tension indicates that the stronger the loneliness, the weaker the affective commitment, and the stronger the thought of leaving the priesthood.

Alternatively, loneliness might play a role in invalidating one's vocational choice rather than increasing the need for intimacy or desire for marriage. The fact that religious variables such as intrinsic religiosity, sacredness of the priesthood, and relationship with bishop/superior were not strong enough to suppress the effect of loneliness might suggest that loneliness in the priesthood is not so much associated with the need/lack of support.

Instead, it might be more related to the individual's sense for not being validated in his vocation choice. In this regard, experience of loneliness might be interpreted as indicator or signal that the priesthood is not the right choice. Put differently, loneliness invalidates one's vocation decision. And vice versa, the absence of loneliness might be then a signal for the individual that the priesthood is indeed his right choice. This might be accountable for why religious variables, including intrinsic religiosity, spiritual companion, perceived sacredness of the priesthood, and relationship with bishop/superior were not sufficient to fully suppress the impact of loneliness.

Religious Variables

After controlling for demographic, parental, and personality variables, 4 religious variables were found to be significant in the affective commitment model. Intrinsic religiosity, perceived sacredness of the priesthood, and a relationship with bishop or superior were positively correlated with affective commitment. This means that an increased level of these variables was significantly associated with an increased level of affective commitment. In addition, the study indicated that perceived sacredness of the priesthood weakened the thought of leaving the priesthood, whereas extrinsic religiosity enhanced the continuance commitment. Again, the correlational patterns were true only when the possible effects of the demographic, parental, and personality variables in the model were controlled.

The role of religious variables in the model as a whole deserves special attention. As mentioned previously, when religious variables were included in the model, parental care became significantly relevant to affective commitment. In the contrast, the inclusion

of personality variables in the model paralyzed or suppressed the role of parental care on affective commitment. In this regard, religious variables might function as a unique way of integrating the individual's experience. With the inclusion of religious variables in the model, the individual's past experience of parent care became relevant and meaningful to the priesthood and its commitment. However, considering the negative role of parental care on priestly commitment, the religious variables might reflect further the individual's way of reinterpreting and integrating the experience with parents according to his belief/ conviction in the priestly vocation. The negative role of parental care due to the entry of religious variables in affective commitment might specifically represent the way how the individual prioritizes his religious conviction and priestly vocation.

The significance of religious variables, especially intrinsic religiosity on priestly commitment was relatively similar to what was found in the commitment to marriage, commitment to social work/justice, and commitment to the community/society. That is, the intrinsic religiosity was favorable for, while the extrinsic religiosity was unfavorable for most religiously and socially-oriented commitment (Brooks, 2004; Robinson, 1993; Yeganeh & Shaikhmahmoodi, 2013). The pattern might suggest that religious orientation is a common and primary foundation for various forms of religious or socially-valued commitments/vocations. Gorsuch (1990) suggested that intrinsic religiosity might help people identify with what they believe and value as the core of their being or existence.

Specific to the priesthood, the intrinsic religious orientation might represent the individual's potential to identify with or internalize the priesthood and its demands which is a process critical for affective commitment (Zondag, 2001). Furthermore, the previous studies have shown that individuals with intrinsic religious orientation live out religious

faith for the sake of faith itself (Gorsuch, 1990) which might explain the role of intrinsic religiosity in the identification with the priesthood and its values (Rolla, 1990). However, intrinsic religiosity was not related to thought leaving the priesthood which indicates that intrinsic religiosity does not belong to the thought of leaving model. Taken together, it might be relevant in discussing affective commitment but not relevant in discussing thought of leaving the priesthood based on one's intrinsic religiosity.

Consistent with the previous findings on the significant role of dissatisfaction with authority and the obligation of celibate life in the priestly resignation (Hoge, 2012), this study provided evidence for the positive correlations between both relationship with bishop/superior and perceived sacredness of the priesthood and affective commitment and a negative correlation between these two predictor variables with thought of leaving the priesthood. This indicates that both variables were favorable for the priesthood. Given the importance of obedience in the Church and the priesthood, a relationship with bishop/ superior might help the individual identify with the priestly role in the Church. In their positive relationship with their bishop or superior, the individual might find affirmation or validation about his own priestly vocation.

Noteworthy attention should be also given to the role or relevance of perceived sacredness of the priesthood to both affective commitment and thought of leaving the priesthood. When demographic, parental, and personality variables were kept constant, the model showed that the increased level of perceived sacredness is associated not only with an increased level of affective commitment but also with a significant reduction in thought of leaving the priesthood. This research provided evidence for the reliability and

sensitivity of perceived sacredness of the priesthood as the strongest and most favorable predictor of priestly commitment.

Pathways of Priestly Commitment

It has long been thought that vocational or priestly commitment is a complex process. No variable was completely independent of others in its account (Potvin & Muncada, 1990), and there were multi-layers of reasons/motivations involved in the seminarian withdrawal (Bier, 1971; Weisgerber, 1967) and the priestly resignation (Hoge, 2002; Rossetti, 2010). This study provided further evidence for this complex dynamic of vocational and priestly commitment. Four layers of predictors, namely, demographic, parental, personality trait, and religious factors accounted for 5%, 8%, 25%, and 18%, respectively, of the variance in the subjects' affective commitment to a total of 56%, whereas in the subjects' thought of leaving the priesthood, they accounted for 10%, 13%, 16%, and 9%, respectively, for a total variance of 49%. The goodness-of-fit of these two models provided empirical bases to verify priestly commitment as the complex function of interconnected factors.

The fundamental role of parental environment in vocational/priestly commitment was evident in the present study. Verifying further what Potvin and Muncada (1990) have stated, "parent-child relations are relevant for perseverance because of their associations with significant personality variables" (p. 85), this study showed the influence of parents (caring and overprotective) in the vocational/priestly commitment through the influence of not only personality but also religious factors. More specifically, this study identified two different paths of commitment to the priesthood: Parental care was predictive of the affective commitment through its significant association with religious variables, whereas

parental overprotection led to thought of leaving the priesthood, with or without its association with personality and religious variables. Thus, consistent with the previous finding, the present study provided evidence for the idea of priestly commitment as a function of parental role with its correlation with personality and religious factors.

Following the parental relevance, personality factors undeniably, on the bases of the explained variance given to the models, played the greatest role on commitment to the priesthood. This pattern was consistent with the findings on organizational commitment (Meyer & Allen, 1997). In contrast to the studies of organizational commitment showing the favorable effect of extraversion, this study found the opposite which might represent the uniqueness of priestly commitment. Agreeableness, on the other hand, was favorable for priestly commitment, and its effect was much greater due to the moderating effect of religious variables in the model. Previous studies have documented specific profiles of priests and seminarians as being defensive and introverted (Kuchan et al., 2013; Plante et al., 2005). This study gave further evidence for the favorability of these two personality traits on priestly commitment. Also consistent with the previous reports on the negative effect of loneliness (Hoge, 2002; Verdiek, Shields, & Hoge, 1988), this study provided additional evidence. Loneliness weakened affective commitment and increased thought of leaving when demographic and parental variables were kept constant. In conclusion, despite their greater and more reliable significance, personality variables were not fully independent of other variables in affecting priestly commitment. The personality effects were partially affected by religious factors.

The significant roles of religious variables were evident in both subjects' affective commitment and thought of leaving the priesthood. Not only were the religious variables

significantly associated with priestly commitment, but also through their significant roles, the meaningfully existing correlation between both parental and personality variables and priestly commitment became significant and stronger. Statistically, the religious variables might mediate the significance of parental care and moderate the effect of agreeableness on affective commitment. These correlational patterns were true only when demographic, parental, and personality variables were kept constant, and religious variables were added to the model. The interdependent patterns of how the individual and the sets of variables predicted priestly commitment might reveal a complex dynamic of the priesthood and its commitment (Potvin & Muncada, 1990; Rossetti, 2010).

Priestly Commitment and Well-being

Three separate Multiple Regression analyses were performed to investigate the possible correlations between affective commitment, continuance commitment, and thought of leaving the priesthood as the independent variables and the three domains of well-being which include affect balance, psychological well-being, and religious well-being as the dependent variables. The first MR analysis resulted in a positive correlation between affective commitment and affect balance and a negative correlation between thought of leaving the priesthood and affect balance. The second MR analysis indicated a positive correlation between affective commitment and psychological well-being and negative correlations between continuance commitment and thought of leaving the priesthood and psychological well-being. Lastly, on the third MR analysis, affective commitment was found to positively correlate with religious well-being.

Overall, affective commitment is the most positive and reliable predictor variable for all domains of well-being. As a whole, the increased level of affective commitment was associated with the increased level of affect balance, psychological well-being, and religious well-being. In contrast, both continuance commitment and thought of leaving the priesthood were negatively correlated with an individual's psychological well-being, meaning that the increased level of continuance commitment and thought of leaving the priesthood is associated with the significant reduction in one's psychological well-being. Specific to the thought of leaving the priesthood, the study showed a negative correlation with affect balance, meaning that the more frequent the thought of leaving the priesthood, the lower the affect balance level is. This is consistent with the organizational report that employees with low commitment were susceptible to feelings of stress due to a decrease in physical and psychological well-being. In contrast, for those who have strong affective commitment, stress was mostly unrelated to changes in physical and psychological well-being (Begley & Czajka, 1993).

In general, the above patterns were consistent with what has been documented in the previous research on organization commitment. In a review of studies on the relationship between the organizational commitment and well-being, Meyer and Maltin (2010) wrote, "In summary, AC (affective commitment) tends to relate positively to well-being and negatively to strain" and CC (continuance commitment) appears to relate positively to strain in many cases" (p. 325). Additionally, literature on work-related stress or tension (Meyer & Allen, 1997; O'Reilly & Orsak, 1991; O'Reilly, Chatman & Caldwell, 1991) also suggested that affective commitment was negatively associated with stress-related measure indexes, while continuance commitment has a positive effect. This

implies that affective commitment is favorable for and sensitive to well-being, whereas continuance commitment and thought of leaving the priesthood are unfavorable for well-being. In this case, affective commitment might provide a protection against work-related stress, and thus, sustain the individual's general well-being. In contrast, continuance commitment and thought of leaving might become a source of psychological tension or conflict which is unfavorable for their well-being.

Accordingly, affective commitment might give the individual a subjective sense of harmony or goodness-of-fit which might further promote the individuals' well-being. On the contrary, continuance commitment and thought of leaving the priesthood might instead create a subjective sense of dissonance or disharmony which then weakens the individuals' well-being. Research on organizational commitment has well documented a tendency among employees with strong continuance commitment to experience conflict and emotional tensions which consequently also affect one's well-being and immune system (Emmons & King, 1988; Kivimaki, 2002; Reilly, 1994).

Implications to the Priesthood and Future Research

This study has significant implications to the priesthood and to the future research. The implications to the priesthood include formation related recommendations and practical suggestions for priests and seminarians. The implications for the future research include the need for a theoretical revisit of the priestly (perhaps organizational) commitment, the applicability of the organizational commitment to the priesthood, the multiple factors for priestly commitment, the reliable measures for predicting priestly

commitment, the use of online surveys in the priesthood, and Hierarchical Multiple Regression method.

The identified factors which reliably predicted priestly commitment are definitely relevant to the priestly formation and maintenance. The study indicated that parental care and overprotection are critical for vocational commitment. Considering the significant role of parental care in weakening affective commitment and of parental overprotection in increasing their thought of leaving the priesthood, it suggests that those who work in formation programs for the priesthood need to address these unfavorable conditions with their seminarians and develop an effective approach to integrate the parental experience into their vocation. Furthermore, since parental care becomes relevant to the affective commitment through the significance of religious variables in the model, it may also be relevant for seminarians to recognize the impact of parental environment in the individual's religious belief.

Additionally, given the unfavorable effects of loneliness and extraversion on the priestly commitment model, it is further recommended that formation programs for the priesthood provide adequate interpersonal and coping skills to deal with these potential threats. Priests and seminarians need to be mindful of the consequences of loneliness and extraversion or their own vulnerabilities. In response to the unfavorable role of loneliness in the priestly resignation, Rossetti (cited in Hoge, 2002) pointed out wisely an important "concept of connection" (p. 134) or "man of communion" (p.135).

Finally, considering the positive effects of the sacred sense of the priesthood and relationship with bishop/superior in strengthening affective commitment and in reducing thought of leaving the priesthood, it is also recommended that formation programs for the

priesthood create a conducive atmosphere with spiritual dialog and enrichment so as to help the seminarians validate and nourish their sacred senses of the priesthood as well as maintain an affective connection to their diocese/community and their bishop/superior. Evidently, growing and maintaining spiritual health, especially a sense of sacredness in the priesthood, is crucial for priests and seminarians to remain in the priesthood.

Related to the assessment, this present study provides practical implications in selecting psychological instruments for the assessment of the priestly candidates. This study shows several potential instruments for this purpose, including Parental Bonding Instrument, Big Five Personality Inventory, MMPI-II, Revised UCLA Loneliness Scale, Bem Sex Role Inventory, Religious Orientation, Perceived Sacredness of the Priesthood Scale, Relationship with Bishop/Superior Scale, Affect Balance Scale, Psychological Well-being Scale, and Religious Well-being Scale.

Despite the limited number of published studies, there has been an effort in applying the organization commitment theory and measures proposed by Meyer and Allen (1997) to the study of priestly commitment (Zondag, 2001). This study provided evidence for its usability in measuring and explaining commitment to the priesthood, especially affective commitment seemed to be reliable, interpretable, and informative. Continuance commitment was reliable, although it was less sensitive or informative for the priesthood. In the present study, normative commitment was unreliable, as shown in its unacceptable Cronbach's alpha. Literature on the organizational commitment also reported a reliability issue related to normative commitment (Meyer & Allen, 1997; Meyer & Maltin, 2010). Several studies suggested a further potential discriminant issue between normative and affective commitment to the organization. Subsequently, this may

be suggestive of the need for revisiting the organizational commitment constructs, especially this normative commitment construct.

The present study also provided evidence for the usability of thought of leaving the priesthood scale or construct. This construct was found to be as statistically reliable, interpretable, and informative as affective commitment was. In this regard, thought of leaving the priesthood might reflect the opposite side/end (or continuum) of affective commitment to the priesthood. Alternatively, thought of leaving the priesthood might be (theoretically) viewed as a cognitive component of commitment to the priesthood. This potential construct/component of priestly commitment is definitely open for further exploration and research.

Thirdly, this study extends the previous knowledge about the multiple factors for priestly commitment. While loneliness in the priesthood has long been identified as one necessary condition for priestly resignation (Hoge, 2002), the most recent study (Rossetti, 2010) suggested that priestly commitment and resignation are more complex than what was previously thought. This study provided evidence for other factors contributing to priestly commitment and thought of leaving the priesthood. Four factor models, which involve demographic, parental, personality trait, and religious variables, fit well with the data for affective commitment and thought of leaving the priesthood. However, given the medium sample size used in the present study, further research with a large and more representative sample size to replicate these findings is necessary.

Finally, discussing recruitment methods is also noteworthy. Almost one third of the potential subjects for the present study were dropped from the analysis due to the large number of missing values. While these incomplete responses cannot exclusively be

attributed to the online survey format as its primary cause, this considerable portion itself is sufficient to be cautious with the online survey format. Clearer instruction with greater emphasis on completing the entire online survey may be necessary. Alternatively, a mailing survey can be a better option for a priestly survey although it will consume more time, energy, and finances.

Limitations

While the present study provided relevant findings for the priesthood, there are several limitations to be taken into consideration, including the potential bias of the use of self-report instrument, incomplete responses, non-random sample selection with the online survey format, measures for priestly commitment, and the correlational nature of the study.

This present study used self-report instruments which are associated with some potential limitations. Self-report measures are often considered to be subjective and influenced by social desirability bias. Combined with the online survey method, the self-report format might be sensitive and more susceptible to a personal bias, although it is possible that the anonymity might reduce the social desirability, and thus becomes less inflated.

Given a high percentage of cases dropped from the analysis, there is inevitably a question as to what extent the remaining sample of this study could be trusted. While four important assumptions for Multiple Regression analyses performed to answer all research questions were well met, how much the dropped cases may have affected the outcomes, if

included, remains unknown. Thus, the findings of this present study should be interpreted with respect to its limits.

Although the sample of the study was taken nationally from different locations, it was not randomly selected. In addition, participation in the present study was voluntary, meaning that participants were self-selected which also suggests potentially a volunteer bias. Taken together, this nonrandom sample with a voluntary selection could limit the ability of this present study to generalize these results.

A caution should be also taken in conjunction with the instruments to measure the priestly commitment. In the present study, we modified three components of organization commitment to measure commitment to the priesthood. The reliability test showed that affective and continuance commitment have adequate Cronbach's alphas. However, normative commitment failed to reach an adequate Cronbach's alpha. Although a careful analysis has been conducted to verify the reliability of the measures, the modification itself should be considered as a reason for concern. In addition, thought of leaving the priesthood scale was not an integral part of the priestly commitment. Although there was a strong Pearson's correlation between this subscale and other two subscales for priestly commitment, one should be aware of a potential validity issue with the overall construct of priestly commitment.

Finally, considering its correlational nature, this present study has no basis or way to assume any cause-effect relationships between variables. While the variables identified and listed as the most favorable or most unfavorable factors for priestly commitment can be relevant to the priesthood, caution should be carefully taken, especially in interpreting the results. No causal statement should be made.

CONCLUSION

Predicting commitment to the priesthood has long been the interest of past studies. Many of the individual studies have determined some factors thought to be favorable or unfavorable for the priesthood. Examining four sets (demographic, parental, personality, and religious) of factors simultaneously using Hierarchical Multiple Regression analyses, this present study was able to determine the variables that are significantly and reliably associated with the priestly commitment. Among those predictor variables in the models, perceived sacredness of the priesthood was found to be the most favorable factor for the priestly commitment, while loneliness, as previous studies have well documented, was the most unfavorable factor. Other variables with significant predictive effects on priestly commitment also deserved recognition.

Parental care was found to paradoxically weaken the affective commitment, while parent overprotective enhanced thought of leaving the priesthood. Specific to personality trait variables, the study showed that the increased level of agreeableness, defensiveness, and masculinity is associated with the increased level of affective commitment, whereas an increased level of extraversion and loneliness weakens it. Extraversion and loneliness were found to be associated with an enhanced thought of leaving the priesthood, whereas masculinity weakened it. Additionally, the study found that intrinsic religiosity, perceived sacredness of the priesthood, and relationship with bishop/superior are associated with an increased level of affective commitment, whereas perceived sacredness of the priesthood and relationship with bishop/superior are associated with a decreased level of the thought of leaving the priesthood. Extrinsic religious orientation was the only significant variable in the model that is associated with an enhancement of continuance commitment.

As important as the individual variables' contributions are to the models so also are the paths to commitment to the priesthood. This present study identified further how a set of factors affected other factors in predicting priestly commitment. The HMR models for affective commitment and thought of leaving the priesthood indicated two distinctive, but, nevertheless, complimentary paths. Parental, personality trait, and religious variables were involved in both paths. Specifically, this present study documented the relevance of parental environment to priestly commitment independently as well as interdependently through the significance of religious variables. Personality trait variables which include defensiveness, masculinity, and loneliness tended to correlate with commitment to the priesthood, independently of other sets of variables. Lastly, religious variables not only had direct, positive correlations with priestly commitment, but they also mediated and moderated the correlations between both parental and personality variables and priestly commitment. As a whole, the paths of how the individual and sets of predictor variables predict priestly commitment might reflect a complex dynamic of interrelated factors.

Finally, in addition to identifying the factors for priestly commitment, this present study examined the correlation between priestly commitment and three domains of well-being, including affect balance, psychological well-being, and religious well-being. The three separate Multiple Regression analyses showed that affective commitment was associated with the increased level of all aspects of well-being, continuance commitment reduced psychological well-being, and thought of leaving reduced affect balance and psychological well-being.

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APPENDIX I-A:
First Letter to President Rector of the Seminary

Monsignor/Father _____,

My name is Yulius Sunardi, SCJ. I am a priest of the Sacred Heart of Jesus. Currently, I am doing my doctoral research on commitment to the priesthood at Marquette University in Milwaukee, Wisconsin. It is in this regard, I am asking you for help. Is it possible for me to invite the seminarians and alumni priests from _____to participate in my research? The research will be conducted through online survey, and I also invite other seminaries. The objective is to identify the predictive factors for commitment to the priesthood.

This study is anonymous. No any personal information will be collected. I am employing an IMPLIED CONSENT by providing a consent page via the internet and clearly stating that completing the survey implies consent to participate. To protect seminarians/priests and to maintain their confidentiality, there will no direct communication/interaction with seminarians and priests. I will send you the link to the survey, and then you forward it to them.

Each seminarian or alumni priest who is willing to participate in this research will receive online questionnaires which take approximately 45 minutes. All data will be assigned an arbitrary code number rather than using name or other information that could identify the participant. All data will go directly to the password-protected online database of Survey Monkey where only I and my advisors can get access to it. Research Institutional Board might also inspect the database.

The risks associated with participation in this research are minimal. The questions regard personal and sometimes sensitive matters that may cause some discomfort. Participation is completely voluntary, and they may withdraw from the study and stop participating at any time without penalty and loss of benefits. As compensation, I will present the results at Sacred Heart School of Theology in Hales Corners, Wisconsin and at other seminaries if requested.

I do appreciate your help, and I will provide you with more information if you would like to know more or have any concerns regarding the nature of this research. Please feel free to contact me at the address below. Thank you very much for your interest and response.

Attached are a letter from my provincial, a brief proposal of my dissertation (background and significance of the study), the agreement of consent for research participants, and the questionnaires. I deeply thank you for allowing me to do this research.

Cordially yours
Fr. Yulius Sunardi, SCJ
Phone 414-8584605
Email Address: yulius.sunardi@marquette.edu

APPENDIX I-B:
Second Letter to President Rector of the Seminary

Dear Monsignor/Father _____
I hope that this email finds you well. It has been about a month since I sent you the link to the priestly commitment survey. Thanks for having sent it to the seminarians and alumni priests. We have now about___% of the minimum number necessary for the study to be considered adequate. Receiving this ___% within a month is pretty good. Thanks to the seminarians/priests responding to the survey.

It is not uncommon for seminarians and priests to wait for the right time to complete the survey. While some might decide not to participate, many others might forget or miss the survey-related email. Therefore, I am humbly asking you to send them a reminder of the survey and the link to it. If you don't mind, gentle encouragement in your email will be great. Below is the survey link:

tps://www.surveymonkey.com/s/RTLSBCX

Another one I would like to ask is the number of E-mails sent to seminarians and alumni priests or the number of seminarians and priest being invited. The number is important for the study in so as to estimate the response rate, which will further help us compare it with other studies of the priesthood. Thank for your help and support.

Cordially yours

Yulius Sunardi, SCJ

APPENDIX I-C:
Third Letter to President Rector of the Seminary

Dear Monsignor/Father _____
I will close the survey on _____, which is a week from today. I thank all seminarians and priests who have completed the survey, and if it is possible, I would like to ask you to inform the seminarians and priests about this closing date so that those who have not yet had time, but would like to be part of the survey may have chance to complete the survey before the expiration date. Below is the link to the survey:

https://www.surveymonkey.com/s/RTLSBCX

I am really grateful for your help and support. It is now my part to analyze and write the results, which I look forward to with much excitement. Again, thank you, and God bless.

Cordially yours

Yulius Sunardi, SCJ

APPENDIX I-D:
Thank-you Note

Dear Father and Seminarian,
Thanks for your participation. I am grateful for doing this research with you. In answering all questions, I hope that you find some insights into our priestly vocation. Please forward the link of this survey to other seminarians and priests you know if you feel that this survey will benefit our priestly vocation, the Church we love, our fellow priests and seminarians, and our vocation or formation directors. I am definitely grateful for your thoughtful participation. After my doctoral defense, I will give a presentation on the results of this survey. I look forward to your presence at this presentation. You will receive details from your president-rector. May God bless you with great joy and enthusiasm in your ministries and studies.

Cordially yours,

Yulius Sunardi, SCJ

APPENDIX II:
Agreement of Consent for Research Participants

MARQUETTE UNIVERSITY
AGREEMENT OF CONSENT FOR RESEARCH PARTICIPANTS
PSYCHOLOGY DEPARTMENT

Dear Father and Seminarian
My name is Yulius Sunardi. I am a priest of the Sacred Heart of Jesus and a doctoral student at Marquette University. I invite you to participate in a priestly commitment survey. Before you agree to participate, it is important that you read and understand the following information. Participation is completely voluntary. Please ask questions about anything you do not understand before deciding whether or not to participate. By completing the survey on the following pages, you are implying consent to participate in this survey project.

PURPOSE: The purpose of this research study is to examine some factors (family, social support, attitudes, and spiritual/religious experiences) that might have influence on the vocations of Catholic seminarians and priests. You will be one of approximately 175 participants in this research study.

PROCEDURES: Please complete the questions that follow. There will be specific directions for each set of questions. Please read the instructions before answering the question.

DURATION: The complete survey requires approximately 45 minutes to complete. We suggest you do this in one session.

RISKS: The risks associated with participation in this study are minimal. The questions regard personal and sometimes sensitive matters that may cause some discomfort.

BENEFITS: There are no large and direct benefits to participants, except that you might become more self-reflective and insightful about your own inner life while answering the questionnaire. However, we would like to present the results sometimes in the future, which might give you better understanding of influences on your vocation and that of others as a priest, religious, or seminarian. The knowledge gained will also provide us with direction and practical guidance about what we need to do in order for us to maintain our vocation.

CONFIDENTIALITY: This research is anonymous. All information you reveal in this study will be kept confidential. All your data will be assigned an arbitrary code number rather than using your name or other information that could identify you as an individual. When the results of the study are published, you will not be identified by name. The data will be stored in an encrypted file on Dr. Ed de St. Aubin’s computer, and all the data

will be destroyed when I leave Marquette University. Your research records may be inspected by the Marquette University Institutional Review Board or its designees.

COMPENSATION: There is no financial gain associated with your participation. However, you and all seminarians and priests who receive the invitation to participate in this research may be invited to attend presentations on the results.

VOLUNTARY NATURE OF PARTICIPATION: Participating in this study is completely voluntary and you may withdraw from the study and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

CONTACT INFORMATION: If you have any questions about this research project, you can contact Dr. Ed de St. Aubin at (414) 288-2143. If you have questions or concerns about your rights as a research participant, you can contact Marquette University's Office of Research Compliance at (414) 288-7570.

I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO PARTICIPATE IN THIS PROJECT.

APPENDIX III:
Questionnaires (A-Q) for the Survey

General Instruction: Please answer all questions as honestly and accurately as possible in their given order. This survey is anonymous, confidential, and voluntary. No identifying information will be collected. Please find the best time so that you can complete it in one session. This survey will take approximately 45 minutes. Make sure you read each set of questions carefully, as the responses to each set are answered in different ways.
Thank you for your cooperation.

A. <u>Sociodemographic Questionnaire</u>
Direction: The following questions are to gather some demographical information. Please check one box for each question:
1. My age is:
□ 29 or less □ 30-39 □ 40-49 □ 50-59 □ 60-69 □ Over 69
2. I am a:
□ Diocesan Seminarian Religious Seminarian Diocesan Priest
□ Diocesan Priest □ Deacon
3. If you are a:
Seminarian, what year are you in the program?
□□ Pre-theology □ First Year □ Second Year □□ Third Year
□□ Fourth Year □ Fifth Year □ Pastoral Year
Priest/Deacon, how many years have you been ordained?
□ 1-5 □ 6 to 15 □ 16 to 30 □ 31 to 45 □ 46 or more
4. My country/race/ethnicity is: □
□ Caucasian □ Hispanic □ African American □ African
□ Asian American □ Asian □ European □ Others ____
5. My sexual orientation:
□ Homosexual □ Heterosexual □ Bisexual □ Unsure

B. **<u>Family Religiosity Scale</u>**
Please indicate how you parents practiced their Catholic faith in your first 16 years, using this scale: 1 = Never True; 2 = Rarely True, 3 = Sometimes True, 4 = Always True.

□ Attended Sunday Mass/Holy Days of obligation	□ 1	□ 2	□ 3	□ 4
□ Were consistent in how they live out their faith.	□ 1	□ 2	□ 3	□ 4
□ Showed their faith in Christ by how they talk and act.	□ 1	□ 2	□ 3	□ 4
□ Had not much interest in Catholic faith in Church*	□ 1	□ 2	□ 3	□ 4
□ Showed me what it means to be an authentic Christian	□ 1	□ 2	□ 3	□ 4
□ Were socially involved in the community/parish	□ 1	□ 2	□ 3	□ 4

C. **<u>Religious Experience Scale</u>**
Please rate how often did you engage in the following activities in your first 16 years of age, using this scale. 1 = Never; 2 = Rarely; 3 = Sometimes, or 4 = Very Often

□ Attending Mass or other liturgical celebrations	□ 1	□ 2	□ 3	□ 4
□ Being a boy scout or a member of social youth groups	□ 1	□ 2	□ 3	□ 4

□ Spending time in private prayer or reflection □ 1 □ 2 □ 3 □ 4
□ Being an altar boy/lector/Eucharistic minister □ 1 □ 2 □ 3 □ 4
□ Taking part in social/community work □ 1 □ 2 □ 3 □ 4
□ Reading books/magazines about the church/faith □ 1 □ 2 □ 3 □ 4

D. Affect Balance Scale

Direction: Please indicate your feelings these days. During the past few weeks, did you ever feel:

□ Pleased about having accomplished something? □ Yes □ No
□ That things were going your way? □ Yes □ No
□ Proud because someone complimented you on something you had done? □ Yes □ No
□ Particularly excited or interested in something? □ Yes □ No
□ On top of the world? □ Yes □ No
□ Depressed or very unhappy? □ Yes □ No
□ Very lonely or remote from other people? □ Yes □ No
□ Upset because someone criticized you? □ Yes □ No
□ So restless that you couldn't sit long in a chair? □ Yes □ No
□ Bored? □ Yes □ No

E. **Parental Bonding Instrument**

Instruction: This questionnaire lists various attitudes and behaviors of parents. As you remember your father/mother in your first 16 years, check the most appropriate box for each question. If during the first 16 years, you lived with your relatives such as aunts, uncles, or grandparents who reared you, consider males as FATHER, and females as MOTHER. Use this scale: 1 = Never; 2 = Sometimes; 3 = Usually; or 4 = Almost Always

Father				1 = Never; 3 = Sometimes; 2 = Usually; 1 = Almost Always	Mother			
1	2	3	4		1	2	3	4
□	□	□	□	1. Spoke to me in a warm and friendly voice	□	□	□	□
□	□	□	□	2. Did not help me as much as I needed*	□	□	□	□
□	□	□	□	3. Let me do those things I liked doing*	□	□	□	□
□	□	□	□	4. Seemed emotionally cold to me*	□	□	□	□
□	□	□	□	5. Appeared to understand my problems and worries	□	□	□	□
□	□	□	□	6. Was affectionate to me	□	□	□	□
□	□	□	□	7. Liked me to make my own decisions*	□	□	□	□
□	□	□	□	8. Did not want me to grow up	□	□	□	□
□	□	□	□	9. Tried to control everything I did	□	□	□	□
□	□	□	□	10. Invaded my privacy	□	□	□	□
□	□	□	□	11. Enjoyed talking things over with me	□	□	□	□

Father				1 = Never; 3 = Sometimes; 2 = Usually; 1 = Almost Always	Mother			
1	2	3	4		1	2	3	4
□	□	□	□	12. Frequently smiled at me	□	□	□	□
□	□	□	□	13. Tended to baby me	□	□	□	□
□	□	□	□	14. Did not seem to understand what I needed/wanted*	□	□	□	□
□	□	□	□	15. Let me decide things for myself	□	□	□	□
□	□	□	□	16. Made me feel I wasn't wanted*	□	□	□	□
□	□	□	□	17. Could make me feel better when I was upset	□	□	□	□
□	□	□	□	18. Did not talk with me very much*	□	□	□	□
□	□	□	□	19. Tried to make me feel dependent on her/him	□	□	□	□
□	□	□	□	20. Felt I could not look after myself unless she/he was around	□	□	□	□
□	□	□	□	21. Gave me as much freedom as I wanted*	□	□	□	□
□	□	□	□	22. Let me go out as often as I wanted*	□	□	□	□
□	□	□	□	23. Was overprotective of me	□	□	□	□
□	□	□	□	24. Did not praise me	□	□	□	□
□	□	□	□	25. Let me dress in any way I pleased*	□	□	□	□

F. **MOS-Social-Spiritual Support Scale**

Instruction: People sometimes look to others for companionship, assistance, and support. How often each of the following kinds of support available to you if you need! Check one on each line.

How available is . . . for you?	None of the time	A little time	Some of the time	Most of the time	All of the time
1. Someone to help with daily chores if you were sick	□	□	□	□	□
2. Someone to turn for spiritual advice about a vocational crisis.	□	□	□	□	□
3. Someone to do something enjoyable with	□	□	□	□	□
4. Someone who gives you a sense of connection to the community of faith.	□	□	□	□	□
5. Someone to turn to for suggestions about how to deal with a personal problem	□	□	□	□	□
6. Someone to share your spiritual life (joys, fears, or sadness) with.	□	□	□	□	□
7. Someone to love and make you feel wanted	□	□	□	□	□
8. Someone to show you cares about your vocation or ministry.	□	□	□	□	□

G. Big Five Personality Inventory

Direction: Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please check an appropriate box to indicate the extent to which you agree or disagree with that statement: 1. Strongly Disagree; 2. Disagree; 3. Neutral; 4. Agree; 5. Strongly Agree

Statements: I see myself as someone who...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Is talkative	☐	☐	☐	☐	☐
2. Tends to find fault with others*	☐	☐	☐	☐	☐
3. Does a thorough job	☐	☐	☐	☐	☐
4. Is depressed, blue	☐	☐	☐	☐	☐
5. Is original, comes up with new ideas	☐	☐	☐	☐	☐
6. Is reserved*	☐	☐	☐	☐	☐
7. Is helpful and unselfish with others	☐	☐	☐	☐	☐
8. Can be somewhat careless*	☐	☐	☐	☐	☐
9. Is relaxed, handles stress well*	☐	☐	☐	☐	☐
10. Is curious about many different things	☐	☐	☐	☐	☐
11. Is full of energy	☐	☐	☐	☐	☐
12. Starts quarrels with others *	☐	☐	☐	☐	☐
13. Tends to be lazy*	☐	☐	☐	☐	☐
14. Is a reliable worker	☐	☐	☐	☐	☐
15. Can be tense	☐	☐	☐	☐	☐
16. Is ingenious, a deep thinker	☐	☐	☐	☐	☐
17. Generates a lot of enthusiasm	☐	☐	☐	☐	☐
18. Has a forgiving nature	☐	☐	☐	☐	☐
19. Tends to be disorganized*	☐	☐	☐	☐	☐
20. Worries a lot	☐	☐	☐	☐	☐
21. Has an active imagination	☐	☐	☐	☐	☐
22. Tends to be quiet*	☐	☐	☐	☐	☐
23. Is generally trusting	☐	☐	☐	☐	☐
24. Is emotionally stable, not easily upset*	☐	☐	☐	☐	☐
25. Is inventive	☐	☐	☐	☐	☐
26. Has an assertive personality	☐	☐	☐	☐	☐
27. Can be cold and aloof *	☐	☐	☐	☐	☐

Statements: I see myself as someone who...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
28. Perseveres until the task is finished	☐	☐	☐	☐	☐
29. Can be moody	☐	☐	☐	☐	☐
30. Is considerate and kind to almost everyone	☐	☐	☐	☐	☐
31. Values artistic, aesthetic experiences	☐	☐	☐	☐	☐
32. Is sometimes shy, inhibited*	☐	☐	☐	☐	☐
33. Does things efficiently	☐	☐	☐	☐	☐
34. Remains calm in tense situations*	☐	☐	☐	☐	☐
35. Prefers work that is routine*	☐	☐	☐	☐	☐
36. Is outgoing, sociable	☐	☐	☐	☐	☐
37. Is sometimes rude to others*	☐	☐	☐	☐	☐
38. Makes plans and follows through with them	☐	☐	☐	☐	☐
39. Gets nervous easily	☐	☐	☐	☐	☐
40. Likes to reflect, play with ideas	☐	☐	☐	☐	☐
41. Has few artistic interests*	☐	☐	☐	☐	☐
42. Likes to cooperate with others	☐	☐	☐	☐	☐
43. Is easily distracted*	☐	☐	☐	☐	☐
44. Is sophisticated in art, music, or literature	☐	☐	☐	☐	☐

H. **Defensive Scale of the MMPI-2**

Direction: Please read each statement below and decide whether it is true as applied to you or false as applied to you. If a statement is true or mostly true, check the **True Box**. If a statement is false or not usually true, check the **False Box**. But try to give a response to every statement.

Statements	True	False
1. At times I feel like swearing.	☐	☐
2. At times I feel like smashing things.	☐	☐
3. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.	☐	☐
4. It takes a lot of argument to convince most people of the truth.	☐	☐
5. I have very few quarrels with members of my family.	☐	☐
6. Often I can't understand why I have been so irritable and grouchy.	☐	☐
7. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.	☐	☐

Statements	True	False
8. At times my thoughts have raced ahead faster than I could speak them.	☐	☐
9. Criticism or scolding hurts me terribly.	☐	☐
10. I certainly feel useless at times.	☐	☐
11. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.	☐	☐
12. I have never felt better in my life than I do now.	☐	☐
13. What others think of me does not bother me.	☐	☐
14. It makes me uncomfortable to put on stunt at a party even when others are doing the same sort of things.	☐	☐
15. I find it hard to make talk when I meet new people.	☐	☐
16. I am against giving money to the beggars.	☐	☐
17. I frequently find myself worrying about something.	☐	☐
18. I get mad easily and then get over it soon.	☐	☐
19. When in a group of people I have trouble thinking of the right things to talk about.	☐	☐
20. I have periods in when I usually cheerful without any special reason.	☐	☐
21. I think nearly any anyone would tell a lie to keep out of trouble.	☐	☐
22. I worry over money and business.	☐	☐
23. At times I am full of energy.	☐	☐
24. People often disappoint me.	☐	☐
25. I have sometimes felt that difficulties were piling up so high that I could not overcome them.	☐	☐
26. At periods my mind seems to work more slowly than usual.	☐	☐
27. I have often met people who were supposed to be experts who were no better than I.	☐	☐
28. I often think, "I wish I were a child again."	☐	☐
29. I find it hard to set aside a task that I have undertaken, even for a short time.	☐	☐
30. I like to let people know where I stand on things.	☐	☐

I. <u>Bem Sex Roles Inventory</u>

Direction: Please use the following characteristics to describe yourself, and indicate how true of you each characteristic is, using the following scale: Never or almost never true, Usually not true; Sometimes true, Occasionally true, Often True, Usually true, and always true.

Characteristics	Never True	Usually Not True	Sometimes True	Occasionally True	Often True	Usually True	Always True
Defend my own beliefs	☐	☐	☐	☐	☐	☐	☐
Affectionate	☐	☐	☐	☐	☐	☐	☐
Independent	☐	☐	☐	☐	☐	☐	☐
Sympathetic	☐	☐	☐	☐	☐	☐	☐
Assertive	☐	☐	☐	☐	☐	☐	☐
Sensitive to needs of others	☐	☐	☐	☐	☐	☐	☐
Strong personality	☐	☐	☐	☐	☐	☐	☐
Understanding	☐	☐	☐	☐	☐	☐	☐
Forceful	☐	☐	☐	☐	☐	☐	☐
Compassionate	☐	☐	☐	☐	☐	☐	☐
Have leadership abilities	☐	☐	☐	☐	☐	☐	☐
Eager to soothe hurt feelings	☐	☐	☐	☐	☐	☐	☐
Willing to take risks	☐	☐	☐	☐	☐	☐	☐
Warm	☐	☐	☐	☐	☐	☐	☐
Dominant	☐	☐	☐	☐	☐	☐	☐
Tender	☐	☐	☐	☐	☐	☐	☐
Willing to take a stand	☐	☐	☐	☐	☐	☐	☐
Love children	☐	☐	☐	☐	☐	☐	☐
Aggressive	☐	☐	☐	☐	☐	☐	☐
Gentle	☐	☐	☐	☐	☐	☐	☐

J. <u>Revised UCLA Loneliness Scale</u>

Direction: Please indicate how often you feel the way described in each of the following statements by checking the appropriate box.

Statements	Never	Rarely	Some times	Often
1. I feel in tune with the people around me. *	☐	☐	☐	☐
2. I lack companionship.	☐	☐	☐	☐
3. There is no one I can turn to.	☐	☐	☐	☐
4. I do not feel alone.	☐	☐	☐	☐
5. I feel part of a group of friends. *	☐	☐	☐	☐
6. I have a lot in common with the people around me. *	☐	☐	☐	☐

Statements	Never	Rarely	Some times	Often
7. I am no longer close to anyone.	☐	☐	☐	☐
8. My interests and ideas are not shared by those around me.	☐	☐	☐	☐
9. I am an outgoing person.*	☐	☐	☐	☐
10. There are people I feel close to. *	☐	☐	☐	☐
11. I feel left out.	☐	☐	☐	☐
12. My social relationships are superficial	☐	☐	☐	☐
13. No one really knows me well.	☐	☐	☐	☐
14. I feel isolated from others.	☐	☐	☐	☐
15. I can find companionship when I want it. *	☐	☐	☐	☐
16. There are people who really understand me. *	☐	☐	☐	☐
17. I am unhappy being so withdrawn.	☐	☐	☐	☐
18. People are around me but not with me.	☐	☐	☐	☐
19. There are people I can talk to. *	☐	☐	☐	☐
20. There are people I can turn to. *	☐	☐	☐	☐

K. <u>Religious Orientation Scale</u>

Direction: Please indicate the extent to which you agree or disagree with each statement below by checking the appropriate box.

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I try hard to carry my religion over into all my other dealings in life.	☐	☐	☐	☐	☐
2. Quite often I have been keenly aware of the presence of God or the Divine Being.	☐	☐	☐	☐	☐
3. The prayers I say when I am alone carry as much meaning and personal emotion as those said by me during services.	☐	☐	☐	☐	☐
4. It is important to me to spend periods of time in private religious thought and meditation.	☐	☐	☐	☐	☐
5. My religious beliefs are what really lie behind my whole approach to life.	☐	☐	☐	☐	☐
6. Religion is especially important to me because it answers many questions about the meaning of life	☐	☐	☐	☐	☐
7. I read literature about faith (or church).	☐	☐	☐	☐	☐

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8. If I were to join a church group, I would prefer to join a Bible Study group rather than a social fellowship.	☐	☐	☐	☐	☐
9. If not prevented by unavoidable circumstances, I attend church.	☐	☐	☐	☐	☐
10. The church is most important as a place to formulate good social relationships.	☐	☐	☐	☐	☐
11. The purpose of prayer is to secure a happy and peaceful life.	☐	☐	☐	☐	☐
12. What religion offers me most is comfort when sorrows and misfortune strike.	☐	☐	☐	☐	☐
13. It doesn't matter so much what I believe so long as I lead a moral life.	☐	☐	☐	☐	☐
14. Although I am a religious person, I refuse to let religious considerations influence my everyday affairs.	☐	☐	☐	☐	☐
15. I pray chiefly because I have been taught to pray.	☐	☐	☐	☐	☐
16. A primary reason for my interest in religion is that my church is a congenial social activity.	☐	☐	☐	☐	☐
17. Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well-being.	☐	☐	☐	☐	☐
18. The primary purpose of prayer is to gain relief and protection.	☐	☐	☐	☐	☐
19. Although I believe in my religion, I feel there are many more important things in my life.	☐	☐	☐	☐	☐
20. One reason for my being a church member is that such membership helps to establish a person in the community.	☐	☐	☐	☐	☐

L. <u>Brief Religious Coping Scale</u>

Direction: The following items deal with the ways you typically cope with stressful/negative events in your life. Each item says something about a particular way of coping. Please indicate to what extent you did what the item says, which is h*ow much or how frequently.* Make your answers as true FOR YOU as you can, and check the answer that best applies to you.

Statements	Not at all	Some what	Quite a bit	A great deal
1. Looked for a stronger connection with God	☐	☐	☐	☐
2. Sought God's love and care.	☐	☐	☐	☐

Statements	Not at all	Some what	Quite a bit	A great deal
3. Sought help from God in letting go of my anger.	□	□	□	□
4. Tried to put my plans into action together with God.	□	□	□	□
5. Tried to see how God might be trying to strengthen me in this situation.	□	□	□	□
6. Asked forgiveness for my sins.	□	□	□	□
7. Focused on religion to stop worrying about my problems.	□	□	□	□
8. Wondered whether God had abandoned me.	□	□	□	□
9. Felt punished by God for my lack of devotion.	□	□	□	□
10. Wondered what I did for God to punish me.	□	□	□	□
11. Questioned God's love for me.	□	□	□	□
12. Wondered whether my diocese/community had abandoned me.	□	□	□	□
13. Decided the devil made this happen.	□	□	□	□
14. Sought God's love and care.	□	□	□	□

M. <u>Possible Reasons for Leaving the Priesthood</u>

Instruction-1: There are various reasons for one to leave the priesthood. If you were to leave the priesthood or the seminary, what would be the most likely reason that you might have?

□ Loneliness of the priestly life
□ Desire for an intimate relationship/marriage
□ Struggle with celibacy
□ Conflict/disagreement with authority
□ Lack of personal skills to meet pastoral demands
□ Difficulty of establishing private space
□ Others (Specify), _____

N. **<u>Causal Dimensional Scale</u>**

Instruction-2: Think again about your response to the Question #M and its cause. On the scale below, 9 represents Option A and 1 represents Option B. Choose the number which best reflects your response to the options.

Is the cause(s) something that:										
Is the cause (s) something that: Reflects an aspect of yourself	9	8	7	6	5	4	3	2	1	Reflects an aspect of the situation
Is the cause (s): Controlled by you or other people	9	8	7	6	5	4	3	2	1	Uncontrollable by you or other people

Is the cause(s) something that:										
Is the cause (s) something that is: Permanent	9	8	7	6	5	4	3	2	1	Temporary
Is the cause (s) something: Intended by you or other people	9	8	7	6	5	4	3	2	1	Unintended by you or other people
Is the cause (s) something that is: Outside of you	9	8	7	6	5	4	3	2	1	Inside of you
Is the cause (s) something that is: Variable over time	9	8	7	6	5	4	3	2	1	Stable over time
Is the cause (s): Something about you	9	8	7	6	5	4	3	2	1	Something about others
Is the cause (s) something that is: Changeable	9	8	7	6	5	4	3	2	1	Unchanging
Is the cause (s) something for which: No one is responsible	9	8	7	6	5	4	3	2	1	Someone is responsible

O. <u>View of the Priesthood Scale</u>

Direction: We are interested in your opinions of some aspects of the priesthood. Please indicate the extent to which you agree or disagree with each statement. Check one box that best describes your view.

Statements	Strongly Disagree	Disagree	Disagree Slightly	Agree Slightly	Agree	Strongly Agree
1. Despite its challenges, celibacy has been a grace for me personally.	☐	☐	☐	☐	☐	☐
2. Ordination confers on the priest a new status which makes him essentially different from the laity.	☐	☐	☐	☐	☐	☐
3. I have a good relationship with my bishop or superior.	☐	☐	☐	☐	☐	☐
4. I often think of leaving the priesthood.	☐	☐	☐	☐	☐	☐
5. I don't think God has called me to live a celibate life. *	☐	☐	☐	☐	☐	☐
6. I support my bishop's or superior's leadership.	☐	☐	☐	☐	☐	☐
7. I believe that a priest is a "man set part" by God.	☐	☐	☐	☐	☐	☐
8. I have looked for an alternative to the priesthood.	☐	☐	☐	☐	☐	☐
9. I don't think bishop or superior knows me. *	☐	☐	☐	☐	☐	☐
10. Celibacy is an expression of my dedication to Christ and God's people.	☐	☐	☐	☐	☐	☐

Statements	Strongly Disagree	Disagree	Disagree Slightly	Agree Slightly	Agree	Strongly Agree
11. The idea that priest is a "man set apart" is a barrier to the full realization of true Christian community. *	□	□	□	□	□	□
12. If I had a chance to do it over, I would become a priest again. *	□	□	□	□	□	□

P. <u>Commitment to the Priesthood Scale</u>

Direction: The following statements represent possible feelings that priests/seminarians may have about their priestly vocation. Please indicate the degree of your agreement or disagreement with each statement. Please check the number that most accurately reflects your feelings about each statement, using the following scale: 1= Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Undecided; 5 = Somewhat Agree; 6 = Agree; or 7 = Strongly Agree.

Statements	1	2	3	4	5	6	7
1. I would be very happy to spend the rest of my life in my priestly vocation	□	□	□	□	□	□	□
2. I am not afraid of what might happen if I leave my priestly vocation, even if without having a career or job lined up. *	□	□	□	□	□	□	□
3. I do not feel an obligation to remain in my priestly vocation. *	□	□	□	□	□	□	□
4. I enjoy discussing my priestly vocation with lay people.	□	□	□	□	□	□	□
5. It would be very hard for me to leave my priestly vocation right now, even if I wanted to.	□	□	□	□	□	□	□
6. Even if it were to my advantage, I do not feel it would be right to leave my priestly vocation now.	□	□	□	□	□	□	□
7. I really feel that any problems I experience in my priestly vocation are of my own doing.	□	□	□	□	□	□	□
8. Too much of my life would be disrupted if I decided to leave my vocation right now.	□	□	□	□	□	□	□
9. I would feel guilty if I left my priestly vocation now.	□	□	□	□	□	□	□
10. I think that I could easily become as attached to another vocation as I am to the priestly vocation. *	□	□	□	□	□	□	□
11. It wouldn't be too costly for me to leave my priestly vocation in the near future. *	□	□	□	□	□	□	□
12. My priestly vocation deserves my loyalty.	□	□	□	□	□	□	□
13. I do not feel like "a part of the family" at my diocese or congregation. *	□	□	□	□	□	□	□
14. Right now, staying with the priestly vocation is a matter of necessity as much as desire.	□	□	□	□	□	□	□

Statements	1	2	3	4	5	6	7
15. I would not leave my priestly vocation right now because I have a sense of obligation to the Church.	□	□	□	□	□	□	□
16. I do not feel "emotionally attached" to my priestly vocation. *	□	□	□	□	□	□	□
17. I believe that I have too few options to consider about leaving my priestly vocation.	□	□	□	□	□	□	□
18. I owe a great deal to my priestly vocation	□	□	□	□	□	□	□
19. The priestly vocation has a great deal of personal meaning for me.	□	□	□	□	□	□	□
20. One of the few negative consequences of leaving priestly vocation would be the scarcity of available alternatives.	□	□	□	□	□	□	□
21. I do not feel a strong sense of "belonging" to my priestly vocation. *	□	□	□	□	□	□	□
22. One of the major reasons I continue to live my priestly vocation and to work for the diocese/community is that leaving would require considerable personal sacrifice; another vocation may not match the benefits I had have.	□	□	□	□	□	□	□
23. If I had not already put so much of myself into my priestly vocation, I might consider living married life or another vocation.	□	□	□	□	□	□	□

Q. **Psychological-Spiritual Well-Being**

Direction: For each of the following statements, please check one response that best indicates the extent of your agreement or disagreement as it describes your personal experience.

Statements	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
1. I like most parts of my personality.	□	□	□	□	□	□
2. I believe that God loves me and cares about me.	□	□	□	□	□	□
3. For me, life has been a continuous process of learning, changing, and growth.	□	□	□	□	□	□
4. Some people wander aimlessly through life, I am not one of them.	□	□	□	□	□	□
5. I believe that God is concerned about my problems.	□	□	□	□	□	□
6. The demands of life often get me down. *	□	□	□	□	□	□

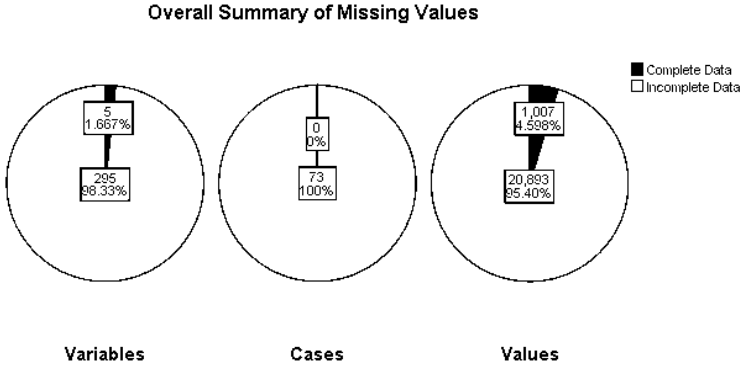
Statements	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
7. I don't get much personal strength and support from my God. *	☐	☐	☐	☐	☐	☐
8. I tend to be influenced by people with strong opinions. *	☐	☐	☐	☐	☐	☐
9. I don't find much satisfaction in private prayer with God. *	☐	☐	☐	☐	☐	☐
10. Maintaining close relationships has been difficult and frustrating for me. *	☐	☐	☐	☐	☐	☐
11. My relationship with God helps me not to feel lonely.	☐	☐	☐	☐	☐	☐
12. I have a personally meaningful relationship with God.	☐	☐	☐	☐	☐	☐
13. When I look at my life story, I am pleased with how things have turned out so far.	☐	☐	☐	☐	☐	☐
14. I think it is important to have new experiences that challenge how I think about myself and the world.	☐	☐	☐	☐	☐	☐
15. I live one day at a time and don't really think about the future.*	☐	☐	☐	☐	☐	☐
16. In general, I feel I am in charge of the situation in which I live	☐	☐	☐	☐	☐	☐
17. I don't have a personally satisfying relationship with God. *	☐	☐	☐	☐	☐	☐
18. I have confidence in my own opinions, even if they are different from the way most people think.	☐	☐	☐	☐	☐	☐
19. People would describe me as a giving person, willing to share my time with others.	☐	☐	☐	☐	☐	☐
20. In many ways, I feel disappointed about my achievements in life. *	☐	☐	☐	☐	☐	☐
21. I gave up trying to make big improvements in my life a long time ago. *	☐	☐	☐	☐	☐	☐
22. I believe that God is impersonal and not interested in my daily situations. *	☐	☐	☐	☐	☐	☐
23. I sometimes feel as if I've done all there is to do in my life. *	☐	☐	☐	☐	☐	☐
24. I am good at managing the responsibilities of daily life.	☐	☐	☐	☐	☐	☐

Statements	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
25. I judge myself by what I think is important, not by the values of what others think is important.	□	□	□	□	□	□
26. My relation with God contributes to my sense of well-being.	□	□	□	□	□	□
27. I have not experienced many warm and trusting relationships with others. *	□	□	□	□	□	□
28. I feel most fulfilled when I'm in close communion with God.	□	□	□	□	□	□

Note: *Reversed score

APPENDIX IV:
Summary of 73 Dropped Cases

A. Missing Value Pattern of 73 Cases Excluded



Variable Summary[a,b]

	Missing		Valid N	Mean	Std. Deviation
	N	Percent			
AttributionQ9	73	100.0%	0		
AttributionQ8	73	100.0%	0		
AttributionQ7	73	100.0%	0		
AttributionQ6	73	100.0%	0		
AttributionQ5	73	100.0%	0		
AttributionQ4	73	100.0%	0		
AttributionQ3	73	100.0%	0		
AttributionQ2	73	100.0%	0		
AttributionQ1	73	100.0%	0		
I feel most fulfilled when I'm in close communion with God.	73	100.0%	0	.	.00000
I have not experienced many warm and trusting relationships with others.	73	100.0%	0	.	.00000
My relation with God contributes to my sense of well-being.	73	100.0%	0	.	.00000
I judge myself by what I think is important, not by the values of what others think is important.	73	100.0%	0	.	.00000
I am good at managing the responsibilities of daily life.	73	100.0%	0	.	.00000
I sometimes feel as if I've done all there is to do in my life.	73	100.0%	0	.	.00000
I believe that God is impersonal and not interested in my daily situations.	73	100.0%	0	.	.00000
I gave up trying to make big improvements in my life a long time ago.	73	100.0%	0	.	.00000
In many ways, I feel disappointed about my achievements in life.	73	100.0%	0	.	.00000
People would describe me as a giving person, willing to share my time with others.	73	100.0%	0	.	.00000
I have confidence in my own opinions, even if they are different from the way most people think.	73	100.0%	0	.	.00000
I don't have a personally satisfying relationship with God.	73	100.0%	0	.	.00000

a. Maximum number of variables shown: 25
b. Minimum percentage of missing values for variable to be included: 95.0%

Note: None of 73 cases has value a minimum complete value of 5%.

B. Demographic Distributions of 73 Dropped Cases

Demographics	Frequency	Percent	Cumulative Percent
Present Age			
≤ 39	16	21.9	22.2
40-49	8	11	33.3
50-59	18	24.7	58.3
60-69	21	28.8	81.4
≥ 70	9	12.3	93.7
Missing	1	1.4	100
Total	73	100	
Sexual Orientation			
Heterosexuals	53	72.6	72.6
Homosexuals	14	19.2	91.8
Bisexuals	1	1.4	93.2
Unsure	0	0	93.2
Respond differently	4	5.5	98.7
Missing	1	1.4	100
Total	73	100	
Race/Ethnicity			
Caucasian	57	78.1	78.1
Hispanic/Latin American	1	1.4	79.5
African American	4	5.5	85
African	2	1.2	86.2
Asian/Asian American	0	0	86.2
European	2	2.7	88.9
Anglo/Cajun	6	8.2	97.1
Mixed Ethnic/Race	1	1.4	98.5
Missing	2	2.7	100
Total	73	100	
Vocational Status			
Seminarian/Deacon	25	34.2	34.2
Priest	47	64.4	98.6
Missing	1	1.4	100
Total	73	100	
Year in Seminarian/ Priesthood			
1St Half Years in Seminary	11	15.1	15.1
2nd Half Years in Seminary	7	9.6	24.7
First-5 Years in Priesthood	9	12.3	37
6 to 15 years in Priesthood	7	9.6	46.6
16 to 30 years in Priesthood	17	23.3	69.9
31 ≤ years in Priesthood	6	8.2	78.1
Missing	16	21.9	100
Total	73	100	

APPENDIX V:
Compononent Analysis and Reliability Test

A. Family Religiosity Scale (α= .84)

1. PCA: Correlation Matrix

Correlation Matrix[a]

		Attended Sunday Mass or Holy Days of obligation	Were consistent in how they lived out their faith	Showed their faith in Christ by how they spoke and acted	Had not much interest in the Catholic faith or the Catholic Church	Showed me what it means to be an authentic Christian	Were socially involved in the community or parish
Correlation	Attended Sunday Mass or Holy Days of obligation	1.000	.553	.391	.306	.431	.410
	Were consistent in how they lived out their faith	.553	1.000	.674	.279	.610	.562
	Showed their faith in Christ by how they spoke and acted	.391	.674	1.000	.299	.710	.540
	Had not much interest in the Catholic faith or the Catholic Church	.306	.279	.299	1.000	.214	.234
	Showed me what it means to be an authentic Christian	.431	.610	.710	.214	1.000	.560
	Were socially involved in the community or parish	.410	.562	.540	.234	.560	1.000

a. Imputation Number = 5

2. PCA: Eigenvalues and Variance Explained (KMO=.83; Barlette's Test= 408.93 at sig. ≤001).

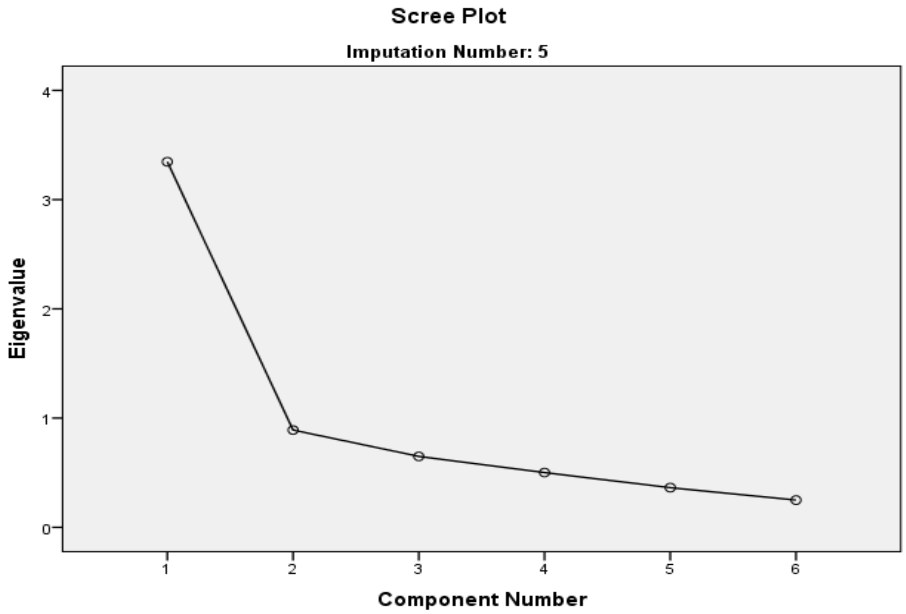
Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.346	55.765	55.765	3.346	55.765	55.765
2	.891	14.847	70.612			
3	.649	10.822	81.434			
4	.501	8.357	89.791			
5	.363	6.053	95.844			
6	.249	4.156	100.000			

Extraction Method: Principal Component Analysis.

a. Imputation Number = 5

3. PCA: Scree Plot



4. Reliability Test: Scale Items Correlation

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Attended Sunday Mass or Holy Days of obligation	17.0732	9.712	.564	.783
	Were consistent in how they lived out their faith	16.9939	10.239	.738	.753
	Showed their faith in Christ by how they spoke and acted	17.0732	10.559	.702	.762
	Had not much interest in the Catholic faith or the Catholic Church	17.3598	10.354	.348	.846
	Showed me what it means to be an authentic Christian	17.1220	10.439	.674	.764
	Were socially involved in the community or parish	17.4573	9.477	.601	.774
1	Attended Sunday Mass or Holy Days of obligation	17.0640	9.405	.555	.771
	Were consistent in how they lived out their faith	16.9884	9.883	.731	.740
	Showed their faith in Christ by how they spoke and acted	17.0640	10.189	.694	.750
	Had not much interest in the Catholic faith or the Catholic Church	17.4012	9.973	.324	.844
	Showed me what it means to be an authentic Christian	17.1163	10.068	.667	.752
	Were socially involved in the community or parish	17.4477	9.184	.590	.762
2	Attended Sunday Mass or Holy Days of obligation	17.0988	9.364	.562	.765
	Were consistent in how they lived out their faith	17.0174	9.877	.733	.736
	Showed their faith in Christ by how they spoke and acted	17.0930	10.178	.695	.746
	Had not much interest in the Catholic faith or the Catholic Church	17.4244	10.047	.311	.843
	Showed me what it means to be an authentic Christian	17.1453	10.055	.668	.748
	Were socially involved in the community or parish	17.5058	9.164	.576	.762
3	Attended Sunday Mass or Holy Days of obligation	17.0814	9.490	.552	.772
	Were consistent in how they lived out their faith	17.0000	9.977	.726	.742
	Showed their faith in Christ by how they spoke and acted	17.0872	10.279	.687	.752
	Had not much interest in the Catholic faith or the Catholic Church	17.4128	9.987	.334	.841
	Showed me what it means to be an authentic Christian	17.1337	10.140	.665	.753
	Were socially involved in the community or parish	17.4826	9.152	.596	.761
4	Attended Sunday Mass or Holy Days of obligation	17.0407	9.454	.556	.766
	Were consistent in how they lived out their faith	16.9709	9.947	.727	.737
	Showed their faith in Christ by how they spoke and acted	17.0407	10.250	.692	.746
	Had not much interest in the Catholic faith or the Catholic Church	17.3721	9.954	.335	.836
	Showed me what it means to be an authentic Christian	17.1047	10.164	.617	.755
	Were socially involved in the community or parish	17.4360	9.242	.587	.758
5	Attended Sunday Mass or Holy Days of obligation	17.0698	9.516	.549	.771
	Were consistent in how they lived out their faith	16.9942	10.018	.717	.742
	Showed their faith in Christ by how they spoke and acted	17.0814	10.239	.689	.750
	Had not much interest in the Catholic faith or the Catholic Church	17.4012	9.961	.337	.839
	Showed me what it means to be an authentic Christian	17.1279	10.147	.656	.753
	Were socially involved in the community or parish	17.4651	9.221	.594	.760

B. Religious Experience Scale (α=.73).

1. PCA: Correlation Matrix

Correlation Matrix[a]

		Attended Mass or other liturgical celebrations	Spent time in private prayer or reflection	Served as an altar boy/lector/eucharistic minister	Took part in social/community work	Read books/magazines about the Church/faith
Correlation	Attended Mass or other liturgical celebrations	1.000	.329	.528	.323	.307
	Spent time in private prayer or reflection	.329	1.000	.243	.348	.467
	Served as an altar boy/lector/eucharistic minister	.528	.243	1.000	.480	.300
	Took part in social/community work	.323	.348	.480	1.000	.332
	Read books/magazines about the Church/faith	.307	.467	.300	.332	1.000

a. Imputation Number = 5

2. PCA: Eigenvalues and Variance Explained (KMO=.72; Barlette's Test=235.59 at .001).

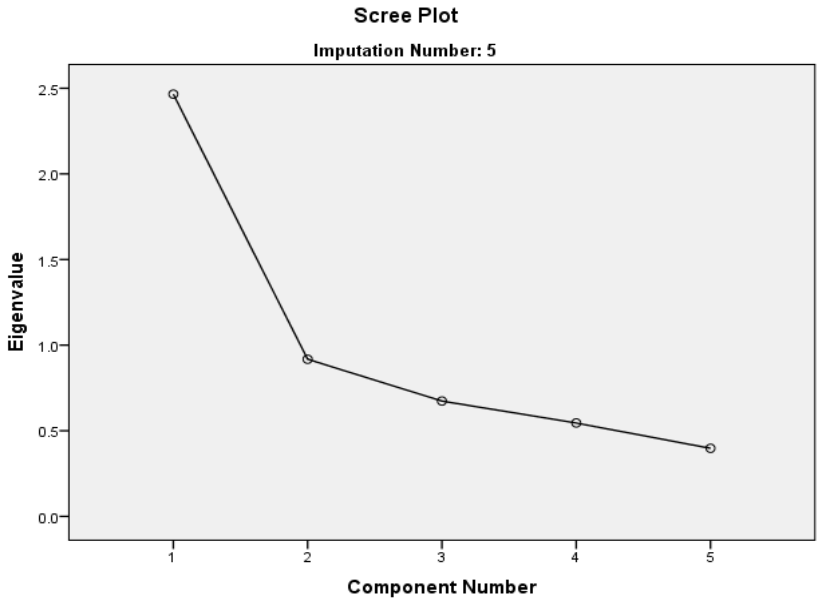
Total Variance Explained[a]

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.466	49.314	49.314	2.466	49.314	49.314
2	.918	18.356	67.670			
3	.674	13.471	81.141			
4	.545	10.907	92.048			
5	.398	7.952	100.000			

Extraction Method: Principal Component Analysis.

a. Imputation Number = 5

3. PCA: Scree Plot



4. Reliability Test: Scale Items Correlation

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Attended Mass or other liturgical celebrations	10.9882	7.690	.536	.684
	Spent time in private prayer or reflection	11.9112	7.998	.465	.706
	Served as an altar boy/lector/eucharistic minister	11.6154	5.667	.556	.684
	Took part in social/community work	11.9704	7.112	.538	.677
	Read books/magazines about the Church/faith	12.0473	7.653	.466	.703
1	Attended Mass or other liturgical celebrations	11.0174	7.655	.536	.686
	Spent time in private prayer or reflection	11.9360	7.920	.471	.706
	Served as an altar boy/lector/eucharistic minister	11.6512	5.690	.549	.689
	Took part in social/community work	11.9942	7.047	.542	.677
	Read books/magazines about the Church/faith	12.0756	7.579	.469	.704
2	Attended Mass or other liturgical celebrations	11.0000	7.614	.528	.677
	Spent time in private prayer or reflection	11.9070	7.909	.465	.697
	Served as an altar boy/lector/eucharistic minister	11.6395	5.647	.542	.680
	Took part in social/community work	11.9767	7.052	.537	.667
	Read books/magazines about the Church/faith	12.0349	7.601	.451	.700
3	Attended Mass or other liturgical celebrations	11.0116	7.591	.538	.676
	Spent time in private prayer or reflection	11.9244	7.883	.459	.700
	Served as an altar boy/lector/eucharistic minister	11.6453	5.622	.549	.678
	Took part in social/community work	12.0058	7.070	.520	.675
	Read books/magazines about the Church/faith	12.0640	7.546	.464	.697
4	Attended Mass or other liturgical celebrations	10.9884	7.602	.538	.675
	Spent time in private prayer or reflection	11.8953	7.954	.445	.704
	Served as an altar boy/lector/eucharistic minister	11.6337	5.614	.548	.679
	Took part in social/community work	11.9767	7.064	.531	.671
	Read books/magazines about the Church/faith	12.0407	7.548	.467	.696
5	Attended Mass or other liturgical celebrations	11.0000	7.591	.536	.676
	Spent time in private prayer or reflection	11.9128	7.893	.455	.701
	Served as an altar boy/lector/eucharistic minister	11.6453	5.622	.543	.681
	Took part in social/community work	11.9884	7.052	.529	.671
	Read books/magazines about the Church/faith	12.0581	7.529	.465	.696

C. MOS Social (Spiritual) Support Survey scale (α= .88)

1. PCA: Correlation Matrix

Correlation Matrix[a]

		Someone to help with daily chores if you were sick	Someone to get together with for spiritual enrichment.	Someone to do something enjoyable with	Someone to substitute your pastoral/spiritual duty if you were unable to do it yourself.	Someone to turn to for suggestions about how to deal with a personal problem	Someone to give you spiritual guidance to help you understand a vocational situation.	Someone to love and make you feel wanted	Someone who hugs you as a fellow priest or seminarian.
Correlation	Someone to help with daily chores if you were sick	1.000	.425	.417	.473	.498	.394	.531	.513
	Someone to get together with for spiritual enrichment.	.425	1.000	.681	.462	.652	.638	.493	.457
	Someone to do something enjoyable with	.417	.681	1.000	.397	.619	.619	.604	.545
	Someone to substitute your pastoral/spiritual duty if you were unable to do it yourself.	.473	.462	.397	1.000	.523	.421	.378	.348
	Someone to turn to for suggestions about how to deal with a personal problem	.498	.652	.619	.523	1.000	.818	.590	.545
	Someone to give you spiritual guidance to help you understand a vocational situation.	.394	.638	.619	.421	.818	1.000	.587	.514
	Someone to love and make you feel wanted	.531	.493	.604	.378	.590	.587	1.000	.645
	Someone who hugs you as a fellow priest or seminarian.	.513	.457	.545	.348	.545	.514	.645	1.000

a. Imputation Number = 5

2. PCA: Eigenvalues and Variance Explained (KMO=.88; Barlette's Test =774.34 sig. at .001).

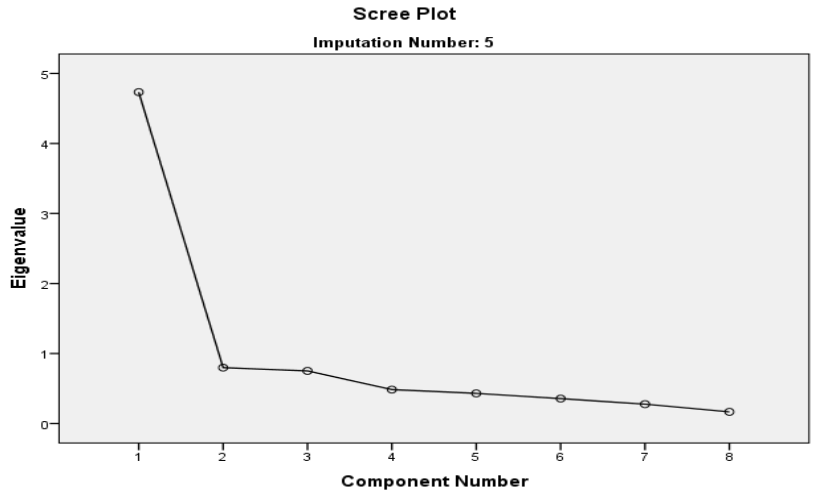
Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.733	59.161	59.161	4.733	59.161	59.161
2	.798	9.980	69.141			
3	.752	9.400	78.541			
4	.485	6.060	84.601			
5	.431	5.384	89.985			
6	.357	4.457	94.441			
7	.277	3.464	97.905			
8	.168	2.095	100.000			

Extraction Method: Principal Component Analysis.

a. Imputation Number = 5

3. PCA: Scree Plot



4. Reliability Test: Scale Items Correlation

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Someone to help with daily chores if you were sick	25.4667	35.202	.607	.896
	Someone to get together with for spiritual enrichment.	25.5212	34.788	.707	.886
	Someone to do something enjoyable with	25.4303	35.442	.726	.886
	Someone to substitute your pastoral/spiritual duty if you were unable to do it yourself.	25.6727	36.331	.550	.900
	Someone to turn to for suggestions about how to deal with a personal problem	25.4000	33.937	.805	.878
	Someone to give you spiritual guidance to help you understand a vocational situation.	25.3879	34.251	.747	.883
	Someone to love and make you feel wanted	25.4182	34.037	.722	.885
	Someone who hugs you as a fellow priest or seminarian.	26.0606	34.021	.666	.891
1	Someone to help with daily chores if you were sick	25.4785	34.075	.595	.892
	Someone to get together with for spiritual enrichment.	25.5515	33.538	.701	.881
	Someone to do something enjoyable with	25.4568	34.199	.720	.880
	Someone to substitute your pastoral/spiritual duty if you were unable to do it yourself.	25.6813	34.945	.537	.897
	Someone to turn to for suggestions about how to deal with a personal problem	25.4092	32.727	.801	.872
	Someone to give you spiritual guidance to help you understand a vocational situation.	25.4070	33.061	.745	.877
	Someone to love and make you feel wanted	25.4113	32.854	.714	.880
	Someone who hugs you as a fellow priest or seminarian.	26.0576	32.989	.646	.887
2	Someone to help with daily chores if you were sick	25.4512	34.187	.599	.891
	Someone to get together with for spiritual enrichment.	25.5328	33.617	.700	.881
	Someone to do something enjoyable with	25.4459	34.339	.710	.881
	Someone to substitute your pastoral/spiritual duty if you were unable to do it yourself.	25.6605	35.035	.543	.896
	Someone to turn to for suggestions about how to deal with a personal problem	25.3893	32.853	.800	.872
	Someone to give you spiritual guidance to help you understand a vocational situation.	25.3847	33.089	.744	.877
	Someone to love and make you feel wanted	25.4016	33.051	.712	.880
	Someone who hugs you as a fellow priest or seminarian.	26.0609	33.079	.643	.887
3	Someone to help with daily chores if you were sick	25.4606	33.959	.598	.890
	Someone to get together with for spiritual enrichment.	25.5530	33.484	.701	.880
	Someone to do something enjoyable with	25.4506	34.131	.721	.879
	Someone to substitute your pastoral/spiritual duty if you were unable to do it yourself.	25.6944	34.897	.534	.895
	Someone to turn to for suggestions about how to deal with a personal problem	25.4284	32.682	.790	.871
	Someone to give you spiritual guidance to help you understand a vocational situation.	25.3932	33.043	.737	.876
	Someone to love and make you feel wanted	25.4102	32.798	.716	.878
	Someone who hugs you as a fellow priest or seminarian.	26.0623	32.943	.638	.886
4	Someone to help with daily chores if you were sick	25.4413	33.974	.603	.890
	Someone to get together with for spiritual enrichment.	25.5175	33.481	.698	.881
	Someone to do something enjoyable with	25.4042	34.225	.715	.880
	Someone to substitute your pastoral/spiritual duty if you were unable to do it yourself.	25.6777	34.958	.536	.896
	Someone to turn to for suggestions about how to deal with a personal problem	25.3971	32.711	.799	.872
	Someone to give you spiritual guidance to help you understand a vocational situation.	25.3733	33.040	.743	.877
	Someone to love and make you feel wanted	25.3705	32.909	.708	.880
	Someone who hugs you as a fellow priest or seminarian.	26.0308	32.971	.647	.886
5	Someone to help with daily chores if you were sick	25.4490	34.233	.597	.893
	Someone to get together with for spiritual enrichment.	25.5305	33.606	.701	.883
	Someone to do something enjoyable with	25.4256	34.367	.722	.882
	Someone to substitute your pastoral/spiritual duty if you were unable to do it yourself.	25.6605	35.080	.543	.897
	Someone to turn to for suggestions about how to deal with a personal problem	25.3861	32.845	.799	.874
	Someone to give you spiritual guidance to help you understand a vocational situation.	25.3765	33.222	.741	.879
	Someone to love and make you feel wanted	25.4028	32.996	.714	.881
	Someone who hugs you as a fellow priest or seminarian.	26.0574	32.979	.658	.887

D. View of the Priesthood Scale

1. PCA: Matric Correlation

Correlation Matrix[a]

		Despite its challenges, celibacy has been a grace for me personally.	Ordination confers on the priest a new status which makes him essentially different from the laity.	I have a good relationship with my bishop or my superior.	I don't think God has called me to live a celibate life.	I support my bishop or my superior's leadership.	I believe that a priest is a "man set apart" by God.	I don't think my bishop or my superior knows me.	Celibacy is an expression of my dedication to Christ and God's people.	The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.
Correlation	Despite its challenges, celibacy has been a grace for me personally.	1.000	.271	.246	.395	.212	.333	.160	.498	.269
	Ordination confers on the priest a new status which makes him essentially different from the laity.	.271	1.000	.091	.206	.238	.439	.047	.233	.371
	I have a good relationship with my bishop or my superior.	.246	.091	1.000	.211	.660	.106	.621	.241	.205
	I don't think God has called me to live a celibate life.	.395	.206	.211	1.000	.280	.236	.269	.430	.304
	I support my bishop or my superior's leadership.	.212	.238	.660	.280	1.000	.261	.398	.257	.300
	I believe that a priest is a "man set apart" by God.	.333	.439	.106	.236	.261	1.000	-.047	.421	.522
	I don't think my bishop or my superior knows me.	.160	.047	.621	.269	.398	-.047	1.000	.191	.152
	Celibacy is an expression of my dedication to Christ and God's people.	.498	.233	.241	.430	.257	.421	.191	1.000	.288
	The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.	.269	.371	.205	.304	.300	.522	.152	.288	1.000

a. Imputation Number = Original data

2. PCA: Eigenvalues and Variance Explained (KMO=.74; Barlette's Test=452.13 at .001).

Total Variance Explained[a]

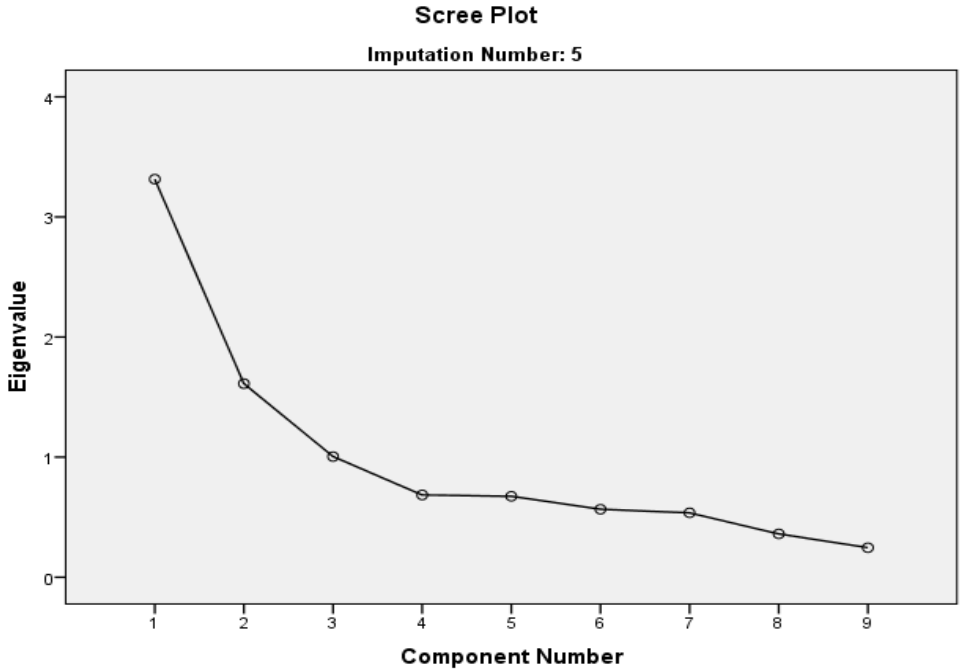
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[b]
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.314	36.826	36.826	3.314	36.826	36.826	2.287
2	1.612	17.911	54.737	1.612	17.911	54.737	2.388
3	1.005	11.167	65.904	1.005	11.167	65.904	2.461
4	.685	7.613	73.517				
5	.674	7.486	81.003				
6	.566	6.291	87.295				
7	.536	5.958	93.253				
8	.361	4.013	97.266				
9	.246	2.734	100.000				

Extraction Method: Principal Component Analysis.

a. Imputation Number = 5

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

3. Scree Plot



4. Pattern Matrix

Pattern Matrix[a,b]

	Component		
	1	2	3
I believe that a priest is a "man set apart" by God.	.775		
Ordination confers on the priest a new status which makes him essentially different from the laity.	.751		
The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.	.712		
I have a good relationship with my bishop or my superior.		-.902	
I don't think my bishop or my superior knows me.		-.798	
I support my bishop or my superior's leadership.		-.766	
Celibacy is an expression of my dedication to Christ and God's people.			-.782
Despite its challenges, celibacy has been a grace for me personally.			-.780
I don't think God has called me to live a celibate life.			-.745

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a,b]

a. Imputation Number = 5

b. Rotation converged in 6 iterations.

5. Structure Matrix

Structure Matrix[a]

	Component		
	1	2	3
I believe that a priest is a "man set apart" by God.	.824		-.431
The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.	.750		-.348
Ordination confers on the priest a new status which makes him essentially different from the laity.	.741		
I have a good relationship with my bishop or my superior.		-.908	
I don't think my bishop or my superior knows me.		-.804	
I support my bishop or my superior's leadership.	.407	-.795	
Celibacy is an expression of my dedication to Christ and God's people.	.355		-.803
Despite its challenges, celibacy has been a grace for me personally.	.334		-.785
I don't think God has called me to live a celibate life.			-.758

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Imputation Number = 5

6. Reliability: Scale Items Correlation (Relation w/ Bishop/Superior, α= .77).

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	I have a good relationship with my bishop or my superior.	7.8750	3.631	.762	.561
	I support my bishop or my superior's leadership.	7.7679	4.407	.581	.757
	I don't think my bishop or my superior knows me.	8.1667	3.756	.557	.799
1	I have a good relationship with my bishop or my superior.	7.8525	3.582	.759	.548
	I support my bishop or my superior's leadership.	7.7547	4.352	.566	.758
	I don't think my bishop or my superior knows me.	8.1467	3.725	.552	.789
2	I have a good relationship with my bishop or my superior.	7.8831	3.578	.743	.563
	I support my bishop or my superior's leadership.	7.7808	4.319	.579	.745
	I don't think my bishop or my superior knows me.	8.1758	3.695	.552	.788
3	I have a good relationship with my bishop or my superior.	7.8657	3.570	.752	.562
	I support my bishop or my superior's leadership.	7.7533	4.317	.578	.752
	I don't think my bishop or my superior knows me.	8.1608	3.679	.556	.792
4	I have a good relationship with my bishop or my superior.	7.8622	3.591	.753	.548
	I support my bishop or my superior's leadership.	7.7596	4.371	.567	.752
	I don't think my bishop or my superior knows me.	8.1674	3.673	.550	.788
5	I have a good relationship with my bishop or my superior.	7.8559	3.570	.762	.557
	I support my bishop or my superior's leadership.	7.7496	4.332	.581	.754
	I don't think my bishop or my superior knows me.	8.1531	3.720	.552	.801

7. Reliability: Scale Item Correlation (Perceived Sacredness of Priesthood, α=.75)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Despite its challenges, celibacy has been a grace for me personally.	19.0976	15.475	.496	.719
	Ordination confers on the priest a new status which makes him essentially different from the laity.	19.6890	14.375	.441	.736
	I don't think God has called me to live a celibate life.	18.9817	15.135	.432	.735
	I believe that a priest is a "man set apart" by God.	19.3293	14.087	.583	.693
	Celibacy is an expression of my dedication to Christ and God's people.	18.8902	15.767	.533	.714
	The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.	19.4695	13.772	.519	.712
1	Despite its challenges, celibacy has been a grace for me personally.	19.1803	15.023	.484	.709
	Ordination confers on the priest a new status which makes him essentially different from the laity.	19.7564	14.153	.410	.732
	I don't think God has called me to live a celibate life.	19.0328	14.657	.434	.721
	I believe that a priest is a "man set apart" by God.	19.3874	13.710	.574	.681
	Celibacy is an expression of my dedication to Christ and God's people.	18.9557	15.330	.523	.703
	The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.	19.5001	13.386	.511	.700
2	Despite its challenges, celibacy has been a grace for me personally.	19.1330	15.147	.496	.710
	Ordination confers on the priest a new status which makes him essentially different from the laity.	19.7400	14.233	.421	.734
	I don't think God has called me to live a celibate life.	18.9928	14.835	.440	.724
	I believe that a priest is a "man set apart" by God.	19.3349	13.878	.582	.684
	Celibacy is an expression of my dedication to Christ and God's people.	18.9215	15.583	.517	.709
	The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.	19.4413	13.657	.502	.708
3	Despite its challenges, celibacy has been a grace for me personally.	19.1478	15.029	.489	.713
	Ordination confers on the priest a new status which makes him essentially different from the laity.	19.7268	14.086	.421	.735
	I don't think God has called me to live a celibate life.	19.0244	14.711	.433	.727
	I believe that a priest is a "man set apart" by God.	19.3728	13.745	.575	.688
	Celibacy is an expression of my dedication to Christ and God's people.	18.9339	15.339	.532	.707
	The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.	19.4868	13.329	.517	.704
4	Despite its challenges, celibacy has been a grace for me personally.	19.1256	14.942	.489	.705
	Ordination confers on the priest a new status which makes him essentially different from the laity.	19.7147	14.029	.417	.728
	I don't think God has called me to live a celibate life.	19.0016	14.659	.424	.722
	I believe that a priest is a "man set apart" by God.	19.3607	13.777	.556	.685
	Celibacy is an expression of my dedication to Christ and God's people.	18.9345	15.280	.522	.701
	The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.	19.4930	13.238	.516	.697
5	Despite its challenges, celibacy has been a grace for me personally.	19.1410	15.113	.491	.709
	Ordination confers on the priest a new status which makes him essentially different from the laity.	19.7478	14.069	.423	.731
	I don't think God has called me to live a celibate life.	19.0110	14.746	.438	.722
	I believe that a priest is a "man set apart" by God.	19.3813	13.829	.574	.684
	Celibacy is an expression of my dedication to Christ and God's people.	18.9458	15.451	.511	.707
	The idea that a priest is a "man set apart" is a barrier to the full realization of true Christian community.	19.4817	13.499	.507	.704

E. Priestly Commitment Scale

1. PCA: Eigenvalues and Variance (KMO=.82; Barlette's Test=937.62 at .001)

Total Variance Explained[a]

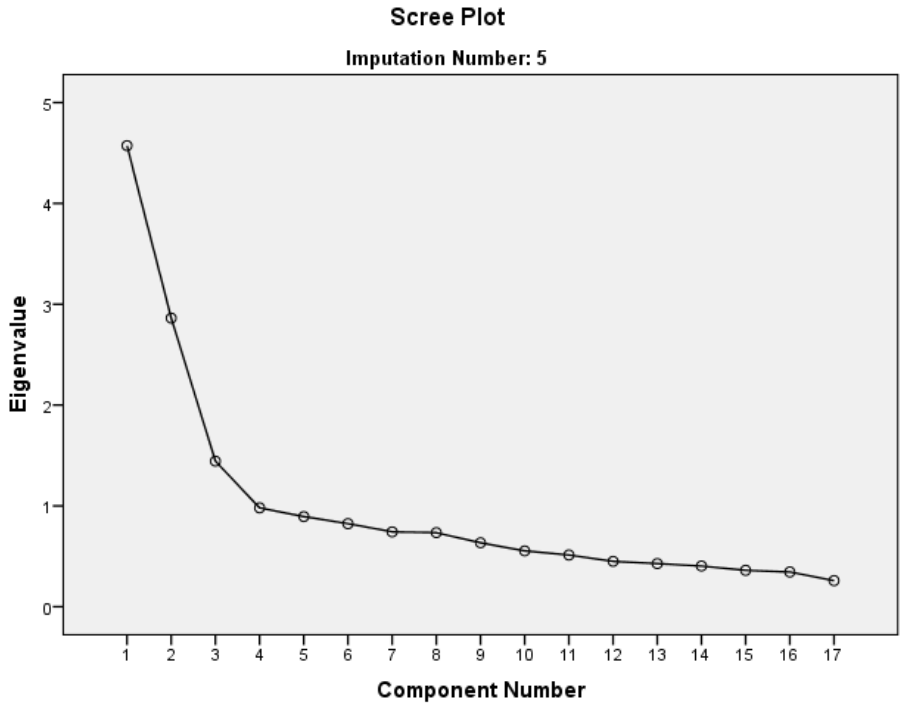
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[b]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.573	26.900	26.900	4.573	26.900	26.900	4.220
2	2.862	16.838	43.738	2.862	16.838	43.738	3.041
3	1.444	8.492	52.230	1.444	8.492	52.230	2.679
4	.981	5.769	57.999				
5	.894	5.259	63.258				
6	.823	4.843	68.101				
7	.743	4.368	72.470				
8	.734	4.319	76.789				
9	.634	3.730	80.519				
10	.554	3.256	83.775				
11	.513	3.016	86.792				
12	.450	2.648	89.440				
13	.428	2.515	91.955				
14	.403	2.373	94.328				
15	.361	2.123	96.451				
16	.344	2.026	98.477				
17	.259	1.523	100.000				

Extraction Method: Principal Component Analysis.

a. Imputation Number = 5

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

2. PCA: Scree Plot



3. PCA: Pattern Matrix

Pattern Matrix[a,b]

	Component		
	1	2	3
I do not feel a strong sense of "belonging" to my priestly vocation.	.807		
I do not feel "emotionally attached" to my priestly vocation.	.794		
I would be very happy to spend the rest of my life in my priestly vocation	.764		
I enjoy discussing my priestly vocation with lay people.	.726		
The priestly vocation has a great deal of personal meaning for me.	.716		
I do not feel like "a part of the family" at my diocese or congregation.	.607		
I think that I could easily become as attached to another vocation as I am to the priestly vocation.	.475		
One of the major reasons I continue to live my priestly vocation and to work for the diocese/community is that leaving would require considerable personal sacrifice; another vocation may not match the benefits I had have.		.817	
I believe that I have too few options to consider leaving my priestly vocation.		.790	
One of the few negative consequences of leaving priestly vocation would be the scarcity of available alternatives.		.767	
Right now, staying with the priestly vocation is a matter of necessity as much as desire.		.637	
If I had not already put so much of myself into my priestly vocation, I might consider living married life or another vocation.		.601	
Even if it were to my advantage, I do not feel it would be right to leave my priestly vocation now.			.799
I would feel guilty if I left my priestly vocation now.			.760
I would not leave my priestly vocation right now because I have a sense of obligation to the Church.			.548
I do not feel an obligation to remain in my priestly vocation.			.537
My priestly vocation deserves my loyalty.	-.368		.455

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

a. Imputation Number = 5

b. Rotation converged in 6 iterations.

4. Structure Matrix

Structure Matrix[a]

	Component		
	1	2	3
I would be very happy to spend the rest of my life in my priestly vocation	.809		
I do not feel a strong sense of "belonging" to my priestly vocation.	.807		
I do not feel "emotionally attached" to my priestly vocation.	.777		
The priestly vocation has a great deal of personal meaning for me.	.715		
I enjoy discussing my priestly vocation with lay people.	.664		
I do not feel like "a part of the family" at my diocese or congregation.	.610		
I think that I could easily become as attached to another vocation as I am to the priestly vocation.	.557		-.367
One of the major reasons I continue to live my priestly vocation and to work for the diocese/community is that leaving would require considerable personal sacrifice; another vocation may not match the benefits I had have.		.801	
I believe that I have too few options to consider leaving my priestly vocation.		.784	
One of the few negative consequences of leaving priestly vocation would be the scarcity of available alternatives.		.759	
Right now, staying with the priestly vocation is a matter of necessity as much as desire.		.655	
If I had not already put so much of myself into my priestly vocation, I might consider living married life or another vocation.	-.445	.645	
Even if it were to my advantage, I do not feel it would be right to leave my priestly vocation now.			.788
I would feel guilty if I left my priestly vocation now.			.748
I would not leave my priestly vocation right now because I have a sense of obligation to the Church.			.575
My priestly vocation deserves my loyalty.	-.521		.561
I do not feel an obligation to remain in my priestly vocation.			.535

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

a. Imputation Number = 5

5. Reliability Test: Correlation Matrix (Affective Commitment; α= .81)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	I would be very happy to spend the rest of my life in my priestly vocation	34.7250	39.899	.692	.783
	I enjoy discussing my priestly vocation with lay people.	35.1688	40.556	.487	.805
	I think that I could easily become as attached to another vocation as I am to the priestly vocation.	35.8875	36.553	.455	.819
	I do not feel like "a part of the family" at my diocese or congregation.	35.8438	34.196	.503	.815
	I do not feel "emotionally attached" to my priestly vocation.	35.2500	35.950	.704	.769
	The priestly vocation has a great deal of personal meaning for me.	34.7375	42.094	.578	.799
	I do not feel a strong sense of "belonging" to my priestly vocation.	35.2500	34.503	.721	.763
1	I would be very happy to spend the rest of my life in my priestly vocation	34.7674	37.817	.684	.770
	I enjoy discussing my priestly vocation with lay people.	35.1860	38.375	.484	.792
	I think that I could easily become as attached to another vocation as I am to the priestly vocation.	35.9244	34.678	.433	.810
	I do not feel like "a part of the family" at my diocese or congregation.	35.8779	32.365	.497	.801
	I do not feel "emotionally attached" to my priestly vocation.	35.3140	34.158	.670	.759
	The priestly vocation has a great deal of personal meaning for me.	34.7558	39.858	.570	.787
	I do not feel a strong sense of "belonging" to my priestly vocation.	35.2907	32.956	.691	.753
2	I would be very happy to spend the rest of my life in my priestly vocation	34.7500	37.662	.681	.770
	I enjoy discussing my priestly vocation with lay people.	35.1860	38.281	.479	.792
	I think that I could easily become as attached to another vocation as I am to the priestly vocation.	35.9302	34.685	.423	.811
	I do not feel like "a part of the family" at my diocese or congregation.	35.8547	32.195	.498	.800
	I do not feel "emotionally attached" to my priestly vocation.	35.3140	33.983	.667	.759
	The priestly vocation has a great deal of personal meaning for me.	34.7849	39.737	.556	.787
	I do not feel a strong sense of "belonging" to my priestly vocation.	35.2616	32.604	.715	.748
3	I would be very happy to spend the rest of my life in my priestly vocation	34.6628	38.213	.668	.773
	I enjoy discussing my priestly vocation with lay people.	35.0930	38.787	.480	.794
	I think that I could easily become as attached to another vocation as I am to the priestly vocation.	35.8081	34.741	.450	.808
	I do not feel like "a part of the family" at my diocese or congregation.	35.7907	32.716	.497	.803
	I do not feel "emotionally attached" to my priestly vocation.	35.2267	34.457	.670	.761
	The priestly vocation has a great deal of personal meaning for me.	34.6570	40.250	.570	.789
	I do not feel a strong sense of "belonging" to my priestly vocation.	35.1802	33.190	.696	.754
4	I would be very happy to spend the rest of my life in my priestly vocation	34.6919	37.641	.680	.768
	I enjoy discussing my priestly vocation with lay people.	35.1570	38.145	.478	.790
	I think that I could easily become as attached to another vocation as I am to the priestly vocation.	35.9012	34.417	.429	.809
	I do not feel like "a part of the family" at my diocese or congregation.	35.7965	32.315	.490	.800
	I do not feel "emotionally attached" to my priestly vocation.	35.2791	33.887	.670	.756
	The priestly vocation has a great deal of personal meaning for me.	34.7209	39.770	.549	.787
	I do not feel a strong sense of "belonging" to my priestly vocation.	35.2209	32.524	.710	.747
5	I would be very happy to spend the rest of my life in my priestly vocation	34.7267	38.013	.680	.774
	I enjoy discussing my priestly vocation with lay people.	35.1337	38.842	.476	.797
	I think that I could easily become as attached to another vocation as I am to the priestly vocation.	35.8837	34.747	.446	.811
	I do not feel like "a part of the family" at my diocese or congregation.	35.8314	32.632	.503	.804
	I do not feel "emotionally attached" to my priestly vocation.	35.2500	34.434	.666	.764
	The priestly vocation has a great deal of personal meaning for me.	34.7267	40.247	.564	.791
	I do not feel a strong sense of "belonging" to my priestly vocation.	35.2500	32.961	.713	.753

6. Reliability: Items Scale Correlation (Continuance Commitment, α= .78)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Right now, staying with the priestly vocation is a matter of necessity as much as desire.	9.9231	27.413	.491	.785
	I believe that I have too few options to consider leaving my priestly vocation.	10.6282	27.654	.616	.738
	One of the few negative consequences of leaving priestly vocation would be the scarcity of available alternatives.	10.4167	27.845	.617	.738
	One of the major reasons I continue to live my priestly vocation and to work for the diocese/community is that leaving would require considerable personal sacrifice; another vocation may not match the benefits I had have.	10.7179	26.978	.670	.720
	If I had not already put so much of myself into my priestly vocation, I might consider living married life or another vocation.	10.9551	31.308	.486	.778
1	Right now, staying with the priestly vocation is a matter of necessity as much as desire.	9.9128	25.741	.479	.775
	I believe that I have too few options to consider leaving my priestly vocation.	10.5407	25.934	.606	.726
	One of the few negative consequences of leaving priestly vocation would be the scarcity of available alternatives.	10.3837	26.144	.598	.729
	One of the major reasons I continue to live my priestly vocation and to work for the diocese/community is that leaving would require considerable personal sacrifice; another vocation may not match the benefits I had have.	10.6977	25.382	.653	.710
	If I had not already put so much of myself into my priestly vocation, I might consider living married life or another vocation.	10.9302	29.352	.475	.767
2	Right now, staying with the priestly vocation is a matter of necessity as much as desire.	9.9767	25.812	.475	.776
	I believe that I have too few options to consider leaving my priestly vocation.	10.6047	25.890	.612	.724
	One of the few negative consequences of leaving priestly vocation would be the scarcity of available alternatives.	10.4186	26.175	.591	.731
	One of the major reasons I continue to live my priestly vocation and to work for the diocese/community is that leaving would require considerable personal sacrifice; another vocation may not match the benefits I had have.	10.7500	25.393	.656	.709
	If I had not already put so much of myself into my priestly vocation, I might consider living married life or another vocation.	10.9942	29.292	.479	.766
3	Right now, staying with the priestly vocation is a matter of necessity as much as desire.	9.9419	25.856	.487	.780
	I believe that I have too few options to consider leaving my priestly vocation.	10.5640	26.049	.609	.733
	One of the few negative consequences of leaving priestly vocation would be the scarcity of available alternatives.	10.3895	26.298	.608	.734
	One of the major reasons I continue to live my priestly vocation and to work for the diocese/community is that leaving would require considerable personal sacrifice; another vocation may not match the benefits I had have.	10.6977	25.417	.659	.716
	If I had not already put so much of myself into my priestly vocation, I might consider living married life or another vocation.	10.9186	29.514	.483	.772
4	Right now, staying with the priestly vocation is a matter of necessity as much as desire.	9.9360	26.002	.485	.778
	I believe that I have too few options to consider leaving my priestly vocation.	10.6395	26.173	.624	.724
	One of the few negative consequences of leaving priestly vocation would be the scarcity of available alternatives.	10.4244	26.760	.599	.733
	One of the major reasons I continue to live my priestly vocation and to work for the diocese/community is that leaving would require considerable personal sacrifice; another vocation may not match the benefits I had have.	10.7209	25.898	.640	.719
	If I had not already put so much of myself into my priestly vocation, I might consider living married life or another vocation.	10.9535	29.694	.484	.769
5	Right now, staying with the priestly vocation is a matter of necessity as much as desire.	9.9651	25.730	.477	.776
	I believe that I have too few options to consider leaving my priestly vocation.	10.6221	25.698	.615	.723
	One of the few negative consequences of leaving priestly vocation would be the scarcity of available alternatives.	10.4360	26.247	.594	.730
	One of the major reasons I continue to live my priestly vocation and to work for the diocese/community is that leaving would require considerable personal sacrifice; another vocation may not match the benefits I had have.	10.7267	25.323	.651	.711
	If I had not already put so much of myself into my priestly vocation, I might consider living married life or another vocation.	10.9942	29.316	.479	.767

7. Reliability: Scale Items Correlation for Normative Commitment; α=65)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Even if it were to my advantage, I do not feel it would be right to leave my priestly vocation now.	7.3067	11.597	.532	.539
	I would feel guilty if I left my priestly vocation now.	6.9080	10.701	.528	.540
	My priestly vocation deserves my loyalty.	8.0491	16.109	.439	.638
	I would not leave my priestly vocation right now because I have a sense of obligation to the Church.	6.7239	11.979	.378	.659
1	Even if it were to my advantage, I do not feel it would be right to leave my priestly vocation now.	7.3140	11.398	.526	.540
	I would feel guilty if I left my priestly vocation now.	6.9070	10.483	.526	.539
	My priestly vocation deserves my loyalty.	8.0640	15.815	.434	.638
	I would not leave my priestly vocation right now because I have a sense of obligation to the Church.	6.7384	11.691	.382	.653
2	Even if it were to my advantage, I do not feel it would be right to leave my priestly vocation now.	7.3198	11.178	.519	.522
	I would feel guilty if I left my priestly vocation now.	6.8895	10.344	.512	.525
	My priestly vocation deserves my loyalty.	8.0233	15.497	.419	.625
	I would not leave my priestly vocation right now because I have a sense of obligation to the Church.	6.6860	11.456	.366	.645
3	Even if it were to my advantage, I do not feel it would be right to leave my priestly vocation now.	7.3488	11.340	.513	.537
	I would feel guilty if I left my priestly vocation now.	6.8837	10.372	.521	.529
	My priestly vocation deserves my loyalty.	8.0349	15.613	.429	.630
	I would not leave my priestly vocation right now because I have a sense of obligation to the Church.	6.6860	11.503	.377	.646
4	Even if it were to my advantage, I do not feel it would be right to leave my priestly vocation now.	7.2965	11.251	.530	.535
	I would feel guilty if I left my priestly vocation now.	6.8488	10.375	.527	.535
	My priestly vocation deserves my loyalty.	8.0174	15.713	.422	.640
	I would not leave my priestly vocation right now because I have a sense of obligation to the Church.	6.7035	11.578	.380	.652
5	Even if it were to my advantage, I do not feel it would be right to leave my priestly vocation now.	7.2965	11.251	.518	.523
	I would feel guilty if I left my priestly vocation now.	6.8953	10.387	.519	.520
	My priestly vocation deserves my loyalty.	8.0523	15.769	.406	.632
	I would not leave my priestly vocation right now because I have a sense of obligation to the Church.	6.7093	11.517	.372	.642

F. Thought of Leaving the Priesthood Subscale (α=.73)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	I often think of leaving the priesthood.	3.3110	2.412	.672	.534
	I have looked for an alternative to the priesthood.	3.1402	2.453	.531	.725
	If I had a chance to do it over, I would become a priest again.	3.4512	3.231	.542	.705
1	I often think of leaving the priesthood.	3.3374	2.451	.654	.542
	I have looked for an alternative to the priesthood.	3.1335	2.362	.530	.716
	If I had a chance to do it over, I would become a priest again.	3.4535	3.201	.542	.692
2	I often think of leaving the priesthood.	3.3389	2.402	.648	.511
	I have looked for an alternative to the priesthood.	3.1223	2.363	.503	.717
	If I had a chance to do it over, I would become a priest again.	3.4686	3.163	.527	.677
3	I often think of leaving the priesthood.	3.3617	2.488	.640	.533
	I have looked for an alternative to the priesthood.	3.1348	2.365	.513	.718
	If I had a chance to do it over, I would become a priest again.	3.4846	3.208	.542	.672
4	I often think of leaving the priesthood.	3.3611	2.424	.663	.522
	I have looked for an alternative to the priesthood.	3.1422	2.377	.519	.724
	If I had a chance to do it over, I would become a priest again.	3.4952	3.213	.536	.692
5	I often think of leaving the priesthood.	3.3455	2.414	.651	.513
	I have looked for an alternative to the priesthood.	3.1774	2.388	.527	.689
	If I had a chance to do it over, I would become a priest again.	3.5090	3.306	.509	.700

G. Parental Bonding Instrument

1. Item Correlation for Parental Care Subscale (α= .93)

Item-Total Statistics

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Relation	Cronbach's Alpha if Item Deleted
Spoke to me in a warm and friendly voice - Mother	64.15	117.79	.57	.92
Spoke to me in a warm and friendly voice - Father	64.63	115.96	.58	.92
Did not help me as much as I needed - Mother	64.25	117.55	.45	.92
Did not help me as much as I needed - Father	64.39	118.07	.47	.92
Seemed emotionally cold to me - Mother	63.91	119.12	.55	.92
Seemed emotionally cold to me - Father	64.25	115.71	.62	.92
Appeared to understand my problems and worries - Mother	64.65	114.55	.63	.92
Appeared to understand my problems and worries - Father	65.01	113.99	.66	.92
Was affectionate to me - Mother	64.23	115.27	.64	.92
Was affectionate to me - Father	64.91	111.51	.69	.92
Enjoyed talking things over with me - Mother	64.78	114.05	.63	.92
Enjoyed talking things over with me - Father	65.07	115.97	.55	.92
Frequently smiled at me - Mother	64.27	115.42	.62	.92
Frequently smiled at me - Father	64.62	112.75	.72	.92
Did not seem to understand what I needed or wanted - Mother	64.34	117.23	.57	.92
Did not seem to understand what I needed or wanted - Father	64.53	115.28	.59	.92
Could make me feel better when I was upset - Mother	64.58	117.33	.46	.93
Could make me feel better when I was upset - Father	64.98	115.24	.60	.92
Did not talk with me very much - Mother	64.01	118.24	.51	.92
Did not talk with me very much - Father	64.35	116.45	.56	.92
Did not praise me - Mother	64.13	117.65	.51	.92
Did not praise me - Father	64.28	116.01	.59	.92

2. Item Correlation for Parental Overprotection Subscale (α= .89)

Item-Total Statistics

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Relation	Cronbach's Alpha if Item Deleted
Liked me to make my own decisions - Mother	45.91	95.55	.63	.88
Liked me to make my own decisions - Father	45.89	97.36	.52	.89
Did not want me to grow up - Mother	46.67	101.34	.32	.89
Did not want me to grow up - Father	46.80	103.98	.18	.90
Tried to control everything I did - Mother	46.42	98.23	.56	.88
Tried to control everything I did - Father	46.44	99.85	.44	.89
Invaded my privacy - Mother	46.49	99.37	.51	.89
Invaded my privacy - Father	46.67	102.58	.35	.89
Tended to baby me - Mother	46.39	100.38	.37	.89
Tended to baby me - Father	46.77	104.42	.20	.89
Let me decide things for myself - Mother	45.93	94.86	.68	.88
Let me decide things for myself - Father	45.97	96.24	.63	.88
Tried to make me feel dependent on her/him - Mother	46.62	100.48	.45	.89
Tried to make me feel dependent on her/him - Father	46.75	102.52	.31	.89
Felt I could not look after myself unless she/he was around - Mother	46.66	100.45	.44	.89
Felt I could not look after myself unless she/he was around - Father	46.80	103.01	.30	.89
Gave me as much freedom as I wanted - Mother	45.59	96.67	.57	.89
Gave me as much freedom as I wanted - Father	45.60	97.01	.58	.88
Let me go out as often as I wanted - Mother	45.44	96.19	.57	.88
Let me go out as often as I wanted - Father	45.55	98.71	.42	.89
Was overprotective of me - Mother	46.34	98.23	.48	.89
Was overprotective of me - Father	46.58	100.10	.46	.89
Let me dress in any way I pleased - Mother	45.58	97.12	.48	.89
Let me dress in any way I pleased - Father	45.61	97.15	.44	.89
Liked me to make my own decisions - Mother	45.90	95.55	.63	.89
Liked me to make my own decisions - Father	45.89	97.36	.52	.89

H. Big Five Inventory (BIF)

1. Extraversion (α=.84)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Is talkative	22.9639	25.308	.513	.837
	Is reserved	23.5602	23.581	.680	.814
	Is full of energy	22.8072	26.750	.454	.842
	Generates a lot of enthusiasm	22.7470	27.148	.554	.833
	Tends to be quiet	23.5964	24.000	.649	.819
	Has an assertive personality	22.9639	25.647	.513	.836
	Is sometimes shy, inhibited	23.4880	24.288	.600	.825
	Is outgoing, sociable	22.6566	24.724	.722	.812
1	Is talkative	23.0601	25.136	.506	.834
	Is reserved	23.6619	23.429	.681	.810
	Is full of energy	22.9031	26.569	.452	.839
	Generates a lot of enthusiasm	22.8372	26.933	.556	.829
	Tends to be quiet	23.6985	23.839	.642	.816
	Has an assertive personality	23.0756	25.700	.500	.834
	Is sometimes shy, inhibited	23.5717	24.131	.594	.822
	Is outgoing, sociable	22.7461	24.633	.718	.809
2	Is talkative	23.0475	25.119	.508	.834
	Is reserved	23.6509	23.395	.684	.810
	Is full of energy	22.8905	26.553	.455	.839
	Generates a lot of enthusiasm	22.8262	26.921	.559	.829
	Tends to be quiet	23.6904	23.862	.644	.816
	Has an assertive personality	23.0679	25.726	.499	.834
	Is sometimes shy, inhibited	23.5591	24.183	.589	.823
	Is outgoing, sociable	22.7335	24.657	.716	.809
3	Is talkative	23.0338	24.885	.507	.830
	Is reserved	23.6370	23.208	.679	.806
	Is full of energy	22.8768	26.333	.451	.835
	Generates a lot of enthusiasm	22.8134	26.727	.551	.825
	Tends to be quiet	23.6762	23.601	.645	.811
	Has an assertive personality	23.0677	25.673	.469	.834
	Is sometimes shy, inhibited	23.5454	23.943	.589	.819
	Is outgoing, sociable	22.7198	24.415	.716	.805
4	Is talkative	23.0511	25.380	.506	.837
	Is reserved	23.6590	23.672	.680	.813
	Is full of energy	22.8941	26.795	.455	.841
	Generates a lot of enthusiasm	22.8244	27.166	.554	.831
	Tends to be quiet	23.7008	24.047	.649	.817
	Has an assertive personality	23.0622	25.708	.521	.834
	Is sometimes shy, inhibited	23.5627	24.379	.593	.825
	Is outgoing, sociable	22.7372	24.906	.715	.812
5	Is talkative	23.0677	25.112	.506	.833
	Is reserved	23.6619	23.381	.686	.809
	Is full of energy	22.9108	26.530	.454	.838
	Generates a lot of enthusiasm	22.8486	26.910	.557	.828
	Tends to be quiet	23.7047	23.851	.637	.816
	Has an assertive personality	23.0810	25.727	.493	.834
	Is sometimes shy, inhibited	23.5794	24.123	.592	.822
	Is outgoing, sociable	22.7538	24.601	.720	.808

2. Agreeableness (α=77)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Tends to find fault with others	32.4634	14.348	.459	.755
	Is helpful and unselfish with others	31.6341	16.552	.362	.765
	Starts quarrels with others	31.3659	15.289	.522	.743
	Has a forgiving nature	31.6768	15.742	.406	.760
	Is generally trusting	31.6220	16.065	.459	.753
	Can be cold and aloof	31.9878	14.797	.450	.755
	Is considerate and kind to almost everyone	31.5305	15.711	.581	.740
	Is sometimes rude to others	31.9939	14.215	.523	.742
	Likes to cooperate with others	31.6280	16.333	.425	.758
1	Tends to find fault with others	32.4570	14.176	.444	.743
	Is helpful and unselfish with others	31.5849	16.374	.339	.754
	Starts quarrels with others	31.3465	14.880	.513	.729
	Has a forgiving nature	31.6244	15.648	.372	.751
	Is generally trusting	31.5821	15.912	.421	.744
	Can be cold and aloof	31.9718	14.516	.441	.742
	Is considerate and kind to almost everyone	31.4910	15.458	.577	.726
	Is sometimes rude to others	31.9868	13.878	.523	.727
	Likes to cooperate with others	31.6114	16.020	.423	.744
2	Tends to find fault with others	32.4297	14.596	.452	.753
	Is helpful and unselfish with others	31.5671	16.735	.368	.761
	Starts quarrels with others	31.3192	15.228	.537	.737
	Has a forgiving nature	31.6021	15.993	.400	.758
	Is generally trusting	31.5625	16.284	.443	.752
	Can be cold and aloof	31.9396	14.988	.444	.753
	Is considerate and kind to almost everyone	31.4603	16.007	.564	.739
	Is sometimes rude to others	31.9710	14.329	.518	.740
	Likes to cooperate with others	31.5859	16.480	.432	.754
3	Tends to find fault with others	32.4845	14.582	.439	.751
	Is helpful and unselfish with others	31.6124	16.758	.341	.760
	Starts quarrels with others	31.3740	15.192	.524	.734
	Has a forgiving nature	31.6489	16.038	.373	.757
	Is generally trusting	31.6218	16.105	.448	.747
	Can be cold and aloof	31.9787	14.699	.464	.744
	Is considerate and kind to almost everyone	31.5172	15.829	.579	.733
	Is sometimes rude to others	31.9961	14.194	.523	.734
	Likes to cooperate with others	31.6422	16.414	.422	.751
4	Tends to find fault with others	32.4805	14.377	.444	.748
	Is helpful and unselfish with others	31.6173	16.419	.373	.755
	Starts quarrels with others	31.3700	15.042	.521	.733
	Has a forgiving nature	31.6441	15.841	.377	.755
	Is generally trusting	31.6025	16.194	.405	.750
	Can be cold and aloof	31.9767	14.599	.456	.744
	Is considerate and kind to almost everyone	31.5099	15.669	.574	.731
	Is sometimes rude to others	32.0055	14.078	.523	.732
	Likes to cooperate with others	31.6371	16.240	.421	.749
5	Tends to find fault with others	32.4613	14.320	.447	.747
	Is helpful and unselfish with others	31.5898	16.553	.339	.758
	Starts quarrels with others	31.3509	14.982	.525	.732
	Has a forgiving nature	31.6195	15.818	.373	.755
	Is generally trusting	31.5940	15.994	.436	.746
	Can be cold and aloof	31.9724	14.652	.447	.745
	Is considerate and kind to almost everyone	31.4942	15.641	.574	.731
	Is sometimes rude to others	31.9913	14.017	.525	.731
	Likes to cooperate with others	31.6173	16.184	.425	.748

3. Consciousness (α=.86)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Does a thorough job	30.2822	26.710	.695	.845
	Can be somewhat careless	30.8896	25.469	.585	.853
	Tends to be lazy	30.6319	25.407	.586	.853
	Is a reliable worker	30.0675	28.421	.592	.855
	Tends to be disorganized	30.9939	23.648	.607	.855
	Perseveres until the task is finished	30.5031	27.289	.533	.857
	Does things efficiently	30.5092	27.375	.597	.852
	Makes plans and follows through with them	30.4540	27.323	.662	.849
	Is easily distracted	31.2515	23.856	.694	.842
1	Does a thorough job	30.4232	26.695	.692	.842
	Can be somewhat careless	31.0535	25.383	.591	.849
	Tends to be lazy	30.7707	25.402	.588	.849
	Is a reliable worker	30.2118	28.380	.597	.852
	Tends to be disorganized	31.1537	23.577	.602	.852
	Perseveres until the task is finished	30.6363	27.254	.532	.854
	Does things efficiently	30.6525	27.376	.587	.850
	Makes plans and follows through with them	30.6014	27.373	.639	.847
	Is easily distracted	31.4009	23.997	.675	.840
2	Does a thorough job	30.4493	27.243	.680	.846
	Can be somewhat careless	31.0464	25.687	.604	.851
	Tends to be lazy	30.7730	25.859	.588	.853
	Is a reliable worker	30.2150	28.867	.597	.855
	Tends to be disorganized	31.1569	23.953	.608	.855
	Perseveres until the task is finished	30.6431	27.653	.539	.857
	Does things efficiently	30.6481	27.724	.606	.852
	Makes plans and follows through with them	30.6046	27.807	.645	.850
	Is easily distracted	31.3931	24.291	.685	.843
3	Does a thorough job	30.4264	27.027	.685	.846
	Can be somewhat careless	31.0279	25.589	.597	.852
	Tends to be lazy	30.7532	25.611	.591	.852
	Is a reliable worker	30.1889	28.651	.598	.855
	Tends to be disorganized	31.1308	23.749	.609	.855
	Perseveres until the task is finished	30.6038	27.435	.542	.856
	Does things efficiently	30.6421	27.602	.598	.852
	Makes plans and follows through with them	30.5785	27.593	.646	.849
	Is easily distracted	31.3692	24.202	.681	.843
4	Does a thorough job	30.4447	27.044	.666	.844
	Can be somewhat careless	31.0363	25.554	.597	.848
	Tends to be lazy	30.7669	25.582	.588	.849
	Is a reliable worker	30.1991	28.621	.598	.852
	Tends to be disorganized	31.1409	23.689	.612	.851
	Perseveres until the task is finished	30.6060	27.484	.529	.854
	Does things efficiently	30.6529	27.724	.571	.851
	Makes plans and follows through with them	30.5886	27.574	.645	.847
	Is easily distracted	31.3663	24.030	.688	.839
5	Does a thorough job	30.4227	26.691	.670	.842
	Can be somewhat careless	31.0286	25.203	.591	.847
	Tends to be lazy	30.7493	25.194	.590	.847
	Is a reliable worker	30.1871	28.193	.597	.850
	Tends to be disorganized	31.1290	23.376	.604	.850
	Perseveres until the task is finished	30.6065	27.164	.519	.853
	Does things efficiently	30.6264	27.166	.597	.847
	Makes plans and follows through with them	30.5767	27.165	.643	.845
	Is easily distracted	31.3801	23.883	.668	.839

4. Openness (α=.77)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Is original, comes up with new ideas	29.7425	19.216	.488	.753
	Is curious about many different things	29.5629	19.308	.448	.758
	Is ingenious, a deep thinker	29.9641	18.866	.512	.749
	Has an active imagination	29.6228	20.297	.366	.768
	Is inventive	29.9940	18.331	.531	.745
	Values artistic, aesthetic experiences	29.6587	18.503	.588	.739
	Likes to reflect, play with ideas	29.6826	19.652	.463	.756
	Has few artistic interests	30.1257	19.412	.344	.775
	Is sophisticated in art, music, or literature	30.3892	17.709	.456	.760
1	Is original, comes up with new ideas	29.7481	18.759	.485	.745
	Is curious about many different things	29.5661	18.866	.434	.751
	Is ingenious, a deep thinker	29.9690	18.435	.510	.741
	Has an active imagination	29.6341	19.799	.365	.761
	Is inventive	30.0009	17.889	.528	.737
	Values artistic, aesthetic experiences	29.6712	18.134	.578	.731
	Likes to reflect, play with ideas	29.6900	19.191	.453	.749
	Has few artistic interests	30.1493	19.087	.315	.772
	Is sophisticated in art, music, or literature	30.3935	17.268	.456	.752
2	Is original, comes up with new ideas	29.7525	18.808	.485	.746
	Is curious about many different things	29.5686	18.903	.444	.751
	Is ingenious, a deep thinker	29.9735	18.494	.508	.742
	Has an active imagination	29.6449	19.866	.357	.763
	Is inventive	29.9970	17.930	.524	.739
	Values artistic, aesthetic experiences	29.6750	18.177	.579	.732
	Likes to reflect, play with ideas	29.6944	19.199	.459	.750
	Has few artistic interests	30.1537	19.071	.322	.772
	Is sophisticated in art, music, or literature	30.3979	17.315	.455	.753
3	Is original, comes up with new ideas	29.7476	18.835	.487	.746
	Is curious about many different things	29.5631	18.867	.450	.751
	Is ingenious, a deep thinker	29.9686	18.564	.504	.744
	Has an active imagination	29.6360	19.931	.358	.764
	Is inventive	30.0014	17.997	.525	.740
	Values artistic, aesthetic experiences	29.6704	18.228	.577	.734
	Likes to reflect, play with ideas	29.6895	19.224	.462	.750
	Has few artistic interests	30.1488	19.092	.325	.773
	Is sophisticated in art, music, or literature	30.3930	17.363	.455	.754
4	Is original, comes up with new ideas	29.7517	18.806	.484	.746
	Is curious about many different things	29.5591	18.902	.442	.751
	Is ingenious, a deep thinker	29.9726	18.494	.506	.742
	Has an active imagination	29.6445	19.855	.356	.763
	Is inventive	30.0099	17.959	.520	.739
	Values artistic, aesthetic experiences	29.6693	18.127	.586	.731
	Likes to reflect, play with ideas	29.6935	19.174	.461	.749
	Has few artistic interests	30.1528	19.083	.319	.772
	Is sophisticated in art, music, or literature	30.3970	17.284	.458	.752
5	Is original, comes up with new ideas	29.7512	18.778	.488	.745
	Is curious about many different things	29.5685	18.876	.445	.751
	Is ingenious, a deep thinker	29.9721	18.484	.508	.742
	Has an active imagination	29.6302	19.826	.366	.762
	Is inventive	30.0097	17.916	.526	.739
	Values artistic, aesthetic experiences	29.6730	18.166	.580	.732
	Likes to reflect, play with ideas	29.6930	19.226	.454	.751
	Has few artistic interests	30.1523	19.134	.314	.774
	Is sophisticated in art, music, or literature	30.3965	17.306	.456	.753

5. Neuroticism (α=.83)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Is depressed, blue	17.9157	20.829	.546	.819
	Is relaxed, handles stress well	17.5120	19.912	.734	.795
	Can be tense	16.7651	20.629	.545	.820
	Worries a lot	17.2048	19.485	.631	.808
	Is emotionally stable, not easily upset	17.9759	22.218	.539	.821
	Can be moody	17.2771	21.317	.457	.832
	Remains calm in tense situations	17.8614	22.847	.459	.829
	Gets nervous easily	17.4880	20.300	.638	.807
1	Is depressed, blue	17.8655	20.244	.537	.810
	Is relaxed, handles stress well	17.4765	19.438	.720	.786
	Can be tense	16.7208	20.034	.541	.810
	Worries a lot	17.1568	18.941	.630	.797
	Is emotionally stable, not easily upset	17.9160	21.876	.472	.818
	Can be moody	17.2474	20.729	.450	.823
	Remains calm in tense situations	17.8230	22.274	.452	.820
	Gets nervous easily	17.4503	19.726	.636	.796
2	Is depressed, blue	17.8635	20.294	.530	.810
	Is relaxed, handles stress well	17.4695	19.428	.723	.784
	Can be tense	16.7059	20.085	.530	.810
	Worries a lot	17.1544	18.962	.629	.796
	Is emotionally stable, not easily upset	17.9100	21.888	.473	.817
	Can be moody	17.2414	20.729	.451	.822
	Remains calm in tense situations	17.8170	22.260	.457	.819
	Gets nervous easily	17.4526	19.731	.637	.795
3	Is depressed, blue	17.8417	20.348	.526	.811
	Is relaxed, handles stress well	17.4520	19.404	.727	.785
	Can be tense	16.6960	20.104	.534	.811
	Worries a lot	17.1457	18.963	.629	.797
	Is emotionally stable, not easily upset	17.8916	21.863	.477	.817
	Can be moody	17.2230	20.753	.449	.823
	Remains calm in tense situations	17.7986	22.251	.459	.819
	Gets nervous easily	17.4366	19.718	.637	.796
4	Is depressed, blue	17.8751	20.226	.534	.809
	Is relaxed, handles stress well	17.4841	19.406	.718	.784
	Can be tense	16.7174	20.026	.530	.810
	Worries a lot	17.1734	18.914	.628	.795
	Is emotionally stable, not easily upset	17.9252	21.835	.472	.816
	Can be moody	17.2566	20.690	.449	.821
	Remains calm in tense situations	17.8322	22.232	.452	.818
	Gets nervous easily	17.4566	19.681	.635	.794
5	Is depressed, blue	17.8579	20.382	.511	.811
	Is relaxed, handles stress well	17.4828	19.375	.727	.782
	Can be tense	16.7194	20.101	.529	.809
	Worries a lot	17.1688	18.883	.628	.794
	Is emotionally stable, not easily upset	17.9216	21.744	.490	.813
	Can be moody	17.2530	20.785	.442	.822
	Remains calm in tense situations	17.8286	22.222	.458	.817
	Gets nervous easily	17.4633	19.735	.633	.794

I. K-Correction Scale of the MMPI-2 (α= .76)

Item-Total Statistics

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Relation	Cronbach's Alpha if Item Deleted
At times I feel like swearing.	15.44	17.69	.27	.76
At times I feel like smashing things.	14.99	17.69	.38	.75
I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.	15.09	17.49	.35	.75
I have very few quarrels with members of my family.	15.66	18.84	-.18	.77
Often I can't understand why I have been so irritable and grouchy.	14.95	17.93	.34	.75
Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.	15.12	17.24	.41	.75
At times my thoughts have raced ahead faster than I could speak them.	15.43	17.75	.24	.76
Criticism or scolding hurts me terribly.	15.23	17.15	.39	.75
I certainly feel useless at times.	15.14	17.24	.40	.75
It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.	15.13	18.15	.16	.76
It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of things.	15.34	17.20	.37	.75
I find it hard to make small talk when I meet new people.	15.20	17.48	.31	.75
I am against giving money to beggars.	15.13	18.44	.15	.77
I frequently find myself worrying about something.	15.20	17.20	.39	.75
I get mad easily and then get over it quickly.	15.09	18.13	.28	.76
When in a group of people I have trouble thinking of the right things to talk about.	15.07	17.27	.43	.75
I have periods in which I am cheerful without any special reason.	15.49	17.98	.19	.76
I think nearly anyone would tell a lie to keep out of trouble.	15.19	17.58	.29	.75
I worry over money and business.	15.14	17.79	.25	.76
People often disappoint me.	15.02	17.62	.37	.75
I have sometimes felt that difficulties were piling up so high that I could not overcome them.	15.20	16.90	.46	.74
At periods my mind seems to work more slowly than usual.	15.38	17.36	.33	.75
I have often met people who were supposed to be experts who were no better than I.	15.31	17.68	.25	.76
I often think, "I wish I were a child again."	14.95	18.33	.29	.76
I find it hard to set aside a task that I have undertaken, even for a short time.	15.09	17.55	.34	.75

J. Bem Sex Role Inventory

1. Item Scale Correlation of Masculinity (α=.87)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Defend my own beliefs	44.3393	65.878	.452	.866
	Independent	44.2143	68.265	.402	.869
	Assertive	45.0060	57.515	.749	.843
	Strong personality	44.8333	58.798	.673	.849
	Forceful	46.0119	55.641	.714	.845
	Have leadership abilities	44.2798	64.897	.562	.860
	Willing to take risks	44.9464	62.817	.476	.866
	Dominant	46.3452	56.862	.669	.850
	Willing to take a stand	44.5179	63.868	.562	.859
	Aggressive	46.8452	58.659	.608	.855
1	Defend my own beliefs	44.3953	65.773	.456	.866
	Independent	44.2907	68.207	.396	.870
	Assertive	45.0640	57.394	.752	.843
	Strong personality	44.8895	58.918	.669	.850
	Forceful	46.0698	55.305	.716	.846
	Have leadership abilities	44.3372	64.821	.565	.860
	Willing to take risks	45.0116	62.538	.485	.865
	Dominant	46.3837	56.729	.667	.850
	Willing to take a stand	44.5872	63.858	.562	.859
	Aggressive	46.9070	58.635	.607	.856
2	Defend my own beliefs	44.4244	65.860	.455	.866
	Independent	44.3372	68.365	.386	.870
	Assertive	45.0872	57.530	.752	.842
	Strong personality	44.9244	58.971	.672	.849
	Forceful	46.0872	55.343	.715	.845
	Have leadership abilities	44.3663	64.912	.564	.860
	Willing to take risks	45.0407	62.683	.485	.865
	Dominant	46.4186	56.865	.666	.850
	Willing to take a stand	44.6221	64.014	.559	.859
	Aggressive	46.9419	58.675	.611	.855
3	Defend my own beliefs	44.3895	65.198	.453	.865
	Independent	44.2791	67.664	.399	.868
	Assertive	45.0581	56.897	.752	.841
	Strong personality	44.8953	58.293	.673	.848
	Forceful	46.0756	54.889	.713	.844
	Have leadership abilities	44.3547	64.663	.531	.860
	Willing to take risks	45.0000	62.047	.482	.864
	Dominant	46.3837	56.214	.666	.848
	Willing to take a stand	44.5814	63.286	.562	.857
	Aggressive	46.9186	58.040	.608	.854
4	Defend my own beliefs	44.4186	65.590	.457	.866
	Independent	44.2965	68.093	.397	.870
	Assertive	45.0872	57.320	.748	.843
	Strong personality	44.9128	58.712	.672	.850
	Forceful	46.0872	55.250	.713	.846
	Have leadership abilities	44.3605	64.641	.566	.860
	Willing to take risks	45.0291	62.438	.483	.865
	Dominant	46.4070	56.547	.669	.850
	Willing to take a stand	44.6105	63.736	.559	.860
	Aggressive	46.9360	58.423	.611	.855
5	Defend my own beliefs	44.3721	65.217	.455	.864
	Independent	44.2500	67.732	.393	.868
	Assertive	45.0349	56.923	.751	.840
	Strong personality	44.8663	58.362	.670	.847
	Forceful	46.0523	54.962	.713	.843
	Have leadership abilities	44.3372	64.646	.532	.859
	Willing to take risks	44.9767	62.128	.479	.863
	Dominant	46.3721	56.153	.666	.848
	Willing to take a stand	44.5640	63.288	.562	.857
	Aggressive	46.9012	57.984	.608	.853

2. Item Scale Correlation of Famininity (α =.89)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Affectionate	52.7262	38.847	.575	.884
	Sympathetic	52.1429	40.973	.652	.879
	Sensitive to needs of others	52.1845	40.559	.653	.878
	Understanding	52.1964	41.560	.652	.880
	Compassionate	52.1429	39.584	.770	.872
	Eager to soothe hurt feelings	52.5774	37.479	.629	.881
	Warm	52.5417	38.441	.758	.871
	Tender	52.8095	35.844	.785	.867
	Love children	52.2619	42.638	.319	.901
	Gentle	52.5060	38.407	.652	.878
1	Affectionate	52.7733	38.258	.576	.881
	Sympathetic	52.1977	40.312	.651	.876
	Sensitive to needs of others	52.2209	39.928	.647	.876
	Understanding	52.2384	40.908	.648	.877
	Compassionate	52.1919	38.963	.771	.869
	Eager to soothe hurt feelings	52.6047	36.895	.623	.878
	Warm	52.5988	37.809	.749	.868
	Tender	52.8488	35.240	.786	.864
	Love children	52.3314	42.235	.295	.901
	Gentle	52.5581	37.780	.653	.875
2	Affectionate	52.7733	38.293	.575	.882
	Sympathetic	52.1860	40.398	.654	.877
	Sensitive to needs of others	52.2267	39.954	.651	.876
	Understanding	52.2326	41.010	.644	.878
	Compassionate	52.1860	39.041	.771	.869
	Eager to soothe hurt feelings	52.6047	36.954	.627	.878
	Warm	52.5814	37.906	.755	.868
	Tender	52.8488	35.275	.784	.864
	Love children	52.3198	42.289	.296	.901
	Gentle	52.5523	37.839	.654	.875
3	Affectionate	52.7442	38.332	.565	.881
	Sympathetic	52.1686	40.375	.643	.875
	Sensitive to needs of others	52.2267	39.989	.637	.875
	Understanding	52.2326	40.846	.652	.876
	Compassionate	52.1744	38.964	.769	.868
	Eager to soothe hurt feelings	52.5988	36.826	.629	.876
	Warm	52.5640	37.826	.755	.866
	Tender	52.8372	35.190	.784	.862
	Love children	52.3081	42.156	.298	.899
	Gentle	52.5523	37.711	.642	.874
4	Affectionate	52.7733	38.293	.575	.880
	Sympathetic	52.1977	40.347	.654	.875
	Sensitive to needs of others	52.2267	39.931	.649	.875
	Understanding	52.2442	40.887	.653	.876
	Compassionate	52.1919	38.963	.771	.868
	Eager to soothe hurt feelings	52.6221	36.950	.623	.877
	Warm	52.6047	37.831	.738	.868
	Tender	52.8605	35.349	.774	.864
	Love children	52.3430	42.250	.295	.900
	Gentle	52.5523	37.769	.653	.874
5	Affectionate	52.7674	38.109	.576	.881
	Sympathetic	52.1977	40.195	.647	.876
	Sensitive to needs of others	52.2384	39.902	.636	.876
	Understanding	52.2442	40.747	.653	.877
	Compassionate	52.1919	38.823	.770	.868
	Eager to soothe hurt feelings	52.6105	36.730	.627	.877
	Warm	52.5872	37.682	.756	.867
	Tender	52.8372	35.120	.779	.864
	Love children	52.3372	42.038	.297	.900
	Gentle	52.5523	37.652	.652	.874

K. UCLA Loneliness Scale; Item Correlation (α= .90)

Item-Total Statistics

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Relation	Cronbach's Alpha if Item Deleted
I feel in tune with the people around me.	34.96	85.55	.39	.90
I lack companionship.	33.99	78.63	.61	.89
There is no one I can turn to.	34.54	78.43	.71	.89
I do not feel alone.	33.19	92.72	-.22	.92
I feel part of a group of friends.	34.80	78.88	.71	.89
I have a lot in common with the people around me.	34.67	80.43	.65	.89
I am no longer close to anyone.	34.66	77.79	.69	.89
My interests and ideas are not shared by those around me	34.08	81.59	.46	.90
I am an outgoing person	34.61	84.86	.31	.90
There are people I feel close to.	34.96	83.31	.48	.90
I feel left out.	34.37	78.81	.67	.89
My social relationships are superficial	34.31	79.84	.63	.89
No one really knows me well.	34.21	77.87	.66	.89
I feel isolated from others.	34.45	77.81	.73	.89
I can find companionship when I want it.	34.73	82.51	.46	.90
There are people who really understand me.	34.67	81.18	.56	.89
I am unhappy being so withdrawn.	34.55	78.92	.59	.89
People are around me but not with me.	34.29	79.52	.64	.89
There are people I can talk to.	35.01	82.67	.64	.89
There are people I can turn to.	34.98	82.19	.64	.89

L. Religious Orientation Scale

1. Item Correlation for Intrinsic Orientation (α=.71)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	It doesn't much matter what I believe so long as I am good.	21.6786	8.291	.404	.680
	It is important to me to spend time in private thought and prayer.	21.2202	9.885	.383	.692
	I try hard to live all my live according to my religious beliefs.	21.5714	8.701	.412	.676
	Although I am religious, I don't let it affect my daily life.	21.4048	8.314	.502	.649
	My whole approach to life is based on my religion.	21.6488	7.798	.506	.645
	Although I believe in my religion, many other things are more important in life.	21.7024	7.348	.478	.659
1	It doesn't much matter what I believe so long as I am good.	21.6109	8.523	.424	.665
	It is important to me to spend time in private thought and prayer.	21.1260	10.332	.368	.688
	I try hard to live all my live according to my religious beliefs.	21.4697	9.279	.370	.680
	Although I am religious, I don't let it affect my daily life.	21.3558	8.400	.511	.637
	My whole approach to life is based on my religion.	21.5518	8.314	.478	.647
	Although I believe in my religion, many other things are more important in life.	21.6589	7.379	.493	.645
2	It doesn't much matter what I believe so long as I am good.	21.6183	8.395	.427	.660
	It is important to me to spend time in private thought and prayer.	21.1252	10.358	.343	.689
	I try hard to live all my live according to my religious beliefs.	21.4695	9.225	.370	.676
	Although I am religious, I don't let it affect my daily life.	21.3528	8.375	.513	.632
	My whole approach to life is based on my religion.	21.5494	8.294	.472	.644
	Although I believe in my religion, many other things are more important in life.	21.6566	7.354	.492	.640
3	It doesn't much matter what I believe so long as I am good.	21.6291	8.393	.425	.669
	It is important to me to spend time in private thought and prayer.	21.1421	10.193	.378	.690
	I try hard to live all my live according to my religious beliefs.	21.4918	9.076	.391	.678
	Although I am religious, I don't let it affect my daily life.	21.3631	8.372	.512	.641
	My whole approach to life is based on my religion.	21.5615	8.275	.463	.656
	Although I believe in my religion, many other things are more important in life.	21.6621	7.356	.496	.648
4	It doesn't much matter what I believe so long as I am good.	21.6294	8.382	.404	.663
	It is important to me to spend time in private thought and prayer.	21.1534	10.086	.360	.682
	I try hard to live all my live according to my religious beliefs.	21.5061	8.925	.391	.666
	Although I am religious, I don't let it affect my daily life.	21.3884	8.242	.487	.635
	My whole approach to life is based on my religion.	21.5771	8.089	.471	.640
	Although I believe in my religion, many other things are more important in life.	21.6774	7.277	.486	.637
5	It doesn't much matter what I believe so long as I am good.	21.6291	8.426	.431	.673
	It is important to me to spend time in private thought and prayer.	21.1353	10.339	.364	.697
	I try hard to live all my live according to my religious beliefs.	21.4878	9.174	.392	.683
	Although I am religious, I don't let it affect my daily life.	21.3639	8.417	.514	.646
	My whole approach to life is based on my religion.	21.5677	8.242	.488	.653
	Although I believe in my religion, many other things are more important in life.	21.6458	7.523	.494	.654

2. Item Correlation for Extrinsic Orientation (α=.76)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	I enjoy reading about my religion.	30.2395	12.677	.301	.695
	It doesn't much matter what I believe so long as I am good.	30.5988	11.266	.392	.679
	It is important to me to spend time in private thought and prayer.	30.1617	12.510	.477	.673
	I have often had a strong sense of God's presence.	30.3952	13.240	.163	.719
	I try hard to live all my live according to my religious beliefs.	30.5090	11.541	.408	.674
	Although I am religious, I don't let it affect my daily life.	30.3473	11.083	.499	.654
	My whole approach to life is based on my religion.	30.5928	10.375	.528	.644
	Although I believe in my religion, many other things are more important in life.	30.6467	10.133	.455	.666
1	I enjoy reading about my religion.	30.1279	13.232	.289	.689
	It doesn't much matter what I believe so long as I am good.	30.5249	11.593	.393	.669
	It is important to me to spend time in private thought and prayer.	30.0401	13.118	.453	.669
	I have often had a strong sense of God's presence.	30.2954	13.616	.183	.707
	I try hard to live all my live according to my religious beliefs.	30.3838	12.294	.364	.675
	Although I am religious, I don't let it affect my daily life.	30.2698	11.225	.515	.639
	My whole approach to life is based on my religion.	30.4659	11.089	.491	.644
	Although I believe in my religion, many other things are more important in life.	30.5729	10.239	.473	.651
2	I enjoy reading about my religion.	30.1288	13.223	.279	.688
	It doesn't much matter what I believe so long as I am good.	30.5399	11.460	.389	.668
	It is important to me to spend time in private thought and prayer.	30.0468	13.115	.430	.669
	I have often had a strong sense of God's presence.	30.3015	13.458	.199	.702
	I try hard to live all my live according to my religious beliefs.	30.3910	12.208	.364	.672
	Although I am religious, I don't let it affect my daily life.	30.2744	11.169	.517	.636
	My whole approach to life is based on my religion.	30.4709	11.029	.487	.642
	Although I believe in my religion, many other things are more important in life.	30.5781	10.174	.474	.648
3	I enjoy reading about my religion.	30.1256	13.123	.278	.690
	It doesn't much matter what I believe so long as I am good.	30.5330	11.396	.392	.669
	It is important to me to spend time in private thought and prayer.	30.0461	12.900	.463	.667
	I have often had a strong sense of God's presence.	30.3183	13.373	.186	.707
	I try hard to live all my live according to my religious beliefs.	30.3958	12.021	.381	.670
	Although I am religious, I don't let it affect my daily life.	30.2670	11.127	.517	.638
	My whole approach to life is based on my religion.	30.4655	10.997	.474	.647
	Although I believe in my religion, many other things are more important in life.	30.5661	10.177	.471	.650
4	I enjoy reading about my religion.	30.1582	12.895	.273	.682
	It doesn't much matter what I believe so long as I am good.	30.5536	11.318	.371	.664
	It is important to me to spend time in private thought and prayer.	30.0775	12.704	.447	.659
	I have often had a strong sense of God's presence.	30.3387	13.172	.183	.698
	I try hard to live all my live according to my religious beliefs.	30.4303	11.773	.383	.660
	Although I am religious, I don't let it affect my daily life.	30.3126	10.955	.486	.634
	My whole approach to life is based on my religion.	30.5012	10.688	.488	.633
	Although I believe in my religion, many other things are more important in life.	30.6016	10.034	.460	.642
5	I enjoy reading about my religion.	30.1287	13.225	.277	.694
	It doesn't much matter what I believe so long as I am good.	30.5408	11.435	.394	.673
	It is important to me to spend time in private thought and prayer.	30.0470	13.044	.448	.673
	I have often had a strong sense of God's presence.	30.3148	13.490	.189	.710
	I try hard to live all my live according to my religious beliefs.	30.3996	12.104	.383	.675
	Although I am religious, I don't let it affect my daily life.	30.2756	11.159	.519	.643
	My whole approach to life is based on my religion.	30.4794	10.933	.500	.646
	Although I believe in my religion, many other things are more important in life.	30.5575	10.330	.472	.655

M. Brief Religious Coping

1. Positive Religious Coping (α=.83)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Looked for a stronger connection with God.	19.1588	11.282	.656	.792
	Sought God's love and care.	19.0471	11.844	.615	.801
	Sought help from God in letting go of my anger.	19.6059	10.323	.625	.796
	Tried to put my plans into action together with God.	19.2471	11.607	.576	.804
	Tried to see how God might be trying to strengthen me in this situation.	19.3059	11.089	.657	.791
	Asked forgiveness for my sins.	19.0176	12.420	.436	.824
	Focused on religion to stop worrying about my problems.	20.1824	10.174	.536	.820
1	Looked for a stronger connection with God.	19.1383	11.189	.654	.790
	Sought God's love and care.	19.0278	11.740	.613	.798
	Sought help from God in letting go of my anger.	19.5926	10.245	.620	.794
	Tried to put my plans into action together with God.	19.2313	11.504	.576	.801
	Tried to see how God might be trying to strengthen me in this situation.	19.2840	11.024	.648	.789
	Asked forgiveness for my sins.	19.0104	12.282	.432	.822
	Focused on religion to stop worrying about my problems.	20.1615	10.094	.535	.817
2	Looked for a stronger connection with God.	19.1432	11.203	.656	.791
	Sought God's love and care.	19.0328	11.754	.616	.800
	Sought help from God in letting go of my anger.	19.5882	10.272	.623	.795
	Tried to put my plans into action together with God.	19.2363	11.535	.575	.803
	Tried to see how God might be trying to strengthen me in this situation.	19.2934	11.031	.654	.790
	Asked forgiveness for my sins.	19.0153	12.306	.433	.823
	Focused on religion to stop worrying about my problems.	20.1665	10.108	.537	.819
3	Looked for a stronger connection with God.	19.1369	11.202	.654	.791
	Sought God's love and care.	19.0265	11.752	.614	.800
	Sought help from God in letting go of my anger.	19.5892	10.266	.621	.795
	Tried to put my plans into action together with God.	19.2299	11.521	.576	.803
	Tried to see how God might be trying to strengthen me in this situation.	19.2861	11.023	.654	.790
	Asked forgiveness for my sins.	19.0090	12.291	.434	.823
	Focused on religion to stop worrying about my problems.	20.1602	10.107	.535	.818
4	Looked for a stronger connection with God.	19.1342	11.278	.656	.792
	Sought God's love and care.	19.0237	11.828	.617	.800
	Sought help from God in letting go of my anger.	19.5785	10.355	.620	.796
	Tried to put my plans into action together with God.	19.2272	11.613	.574	.804
	Tried to see how God might be trying to strengthen me in this situation.	19.2941	11.033	.656	.790
	Asked forgiveness for my sins.	19.0063	12.361	.438	.823
	Focused on religion to stop worrying about my problems.	20.1574	10.183	.536	.819
5	Looked for a stronger connection with God.	19.1509	11.181	.657	.790
	Sought God's love and care.	19.0404	11.735	.616	.798
	Sought help from God in letting go of my anger.	19.5930	10.243	.622	.794
	Tried to put my plans into action together with God.	19.2439	11.518	.574	.802
	Tried to see how God might be trying to strengthen me in this situation.	19.2962	11.039	.646	.790
	Asked forgiveness for my sins.	19.0230	12.303	.429	.823
	Focused on religion to stop worrying about my problems.	20.1742	10.086	.537	.817

2. Negative Religious Coping (α=.81)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Wondered whether God had abandoned me.	6.4444	5.342	.627	.770
	Felt punished by God for my lack of devotion.	6.6725	5.939	.617	.778
	Wondered what I did for God to punish me.	6.6667	5.506	.697	.758
	Questioned God's love for me.	6.5789	5.033	.803	.730
	Wondered whether my church had abandoned me.	6.4094	5.855	.355	.838
	Decided the devil made this happen.	6.4971	5.675	.456	.811
1	Wondered whether God had abandoned me.	6.4396	5.315	.627	.769
	Felt punished by God for my lack of devotion.	6.6663	5.911	.617	.778
	Wondered what I did for God to punish me.	6.6605	5.480	.698	.758
	Questioned God's love for me.	6.5698	5.018	.799	.730
	Wondered whether my church had abandoned me.	6.4047	5.824	.356	.838
	Decided the devil made this happen.	6.4919	5.646	.456	.810
2	Wondered whether God had abandoned me.	6.4389	5.317	.627	.770
	Felt punished by God for my lack of devotion.	6.6656	5.913	.617	.778
	Wondered what I did for God to punish me.	6.6598	5.482	.698	.758
	Questioned God's love for me.	6.5698	5.018	.800	.730
	Wondered whether my church had abandoned me.	6.4040	5.826	.356	.838
	Decided the devil made this happen.	6.4912	5.648	.456	.811
3	Wondered whether God had abandoned me.	6.4435	5.311	.626	.768
	Felt punished by God for my lack of devotion.	6.6703	5.905	.617	.777
	Wondered what I did for God to punish me.	6.6645	5.475	.697	.756
	Questioned God's love for me.	6.5698	5.018	.789	.730
	Wondered whether my church had abandoned me.	6.4087	5.821	.355	.836
	Decided the devil made this happen.	6.4959	5.642	.456	.809
4	Wondered whether God had abandoned me.	6.4360	5.323	.627	.770
	Felt punished by God for my lack of devotion.	6.6628	5.921	.617	.779
	Wondered what I did for God to punish me.	6.6570	5.490	.697	.759
	Questioned God's love for me.	6.5698	5.018	.803	.730
	Wondered whether my church had abandoned me.	6.4012	5.832	.356	.838
	Decided the devil made this happen.	6.4884	5.655	.457	.811
5	Wondered whether God had abandoned me.	6.4399	5.315	.627	.769
	Felt punished by God for my lack of devotion.	6.6667	5.910	.617	.778
	Wondered what I did for God to punish me.	6.6609	5.479	.698	.758
	Questioned God's love for me.	6.5698	5.018	.798	.730
	Wondered whether my church had abandoned me.	6.4050	5.824	.356	.838
	Decided the devil made this happen.	6.4922	5.646	.456	.810

N. Causal Dimensional Scale

1. Locus of Causality Item Correlation Subscale (α=.83)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	AttributionQ1	7.8156	27.151	.686	.853
	AttributionQ5	8.4326	26.147	.804	.736
	AttributionQ7	8.8440	29.904	.723	.816
1	AttributionQ1	7.9477	23.617	.652	.825
	AttributionQ5	8.4884	22.579	.765	.707
	AttributionQ7	8.9128	25.987	.690	.786
2	AttributionQ1	7.7442	23.162	.626	.827
	AttributionQ5	8.4477	22.459	.770	.672
	AttributionQ7	8.8895	26.087	.668	.779
3	AttributionQ1	7.6802	23.038	.632	.836
	AttributionQ5	8.3605	22.396	.772	.688
	AttributionQ7	8.8663	25.637	.687	.777
4	AttributionQ1	7.7674	23.010	.661	.828
	AttributionQ5	8.4535	22.600	.778	.706
	AttributionQ7	8.8953	25.802	.686	.798
5	AttributionQ1	7.7791	23.471	.643	.814
	AttributionQ5	8.4709	22.637	.771	.678
	AttributionQ7	8.8314	26.293	.658	.793

2. Stability Item Correlation Subscale (α=.74)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	AttributionQ3	10.6985	25.131	.623	.672
	AttributionQ6	10.2279	27.748	.579	.720
	AttributionQ8	9.5588	26.337	.614	.682
1	AttributionQ3	10.8023	21.189	.596	.652
	AttributionQ6	10.2965	23.847	.553	.701
	AttributionQ8	9.5988	22.148	.595	.653
2	AttributionQ3	10.7093	21.541	.571	.632
	AttributionQ6	10.3779	23.488	.544	.665
	AttributionQ8	9.6802	22.745	.559	.646
3	AttributionQ3	10.8314	21.802	.605	.640
	AttributionQ6	10.2558	23.513	.543	.711
	AttributionQ8	9.6453	22.511	.593	.654
4	AttributionQ3	10.9012	21.645	.584	.634
	AttributionQ6	10.3953	23.784	.535	.691
	AttributionQ8	9.8198	22.254	.579	.640
5	AttributionQ3	10.7558	21.449	.577	.631
	AttributionQ6	10.2674	23.285	.547	.667
	AttributionQ8	9.6395	22.630	.558	.654

3. Controllability Item Correlation Subscale (α=.50)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	AttributionQ2	10.5942	20.885	.414	.342
	AttributionQ4	9.2464	22.756	.357	.436
	AttributionQ9	9.8841	23.096	.294	.536
1	AttributionQ2	10.6047	18.147	.372	.325
	AttributionQ4	9.2558	18.882	.342	.376
	AttributionQ9	9.6860	19.866	.260	.513
2	AttributionQ2	10.6860	18.041	.387	.314
	AttributionQ4	9.2326	19.560	.335	.403
	AttributionQ9	9.8488	19.989	.268	.514
3	AttributionQ2	10.5814	17.987	.387	.325
	AttributionQ4	9.3488	19.796	.342	.404
	AttributionQ9	9.8488	19.883	.274	.516
4	AttributionQ2	10.5233	17.912	.390	.296
	AttributionQ4	9.2209	19.249	.333	.394
	AttributionQ9	9.8140	19.848	.255	.524
5	AttributionQ2	10.6279	18.282	.371	.313
	AttributionQ4	9.2791	19.688	.319	.402
	AttributionQ9	9.8023	19.645	.269	.486

O. Affect Balance: Item Scale Correlation (α=.70)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	Pleased about having accomplished something?	5.4762	13.568	.392	.692
	That things were going your way?	5.6429	12.518	.400	.681
	Proud because someone complimented you on something you had done?	5.5952	13.200	.288	.697
	Particularly excited or interested in something?	5.5476	13.399	.295	.697
	On top of the world?	6.3095	11.257	.377	.689
	Depressed or very unhappy?	5.7500	11.290	.572	.648
	Very lonely or remote from other people?	5.8333	11.230	.521	.656
	Upset because someone criticized you?	6.0357	12.310	.245	.714
	So restless that you couldn't sit long in a chair?	5.6429	12.854	.323	.692
	Bored?	5.8095	11.987	.384	.683
1	Pleased about having accomplished something?	5.5058	13.409	.391	.691
	That things were going your way?	5.6686	12.375	.400	.680
	Proud because someone complimented you on something you had done?	5.6221	13.043	.289	.696
	Particularly excited or interested in something?	5.5756	13.240	.295	.696
	On top of the world?	6.3372	11.090	.380	.687
	Depressed or very unhappy?	5.7733	11.171	.570	.647
	Very lonely or remote from other people?	5.8663	11.064	.521	.654
	Upset because someone criticized you?	6.0581	12.125	.251	.712
	So restless that you couldn't sit long in a chair?	5.6860	12.731	.305	.694
	Bored?	5.8314	11.849	.384	.681
2	Pleased about having accomplished something?	5.4884	13.339	.395	.688
	That things were going your way?	5.6512	12.310	.405	.677
	Proud because someone complimented you on something you had done?	5.5988	13.014	.287	.695
	Particularly excited or interested in something?	5.5640	13.148	.294	.694
	On top of the world?	6.3256	11.145	.368	.687
	Depressed or very unhappy?	5.7500	11.148	.568	.645
	Very lonely or remote from other people?	5.8372	11.049	.524	.652
	Upset because someone criticized you?	6.0291	12.145	.241	.712
	So restless that you couldn't sit long in a chair?	5.6570	12.706	.304	.692
	Bored?	5.8140	11.790	.388	.679
3	Pleased about having accomplished something?	5.5000	13.339	.392	.688
	That things were going your way?	5.6628	12.307	.401	.677
	Proud because someone complimented you on something you had done?	5.6221	12.973	.287	.694
	Particularly excited or interested in something?	5.5756	13.170	.292	.694
	On top of the world?	6.3372	11.090	.367	.687
	Depressed or very unhappy?	5.7733	11.100	.571	.644
	Very lonely or remote from other people?	5.8547	11.037	.520	.651
	Upset because someone criticized you?	6.0465	12.091	.245	.710
	So restless that you couldn't sit long in a chair?	5.6744	12.642	.311	.690
	Bored?	5.8256	11.782	.384	.679
4	Pleased about having accomplished something?	5.5233	13.374	.392	.691
	That things were going your way?	5.6860	12.334	.403	.680
	Proud because someone complimented you on something you had done?	5.6395	13.004	.291	.696
	Particularly excited or interested in something?	5.5930	13.202	.297	.696
	On top of the world?	6.3547	11.096	.374	.688
	Depressed or very unhappy?	5.7907	11.126	.574	.646
	Very lonely or remote from other people?	5.8779	11.067	.521	.654
	Upset because someone criticized you?	6.0698	12.100	.249	.712
	So restless that you couldn't sit long in a chair?	5.6977	12.715	.303	.694
	Bored?	5.8488	11.802	.387	.681
5	Pleased about having accomplished something?	5.5000	13.281	.392	.687
	That things were going your way?	5.6686	12.258	.397	.677
	Proud because someone complimented you on something you had done?	5.6163	12.916	.290	.693
	Particularly excited or interested in something?	5.5698	13.112	.296	.693
	On top of the world?	6.3430	11.080	.361	.688
	Depressed or very unhappy?	5.7674	11.045	.573	.642
	Very lonely or remote from other people?	5.8547	10.990	.519	.651
	Upset because someone criticized you?	6.0523	12.038	.245	.710
	So restless that you couldn't sit long in a chair?	5.6744	12.607	.307	.690
	Bored?	5.8256	11.724	.385	.678

P. Psychological Well-being Scale (α= .78)

Item-Total Statistics

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Relation	Cronbach's Alpha if Item Deleted
I like most parts of my personality.	73.98	67.34	.52	.77
For me, life has been a continuous process of learning, changing, and growth.	73.57	71.00	.26	.78
Some people wander aimlessly through life; I am not one of them.	74.24	66.59	.34	.78
The demands of life often get me down.	75.44	60.62	.47	.77
I tend to be influenced by people with strong opinions.	75.10	66.35	.24	.79
Maintaining close relationships has been difficult and frustrating for me.	74.80	61.43	.43	.77
When I look at my life story, I am pleased with how things have turned out so far.	74.09	65.31	.50	.77
I think it is important to have new experiences that challenge how I think about myself and the world.	74.19	67.69	.31	.78
In general, I feel I am in charge of the situation in which I live.	74.96	65.99	.29	.78
I have confidence in my own opinions, even if they are different from the way most people think.	74.61	66.82	.31	.77
People would describe me as a giving person, willing to share my time with others.	74.03	68.69	.39	.77
In many ways, I feel disappointed about my achievements in life.	74.33	60.06	.67	.75
I gave up trying to make big improvements in my life a long time ago.	74.19	63.41	.47	.77
I sometimes feel as if I've done all there is to do in my life.	74.20	64.84	.33	.78
I am good at managing the responsibilities of daily life.	74.48	64.07	.48	.77
I have not experienced many warm and trusting relationships with others.	74.42	64.09	.34	.78

Q. Religious Well-being Scale (α=.77)

Item-Total Statistics

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Original data	I believe that God is concerned about my problems.	42.9051	23.042	.316	.754
	I don't get much personal strength and support from my God.	43.2848	19.530	.411	.739
	Maintaining close relationships has been difficult and frustrating for me.	44.0886	18.400	.353	.764
	My relationship with God helps me to not feel lonely.	43.7468	18.585	.455	.733
	I have a personally meaningful relationship with God.	43.2848	19.466	.619	.710
	I don't have a personally satisfying relationship with God.	43.4051	18.051	.491	.726
	I believe that God is impersonal and not interested in my daily situations.	42.9304	21.428	.535	.731
	My relation with God contributes to my sense of well-being.	43.1076	20.772	.587	.723
	I feel most fulfilled when I'm in close communion with God.	43.1709	20.614	.494	.729
1	I believe that God is concerned about my problems.	42.5465	25.349	.305	.760
	I don't get much personal strength and support from my God.	42.9360	21.487	.430	.742
	Maintaining close relationships has been difficult and frustrating for me.	43.7907	19.979	.384	.762
	My relationship with God helps me to not feel lonely.	43.4012	20.780	.439	.742
	I have a personally meaningful relationship with God.	42.9477	21.114	.637	.712
	I don't have a personally satisfying relationship with God.	43.0698	19.995	.484	.734
	I believe that God is impersonal and not interested in my daily situations.	42.6337	22.818	.508	.734
	My relation with God contributes to my sense of well-being.	42.7442	22.928	.600	.729
	I feel most fulfilled when I'm in close communion with God.	42.8140	23.041	.460	.739
2	I believe that God is concerned about my problems.	42.5291	25.619	.318	.762
	I don't get much personal strength and support from my God.	42.9477	21.582	.440	.744
	Maintaining close relationships has been difficult and frustrating for me.	43.7558	20.291	.385	.765
	My relationship with God helps me to not feel lonely.	43.3605	21.074	.452	.743
	I have a personally meaningful relationship with God.	42.9419	21.318	.642	.715
	I don't have a personally satisfying relationship with God.	43.0465	20.279	.487	.737
	I believe that God is impersonal and not interested in my daily situations.	42.5872	23.296	.492	.740
	My relation with God contributes to my sense of well-being.	42.7326	23.285	.582	.733
	I feel most fulfilled when I'm in close communion with God.	42.7965	23.286	.466	.742
3	I believe that God is concerned about my problems.	42.5291	25.736	.298	.764
	I don't get much personal strength and support from my God.	42.9012	21.821	.438	.746
	Maintaining close relationships has been difficult and frustrating for me.	43.7674	20.332	.384	.768
	My relationship with God helps me to not feel lonely.	43.3663	21.029	.462	.743
	I have a personally meaningful relationship with God.	42.9128	21.542	.632	.719
	I don't have a personally satisfying relationship with God.	43.0581	20.301	.489	.739
	I believe that God is impersonal and not interested in my daily situations.	42.6047	23.141	.515	.738
	My relation with God contributes to my sense of well-being.	42.7093	23.400	.591	.735
	I feel most fulfilled when I'm in close communion with God.	42.8023	23.364	.473	.743
4	I believe that God is concerned about my problems.	42.5581	25.500	.305	.763
	I don't get much personal strength and support from my God.	42.9477	21.535	.440	.744
	Maintaining close relationships has been difficult and frustrating for me.	43.7849	20.170	.378	.768
	My relationship with God helps me to not feel lonely.	43.4012	20.838	.459	.742
	I have a personally meaningful relationship with God.	42.9593	21.209	.643	.716
	I don't have a personally satisfying relationship with God.	43.0930	20.038	.494	.736
	I believe that God is impersonal and not interested in my daily situations.	42.6337	23.017	.503	.739
	My relation with God contributes to my sense of well-being.	42.7500	23.101	.596	.733
	I feel most fulfilled when I'm in close communion with God.	42.8488	23.147	.452	.744
5	I believe that God is concerned about my problems.	42.5291	25.701	.310	.764
	I don't get much personal strength and support from my God.	42.9360	21.698	.441	.745
	Maintaining close relationships has been difficult and frustrating for me.	43.7733	20.363	.378	.769
	My relationship with God helps me to not feel lonely.	43.3721	20.972	.467	.742
	I have a personally meaningful relationship with God.	42.9535	21.436	.621	.720
	I don't have a personally satisfying relationship with God.	43.0814	20.099	.506	.736
	I believe that God is impersonal and not interested in my daily situations.	42.6105	23.210	.497	.741
	My relation with God contributes to my sense of well-being.	42.7326	23.332	.589	.735
	I feel most fulfilled when I'm in close communion with God.	42.8023	23.294	.467	.744