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Vicki Hendrix Kloosterhouse

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Barbara D. Ames
Major professor

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FAMILIES' USE OF RELIGION/SPIRITUALITY AS A PSYCHOSOCIAL RESOURCE

By

Vicki Hendrix Kloosterhouse

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ABSTRACT

FAMILIES' USE OF RELIGION/SPIRITUALITY AS A PSYCHOSOCIAL RESOURCE

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Vicki Hendrix Kloosterhouse

The purpose of the study was to determine if there was a relationship between the use of religion/spirituality as a resource, and the ability of families to cope with the stress of having a child in the hospital. The data also were used to test an a priori model to determine if there was a relationship between the model's predictive variables and families choosing to use religion/spirituality as a coping mechanism. The predictive variables used in the a priori model were religious/spiritual (R/S) practices, R/S beliefs, R/S affiliation, interaction with spiritual caregiver, race, income, education and gender and age of the family respondent.

The Pearson product moment coefficient was used to analyze hypothesis one, which looked at the relationship between the families' use of religion/spirituality and the ability to cope with the stress of having a child in the hospital. To test this hypothesis, the respondents were asked if their families used religion/spirituality as a coping mechanism and how stressful and difficult it was to cope with having a hospitalized child. No significant relationship was found between the use of religion/spirituality as a resource and a decrease in the families' stress level and difficulty in coping.

The a priori model, upon which hypothesis two was based, was first tested using a path analysis. The analysis determined that the data were not consistent with this model.

The model then was modified to include only three predictive variables, R/S practices, beliefs and affiliation and the dependent variable, the use of religion/spirituality as a coping resource. Multiple regression was used to analyze the modified model. The model demonstrated a high level of explanatory power with an R^2 of 81.80 percent and an adjusted R^2 of 65.3 percent. The ratio of explained to unexplained variance was statistically significant at .000, with an F value of 43.472. The magnitude of the R^2 and the adjusted R^2 indicated a good fit with the modified model.

When family members were asked if their immediate family's R/S beliefs were important in helping them to cope with having a child in the hospital, a majority of the family members agreed. These responses appeared to be contradictory to the findings of hypothesis one. This may be due to the fact that completion of the surveys occurred when respondents' families were at the initial stage of the coping process in which a stressor is defined and meaning is attached to the situation. Respondents did indicate that their R/S beliefs provided meaning and purpose to life, were a source of strength, and offered hope. However, religion/spirituality did not appear to help families during the later stages of coping where it is more common to see a reduction of stress and difficulty in coping. In this study, families may not have been at this stage of coping, thus leading to inaccurate measurements of hypothesis one. Or, religion/spirituality may have helped in the initial stages of coping but was not influential in the rest of the coping process.

Further research needs to be conducted on how and if families use religion/spirituality to cope with stress. Nonetheless, it would be beneficial for both health care and family science professionals to begin to consider whether they are giving adequate consideration to the use of religion/spirituality as a resource.

DEDICATION

To my husband who is so secure in who he is
that he has always encouraged and supported who I am.

To my mother, who is a remarkable woman, and has
taught me the joy and importance of learning.

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CHAPTER 1

INTRODUCTION

Scope of the Problem

Many health care professionals are concerned that the United States is facing a health care crisis because of escalating medical costs (Beadle, 2000; Friedman, 1998). The U.S. Department of Health and Human Services has estimated that by 2008 health-care costs will increase to 1.7 trillion dollars per year, which means that 17 percent of the gross domestic product will be spent on health care (Beadle, 2000). It is projected that by 2020 one out of every four dollars will be expended for medical costs. Beadle suggests that these increases threaten the country's personal and economic health, and individuals need to consider other cost-effective resources beyond use of technology.

Friedman (1998) also writes about the poor use of medical resources and laments that today's health care system is taking a high tech and crisis management approach. In many cases, this comes too late to successfully manage the disease. She writes,

> In the case of chronic illness – our prevailing cause of morbidity and mortality – we are not treating and eradicating disease, but only minimizing its impact, repairing the damage as much as possible, and treating its complications. We are spending most of our money treating the end result of self-destructive lifestyles rather than focusing on the causative factors of ill health, such as lifestyle and environmental hazards. (Friedman, 1998, p. 38)

As Friedman points out, many of the factors related to ill health could be eradicated through preventive medicine, which would be both beneficial and cost effective. The lack of attention paid to prevention can be summed up by U.S. Secretary of Health and Human Services, Donna Shalala. She approximates that only four percent of the United States' health care budget is spent on preventive services (Whitmer, 1999). Whitmer capsulizes the significance of this statistic by calculating that money spent on preventive medicine "adds up to less than a nickel from each health care dollar. The other 95 percent goes directly toward diagnosis and treatment of diseases, half of which are preventable." (p. 21).

Even though prevention may be one of the most important and cost-effective means of fighting disease, it still does not seem to be a primary focus of many health care providers nor the American public. For example, depending on which research one reads, it is reported that between 60 to 90 percent of all primary-care physician office visits are due to symptoms that are related to stress and lifestyle practices (Benson & Stuart, 1992). These findings are troubling because realigning behavior and/or the environment may be one of the most effective factors in helping to control many health problems.

Not only have many health care providers chosen to ignore the importance of practicing prevention, they also have disregarded the use of complementary therapies that may help in the prevention of diseases, rehabilitation and/or palliative care. However, their patients have not ignored the use of complementary health therapies. In 1990, one-third of Americans were using complementary therapy outside of mainstream medicine such as massage, acupuncture, mind/body connection, and prayer to enhance their health

(Cerrato, 1998). David Eisnberg, as cited in McDonagh (1999), found that from 1990 to 1997 the use of complementary therapy increased by 25 percent. In 1997, it is estimated that 62.9 million Americans paid visits to alternative therapy practitioners and spent over 27 billion dollars for the therapists' services. Research conducted by Stanford University discovered that 39 percent of the patients who were satisfied with their conventional physician were still using complementary therapy to enhance their health (Comarow, 1998). Perhaps this new trend is a clarion call to the medical profession that changes need to be made in the approaches used to deal with illness and disease. The United States is well known for its ability to provide excellent medical care in treating illness. However, it needs to be acknowledged that the medical system has not been as effective in preventing diseases and promoting beneficial complementary therapy. Like any organizational unit, the health care system has limited resources to provide health care to the American people. The health care profession has been handicapped in reaching these goals by the cost of advanced medical treatments, the loss of human resources due to downsizing, and perhaps the failure to look for preventive and complementary health care resources outside of the walls of the mainstream Western medical profession. It is an impossible task for the healthcare community to take full responsibility for our nation's health. Therefore, health care professionals need to consider other resources and therapies that can be used to complement the current medical care in the United States.

Religion/Spirituality as a Psychosocial Resource

It is beyond the scope and purpose of this research to look at all complementary resources that could be useful in preventive and rehabilitative health care. Instead, the

focus will be limited to investigating the effects of religion/spirituality on health. Specifically, this study will focus on the use of religion/spirituality as a psychosocial resource to cope with stress. Addressing the Conference of the Psychology of Health, Immunity and Disease, Bruno Cortis (1993), a practicing cardiologist in both the United States and Europe, spoke to the importance of spirituality when he stated, "Health is not simply the absence of disease. In terms of the total human being, health implies our physical, mental and spiritual dimensions" (p. 67). Antonovsky (1985) also has suggested that religion/spirituality is a viable resource in helping an individual gain a "sense of coherence" to adapt to daily stressors. After 30 years of research, Herbert Benson, M.D. (1996), an Associate Professor of Medicine at Harvard Medical School, has become convinced that belief in a higher power provides a critical contribution to an individual's well-being. In the book, Timeless Healing, Benson (1996) suggests that human beings are "wired for God." He is convinced that each individual is genetically encoded with a need for nourishment from faith. Benson postulates that when individuals use their faith, they activate a neurological pathway that helps with healing. Citing research, Benson notes that religious people have better general health, lower blood pressure, fewer psychological symptoms, and a longer survival rate. Benson also projects that religious people have greater life satisfaction, marital satisfaction, well-being, altruism, fellowship, coping skills and self-esteem as compared to non-religious people. These characteristics lead to decreased stress and anger and improved psychoneuroimmunological pathways, which help fight disease within the body.

Many researchers believe that teaching people how to use effective coping resources to deal with stress not only will help to maintain or improve health but also is

cost-effective (Greenberg, 1993; Benson & Stuart, 1992; Antonovsky, 1985). Researchers have identified an association between stress, the lack of psychosocial resources to deal with stressors, and immunological disturbances (Benson & Stuart, 1992; McCubbin & Patterson, 1983). It has been found that a depressed immune system may occur in people who are bombarded by daily hassles and/or are confronted by profound life changing events (Irwin & Strausbaugh, 1991). McCubbin and Patterson (1983) have submitted that the effect of stress depends on how individuals perceive an event and then how they cope with it. One of the factors that will influence individuals' perception of the event is whether they have adequate physical and psychosocial resources. Studies have found that religion/spirituality is a system that can provide coping resources (McIntosh & Spilka, 1991; Pargament & Hahn, 1986).

Significance of the Study

Health care costs are increasing yearly and will continue to do so if the main focus continues to be on rehabilitation and high-tech treatments. Over the next eight years, health care costs are expected to grow from one trillion to 1.7 trillion dollars (Beadle, 2000). This means that 17 percent of the gross domestic product will be spent on health care cost. Therefore, it is important that professionals begin to look for preventive and rehabilitative resources that are not only beneficial but also cost-effective and readily available. The researcher is proposing that religion and/or spirituality can act as such a resource.

More Research Is Needed in the Area of Religion/Spirituality

The National Institute for Healthcare Research (NIHR) has taken an in-depth look at research that has intentionally as well as inadvertently looked at the influence of religion and spirituality on health (Larson, Swyers, & McCullough, 1997). When reviewing past studies, the NIHR's researchers frequently found that studies did show that there was a positive relationship between religion/spirituality and health. However, due to the political climate, findings, if reported at all, were basically ignored. Larson and colleagues write, "findings pertaining to religious/spiritual-health linkages were often buried in tables, often without comment in either text or abstract, and usually without references to similar findings from other studies" (Larson, Swyers, & McCullough, 1997, p. 4). Times are changing, and in the last decade there has been an increase in the number of studies focusing on the beneficial effects of religion and spirituality. However, according to the NIHR, research in this field needs to be expanded.

It should be noted that for this study, the researcher has used research recommendations that have been established by the NIHR. In 1998, the NIHR published an extensive report entitled Scientific Research on Spirituality and Health: A Consensus Report (Larson, Swyers, & McCullough, 1998). The report was based on the Scientific Progress in Spirituality Conference. The conference participants consisted of scholars and researchers in the field of medicine, psychology, sociology, education, health policy management, public health and religion. The report recommended that special attention be given to improvement in quality of methodology, statistical techniques and commonality in the conceptualization of religion and spirituality. Based on the suggestion of the NIHR report, the researcher has used *religion/spirituality* as a

conceptual term for this study. Further discussion about the use of religion/spirituality as a conceptual term will be found in Chapter II.

The NIHR has recommended a number of domains that need further study in regards to the relationship between religion/spirituality and health. One of the areas cited for further research is the influence of religion/spirituality on coping with stressful life events. Therefore, it is hoped that this research, which has focused on the relationship between religion/spirituality and a family's ability to cope with stress, will contribute to the literature on religion/spirituality and health.

Few Studies Have Focused on the Family

Past research mainly has investigated the influence of religion/spirituality on the patient's health and/or well-being, while little research has looked at the family of the patient. In this study, the researcher will be focusing on the ability of the family to cope with having a child on the pediatric unit in the hospital. The ability of the family to successfully cope with the stress of having a child in the hospital is of great importance for a number of reasons. First, when a child is in the hospital several changes can occur that have the potential to transform the family from a functional to a dysfunctional unit. A discussion of these changes occurs later in Chapter I. To successfully adapt, the family needs to have adequate resources available to help with the coping process. Religion/spirituality may be one of the resources, which can help the family adapt to these changes so they can continue to adequately function (Friedman, 1998; Danielson, Hamel-Bissell, & Winstead-Fry, 1993; Hanson & Boyd, 1996). Second, it is important that the family successfully cope with the stress of having a child in the hospital, because family

members are key players in helping to influence the course of the child's medical problems. According to a 1985 national Gallup survey, families provided more help in health matters than any other source, including doctors (cited in Friedman, 1998). Third, family members, especially parents, are role models for others in the family unit. As members observe other individuals in their families using appropriate psychosocial resources such as religion/spirituality to cope with stress, they may experience and learn that religion/spirituality can be used as an effective coping tool. Fourth, if additional studies continue to indicate that religion/spirituality is an important tool in coping, then health care professionals needs to validate that a family's religious and spiritual practices and beliefs can enhance a family's well-being. This is especially important, because in the realm of health care, religion/spirituality is a resource that is cost-effective and readily accessible to most people.

Purpose of the Study

The purpose of this study was to determine if there was a relationship between families' ability to cope with the stress of having a child in the hospital, and the use of religion/spirituality as a system to help decrease the families' stress. The data also were used to test an a priori model constructed to determine if there was a causal relationship between predictive variables, and families choosing to use religion/spirituality as a psychosocial resource to cope with the stress of having a child in the hospital. The predictive variables included in the model were religious/spiritual (R/S) practices, R/S beliefs, interaction with spiritual caregivers during the child's stay in the hospital, R/S affiliation, race, income, education, and gender and age of the family respondent.

Theoretical Framework

Antonovsky's Generalized Resistance Resources

Aaron Antonovsky (1985), a former professor of medical sociology at the Ben Gurion University in Israel, proposed that stress, combined with the lack of resources to deal with it, are major players in health related issues. He criticized the medical community for only using the pathogenic model to look at health care concerns. The pathogenic model focuses on disease without considering other psychosocial factors that might contribute to illness. Antonovsky believed that this approach limited health care professionals in determining the root cause of the problem. He believed that if underlying causes, such as psychosocial issues, were not addressed, then patients were more likely to stay ill and manifest additional disease symptoms. To address this problem, Antonovsky developed the "salutogenic model of health." In his model, Antonovsky looked beyond the disease and posited that stress by definition places a burden on people. He referred to stress as *strain tension*, and he was convinced that if tension was not dealt with, it would cause the body to break down. He visualized this concept by describing a health continuum that ranged from an *ease end* of health to the opposite end being described as *dis-ease*. Antonovsky wrote:

> To ask about a specific disease is to narrow one's search to specific, disease-relevant factors. To ask about ease and dis-ease is to ask about generalized factors that are relevant to all diseases. And to ask about health ease, that is, to seek to explain what facilitates our movement toward the most salutary end of the breakdown continuum, is to search for weapons that may be far more potent in decreasing human suffering than is any specific disease-preventing or disease-curing factor (p. 56).

Antonovsky (1985) perceived stress as a disequilibrium of homeostasis, which is caused by internal and/or external environments of an individual. How well an individual dealt with stress was dependent upon life experiences and available resources, which he referred to as *generalized resistance resources* (GRRs) [see Table 1]. Antonovsky proposed that both life experiences and the availability of resistant resources influenced an individual's *sense of coherence*. He defined a *sense of coherence* as:

> A global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as can reasonably be expected (p. 184).

A person with a sense of coherence usually views the world as predictable and comprehensible. This type of individual understands that life brings failure and frustration, but because he or she has a *sense of coherence*, there is a confidence that in the end things would work out. It does not mean that the person is in total control, but the person does affirm that he or she has the opportunity to participate in the process of shaping one's destiny as well as one's daily experience.

Table 1: Antonovsky's (1985) Generalized Resistance Resources (GRRs)

Resource	Definition
Physical/Biochemical	Health of the body and of the immune system
Artifactual	Material possessions including money, shelter, clothing, power, status, availability of services
Cognitive	The ability to obtain knowledge and information about the real world and skills
Emotional	A lifelong forming of ego identity, a picture of one's self in the world which one lives
Valuative/Attitudinal	One's coping strategies, the individual's perception of the availability of resources he or she has to use
Interpersonal/Relational	Social support and ties a person has to others, a sense of commitment to a group and the group is committed to the person
Macrosociocultural	Gives cultural stability (a language, a role set, a larger world in which to fit) and a philosophy of life

Antonovsky's (1985) model offers an intriguing perspective on the importance of using resources to help reduce stress and move an individual or group of individuals toward the ease end of the continuum. He suggested that using the GRRs would improve one's sense of coherence, which in turn helps one react more constructively to stress. Not only would a person have the confidence that stressors could be dealt with, but the individual also would know how to draw upon the GRRs to dissipate or resolve the stressful situation. Consequently, as individuals have more GRRs available to deal with stress, they also have a greater chance of staying closer or moving toward the ease end of the continuum, with the outcome being stabilized or improved health.

Limitations of Antonovsky's Model

Antonovsky's "salutogenic model of health" is both insightful and helpful in identifying non-medical resources (GRRs) that individuals can use to successfully deal with stress, creating a greater potential to stay healthy. However, the researcher would suggest that Antonovsky has left out one of the most important resources in our society, which can be very effective in promoting and maintaining health – the family. Peterson (1995) noted that no other system affects an individual's daily life as much as the family. He emphasizes that the family is intertwined in many diverse areas of an individual's life, even down to how members "squeeze the toothpaste tube" (p. 23). For instance, families are usually the primary care givers when an individual goes through a crisis, especially health emergencies. To meet health care concerns, family members often alter their roles, reallocate resources, and utilize new coping strategies to meet a loved one's medical needs (Friedman, 1998; Hanson & Boyd, 1996; Danielson, et al, 1993). As a primary

source of care giving, the family also provides physical, social and emotional support during the crisis.

The family not only is supportive during an emergency, but also helps in the process of shaping family members' health care habits. Troost and Filsinger (1993) identify a number of important roles the family plays in this arena. They propose that lifestyles, whether positive or negative, are learned within the family setting. Since family members share some of the same biological risk factors, the family also can play an important role in helping members identify and successfully deal with those risks. Vaughan-Cole, Johnson, Malone & Walker (1998) emphasize the importance of making the family feel like an "insider" when focusing on health promotion and disease prevention, because it is the family who builds the environment that contributes to a healthy lifestyle. Friedman (1998) cites a number of reasons why the family plays an important role in health care. She notes that parents in the family are the "primary teachers" who help children learn how to deal with health care issues. Furthermore, the family is a critical resource for the actual delivery of many health care services. In addition, working with one family member may help the health care professional recognize and connect to other members who need help. The family also may be able to share invaluable information about a patient that a health care provider would not be able to find elsewhere. Boise, Heagerty, and Eskenazi (1996) point out that the health care system is dependent on the family in helping individuals to achieve optimum health. It would be too costly for the health care community to do this on its own; therefore, it must rely on valuable resources such as the family unit.

One might contend that the family is already recognized in Antonovsky's (1985) salutary model under social support. However, the researcher would argue that listing the family under social support puts it in a secondary position. In essence, one could then say that other people or organizations that offer social support have as powerful an influence over an individual's life as the family unit. Peterson (1995) points out that one of the distinct characteristics of the family, as compared to other social groups, is its permanence and importance in an individual's life. Even though friends and social organizations can contribute to a person's well being, they normally do not have as intimate contact with or provide as many services to the individual as a person's family, nor do they usually sustain a relationship with an individual over time.

It also could be argued that families do not necessarily make positive contributions to a family member's well-being. For example, an individual may learn inappropriate communication patterns or coping skills from the family unit, which eventually contributes to increased stress in the person's life. Likewise, a family member may acquire an undesirable health habit. It cannot be denied that a family can have a negative effect on a family member's psychological and physiological health. However, Antonovsky (1985) acknowledged that any of the GRRs have the potential to have a positive or negative influence on an individual's sense of coherence. The fact that the family can play either a positive or negative role in health care should be an even greater incentive for the health care community to educate families about the importance of being positive role models. If the family is identified as a unique and important resource, then there is a greater likelihood that more attention will be given to educating and equipping the family with other resources to promote health. However, the family should not be

viewed as just another GRR, but should be recognized as a vital co-partner with the health care community. The family also should be seen as a system that has the ability to integrate a wide variety of resources to use for preventive and rehabilitative strategies.

The researcher proposes that Antonovsky's (1985) GRRs can be successfully blended with concepts from the human ecology theory that emphasizes the importance of the family. The intent of this blending is to build a model that would advance the concepts of the GRRs, while at the same time highlighting the importance of the family as an essential resource partner in health care. The family is viewed as such because of its major role in educating members in identifying and using a variety of resources to stay healthy.

Human Ecology Theory

The human ecology theory views the family as a dynamic system, which has a significant influence over its individual members as well as society. As will be demonstrated later, the concepts on which this theory is based are very compatible with GRRs described in Antonovsky's (1985) salutogenic model of health. The theory focuses on the interaction and interdependence of families within their environment. The environment can act as a stressor to the family as well as provide resources to promote well being (Bubolz & Sontag, 1993). The family is viewed as a microunit of society that interacts with the natural, physical, social-cultural, and behavioral milieu (Bubolz & Whiren, 1984). Bubolz and Sontag point out that the human ecology theory emphasizes the family's ability to create, use, and manage resources "for creative adaptation, human development, and sustainability of environments" (p. 419). The family also is seen as an

energy transformation system that is cyclic in nature. It can be pictured as a continuous cycle, which begins with the family receiving input from its environment via information or through resources. The family then integrates the information and resources into its own microunit and makes any needed adjustments. The cycle comes full circle when the family transmits original and learned information and resources back into society. Resources of various kinds are viewed as an important part of the family system, because the resources or lack thereof, have the potential to have a positive or negative influence on the family's ability to transform and use energy.

One of the key words used in the human ecology theory is "adaptation." Adaptation indicates that a change or behavior modification occurs to fit the structure of the environment (Bubolz & Sontag, 1993; Bubolz, Eicher, & Sontag, 1979). This is a crucial concept, because it intimates that resources can act as change agents in helping family members make important lifestyle improvements in their health. This process of adaptation stems from the cyclic, energy transformation system. For example, if family members have appropriate resources to help cope with stress, they are more likely to have an increased sense of coherence, which leads to positive adaptations and sufficient energy to move them toward the ease end of the health continuum. This in turn will have a significant influence on family members' productivity, and the amount of resources that they will be able to feedback into their environmental settings such as work, school, and/or the community. Over a period of time, the family's usage of a wide variety of resources may decrease the amount of health care resources the family will need to use to maintain members' health.

Throughout most of history, the family has been the primary provider of health care. Before the 20th century, the family home had been the main site of care ranging from births to deaths. However, in the 20th century, births, doctor visits, care for ill family members and even deaths were moved from the home into an institutional setting (Howell, 1988). As family care moved out of the home, the concept of health care shifted from viewing the family as an important resource in promoting and preserving health to turning this task over to the health care system. Unfortunately, this practice has placed too large a burden on the medical community and has diminished the importance of one of the most valuable and economical resources in health care, the family.

Viewing the family as a vital resource in transmitting and integrating information about health and the use of GRRs is beneficial both to the family unit and society. The following section will depict how Antonovsky's GRRs can be compatibly blended with the concepts advanced by the human ecology theory. While Antonovsky's (1985) model mainly focused on resources to improve a sense of coherence, and therefore health, the human ecology theory adds the special dimension of the family as an important resource in helping individuals to successfully interact with their environment (Bubolz & Sontag, 1993). Table 2 gives a brief overview of the close association between Antonovsky's GRRs and concepts from the human ecology theory, while the next section will give a more in-depth explanation.

Table 2: The Blending of Antonovsky's Generalized Resistance Resources and Concepts from the Human Ecology Theory

Antonovsky's Generalized Resistance Resources (Antonovsky, 1985)	**Human Ecology Concepts** (Bubolz & Sontag, 1993)
Physical/Biochemical • Internal environment to support life	**Carrying Capacity** • Ability of an environment to support life
Artifactual • Material	**Artifacts** • Physical objects
Cognitive • Knowledge • Information	**Communications** • Information and meaning created and transmitted
Emotional • Ego identity	**Human Development** • Ability to perceive and act in relation to the environment
Valuative/Attitudinal • Coping strategies	**Decision Making and Management** • Goal setting/planning • Problem solving
Interpersonal/Relational • Social Support • Commitment	**Needs and Values** • Needs for having, relating and being • Commit to a group that is good, right, and worthwhile
Macrosocioculture • Cultural Stability • Philosophy of Life	**Social-Culture** • Societal blueprint • Rituals, beliefs, values of the family (McAdoo, 1993)

A Blending of Concepts

Physical-Biochemical/Carrying Capacity

Physical and biochemical resources are the first two GRRs mentioned by Antonovsky (1985). Even though the human ecology model does not include a concept that addresses the physical and biochemical needs, Sutton and Harmon do talk about the *carrying capacity* of an environment (cited in Bubolz & Sontag, 1993). It is the "capability of a particular environment to support life" (p. 433). Theoretically, this also could be used to describe every individual's physiological health, because each person has his or her own internal environment, which must physically and biochemically be able to support life. Likewise, every individual's health should be considered an important resource, because it has the potential to influence interaction with the person's immediate family as well as with others in the external environment. A person's physical health also will be a factor in the amount of resources needed to sustain his or her life. While it is true that genetically some individuals are healthier than others, the availability and use of material as well as psychosocial resources may have as great an influence on a person's health. Both Antonovsky's (1985) model and the human ecology theory (Bubolz & Sontag, 1993) include material and psychosocial resources as important components of adaptability and coping.

Artifactual-Material/Artifacts

One of the most prominent material resources in the Western culture is money, and this falls under the *artifactual GRR* (Antonovsky, 1985). With money comes the ability to purchase needed resources, which in turn has the potential to decrease stress and

give access to health care services. Money also tends to increase one's power base. In this category of GRR, Antonovsky also included other material resources such as shelter, clothing, and adequate food. The human ecology theory's (Bubolz & Sontag, 1993) description of artifacts would be similar to Antonovsky's model when referring to resources needed to maintain well-being. Families can be encouraged to identify material resources that they have available to meet their needs. However, if a family believes that their basic needs such as food, clothing and shelter are not being met, it becomes difficult for them to consider other ways of coping. It also should be noted that families with wealth, power and knowledge will be more likely to take advantage of available resources (Antonovsky, 1985). Families who come from lower socioeconomic backgrounds may need additional encouragement to seek preventive or intervening health care. Once basic needs are addressed, other GRRs such as *cognitive* resources can be promoted.

Cognitive/Communication

Cognitive refers to knowledge and information exchange (Antonovsky, 1985), which is expressed as *communication* in the human ecology theory (Bubolz & Sontag, 1993). This exchange takes place at every level of the ecosystem, whether it is in the family setting or with an external system. The exchange begins with sharing knowledge and information within the family. It then expands outside of the home where information and knowledge is directly shared between an individual and the community at large. Cultural beliefs, values, and norms of society influence the knowledge and information received by the family. As stated earlier, individuals with fewer resources tend to have less accessibility to medical information and intervention. Health care

professionals should recognize that knowledge and information exchange is a source of power that opens up the door to family options and choices. When family members have more options and choices, they generally feel that they have more control over a situation, and this in turn may decrease stress (Benson & Stuart, 1992).

Emotional/Human Development

The *emotional* GRR is based upon how an individual views self. Antonovsky (1985) referred to this as *ego identity*. He described it as the way a person pictures self in relationship to his or her environment. It encompasses a sense of the inner person relating to social and cultural reality, but at the same time being able to keep a sense of independence. The human ecology theory labels this concept as ***human development.*** Similar to Antonovsky's definition, Bubolz and Sontag (1993) define it as a "process of ongoing and interrelated changes in an individual's ability to perceive, conceptualize, and act in relation to his or her environment" (p. 437). Both Antonovsky and the proponents of the human ecology theory would agree that this is a life long process and that all levels of the ecosystem have the potential to influence the way an individual views self. How families view themselves usually affects how family members perceive themselves as individuals and as a family unit. Various levels of the cultural strata can have either a negative or positive influence on the *ego identity* (human development) of the family and individual members.

Valuative-Attitudinal/Decision Making-Management

The next GRR is labeled as *valuative-attitudinal.* This resource has to do with an individual's coping style. Antonovsky (1985) postulated that the valuative-attitudinal resource could have a great influence over all the other resources, because its main focus is on the individual's or family's cognitive appraisal of a stressor. Otherwise, how does the family cope with stress? Do just some of the family members perceive a situation as stressful? Do they feel that there are enough resources available so that they can successfully deal with the problem? The response that members have to these questions will determine the effect and scope of the stressor on the family unit. The ecological perspective would define this GRR as the ability of the family to make *decisions* and then *manage* the resources needed to resolve the problem or reach the goal. Bubolz and Sontag (1993) would label this process as "integrative decision making" (p. 437).

As Antonovsky (1985) pointed out, maybe one of the best ways to empower a family is to help them recognize the resources that they already have available to cope with their stressors. When a family is aware that they have a number of resources, which in turn broadens their options, it often gives them a sense of control over their own destiny. This realization widens the family's horizons and helps them understand the importance of looking for and managing their resources when making a decision.

Interpersonal-Relational/Needs-Values

The *interpersonal-relational* GRR is the next resource that Antonovsky (1985) listed. This resistance resource is usually referred to as an individual's social support system. In the book, Health, Stress, and Coping, Antonovsky gave several examples of

studies, which demonstrate that social support has illness-reducing power. Kantern's (as cited in Antonovsky, 1985) theoretical concept of commitment states that three types of social commitments are necessary. The first is *continuance commitment*, which is the process of judging whether it is worthwhile for the individual to stay connected to a group. The second type is a *cohesion commitment* in which the individual senses a feeling of unity with the group and feels he or she could fit in as a member. Third, *control commitment* is when the individual buys into the moral rightness of the group and the way the group operates.

In addressing this resource, the human ecology theory would speak to the individual's *needs* and *values*. Bubolz and Sontag (1993) write about the microunit's need to relate to others. In any microsystem, individuals need to feel a sense of being loved and loving someone. They need to have a sense of being accepted and well thought of by others. Individuals also need to value the group(s) to which they belong and feel that the group is good, right, and worthwhile.

In the last decade, a number of studies have supported the importance of social support and connection to other human beings as critical to an individual's well being (Benson & Stuart, 1992). There are a number of ways that the family can connect to others, and the family unit should be encouraged to reach out to their extended family, friends, a religious/spiritual group, and/or other community groups to gain social support. Connections with someone outside of the immediate family unit may help give the additional support that is needed for the family to make it through a stressful situation.

Marcosocioculture/Social-Culture

Antonovsky's (1985) last GRR is the *macrosocioculture*. The essence of this GRR is that the culture gives individuals their place in the world. It is a mechanism that provides a place to get answers about what is going on in life and how the social structure is defined. The human ecology theory uses a similar label called the *social-cultural* environment (Bubolz & Sontag, 1993), and sees this environment as having a powerful influence on the family. For example, there are a number of ways that the surrounding social and cultural environment may influence a family's health. One of the best examples is the medical community, which has had a profound effect on how our culture views the family's role in relation to health care.

Over the past century, scientifically-based medical knowledge has been touted by our society as the mainstay to well-being. Families and individuals readily bought into this notion and often viewed health care as out of their realm of expertise. It is true that medical technology has advanced at an amazing speed over the last 100 years and has been of great benefit to society. However, removing families as the gatekeeper of family members' health has not served society well. Matocha (1995) asserts that when the family is not encouraged to share helpful, in-depth insight about a client, additional stress is placed on the health care team to provide all of the answers. Not using all accessible information boxes the health care worker into the "test tube" mentality. Instead of looking at psychosocial factors that might cause or contribute to a family member's disease, the health practitioner often looks only for answers that are based on traditional Western medicine. This does not negate the use of medical technology, but instead it

opens the door for society to value the use of a variety of resources to help maintain health.

Health care providers also need to be aware of cultural diversity and identify how these differences can influence families' perspectives on health. Professionals need to work within a family's cultural belief system when attempting to assess the best techniques to use to promote health care practices. It also would be beneficial to begin by focusing on the positive practices that are already taking place within a particular family and/or community. For example, health care practitioners should be congratulating families who have developed strong decision making and management skills, are participating in community health screening programs and/or participating in their religious/spiritual organizations. Recognition of a family's positive practices not only reinforces their behavior, but also provides a springboard for the professional to discuss other health-related practices.

Using GRRs to Save Family Energy

Most of the resources cited by Antonovsky (1985) and the human ecology theory (Bubolz and Sontag, 1993) are inexpensive and accessible to families. This is important, because it means that the well-being of family members can be improved without spending a great deal of money and/or energy to secure the resources. Available energy is a crucial commodity for the family as well as society. From a human ecological perspective, Bubolz and Whiren (1984) write that ". . . higher levels of energy or more efficient use of energy are needed for adaptive, creative behavior to enable a system to cope with changing environments, internal stresses, and unusual demands on the

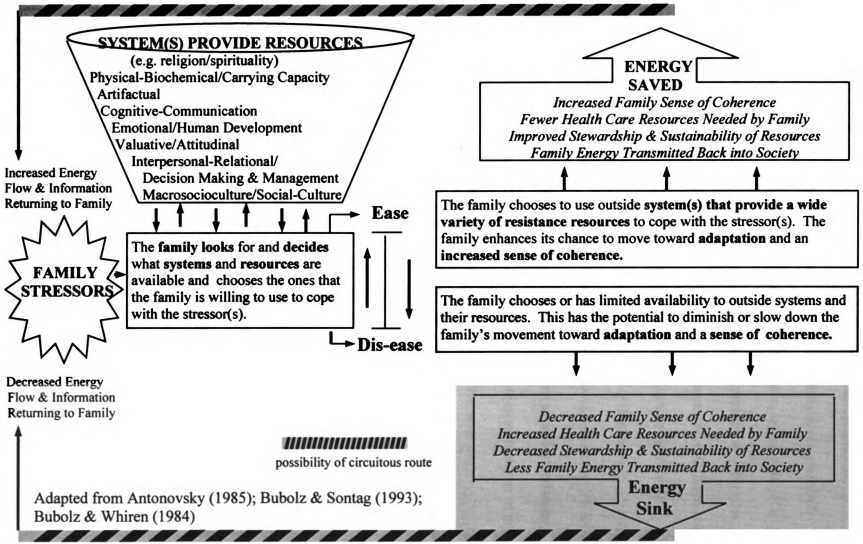
system" (p. 6). The wider the variety of resources available for the family, the greater the chance the family has of establishing enough energy reserves to cope with life's stressors. Also, adequate resources enable a family to become more efficient in dealing with problems, so they do not expend as much energy. This is important for two reasons. First, the less emotional and physical energy used by the family to deal with stressors, the greater the likelihood that family members will move closer to the ease end of the health continuum. Second, the less energy a family uses to cope with stress, the more energy they have to transmit back into the environment (e.g. saving health care dollars, increasing productivity, participating in community service).

Bubolz and Whiren (1984) refer to the loss of energy within the family system as an "energy sink." They define an energy sink as a period in a family's life when they are so drained that the family can no longer think of methods of adaptation or creative behavior to deal with the stress. This leads to costly consequences, because there is little or no energy reserve left to deal with additional daily hassles or traumatic events. It also increases the chances that there will be a greater toll on the family members' emotional and physical stamina, causing them to move toward the dis-ease end of the health continuum.

Blending the Concepts into a Model

Following is a conceptual model that blends Antonovsky's (1985) GRRs with concepts from the human ecology theory. Figure 1 depicts the family as an important part of health care, because the family has the ability to recognize and use systems outside of the microunit to provide GRRs. This philosophy promotes the concept of

Figure 1: The Family Is Viewed as an Important Part of Health Care, because the Family Has the Capability to Recognize Outside Systems, which Can Provide Resistance Resources to Help Cope with Daily Hassles and Traumatic Events



educating and encouraging the family to use a variety of systems that can provide resistance resources to help family members stay healthy. As a family deals with daily hassles and/or traumatic stressors, the family will be required to move into a state of adaptation and adjustment that can either lead to "growth and integration" or "disorder and disintegration" (Bubolz & Whiren, 1984, p. 6). During the process of adaptation and adjustment, if the family looks for and uses an appropriate system(s) to help provide GRRs, they are more likely to reach a period of balance and stability that leads to growth and integration, which Antonovsky refers to as a sense of coherence (Antonovsky, 1985; Bubolz & Whiren, 1984). This balance or sense of coherence helps to move the family closer to the ease end of the health continuum. As the family becomes more aware of and skilled at using a variety of resources, they expend less energy to deal with life's stressors, thus saving energy. The conservation of energy leads to improved stewardship and sustainability of resources and the decreased use of medical resources. This in turn increases the family's potential to build an energy reserve and transmit additional energy back to society via sustained resources and productivity. The successful use of GRRs also increases the flow of energy that feeds back into the family (Bubolz & Whiren, 1984). The family is then able to use this energy to deal with additional stressors or meet other demands. The feedback loop also generates information about how well the family was able to cope with the stressors. If a family has successfully used GRRs to help deal with a stressful situation(s), the family learns that it is important and beneficial to use available resources to help resolve and dissipate stress.

The recognition and use of GRRs can be viewed as a preventive health measure. For example, if a family is able to recognize and use the appropriate resources to adapt

and adjust to life stressors, the family has a greater chance of increasing their sense of coherence, which helps the family move closer to ease end of the health continuum. These actions have the potential to improve family members' psychological health, which according to research in psychoneuroimmunology, can help prevent an onset of an illness or decrease the negative effects that stress can have on exacerbating an existing health problem (Antonovsky, 1985; Irwin & Strausbaugh, 1991; Benson & Stuart, 1992).

The lower, right-hand quadrant of the model in Figure 1 depicts a family who has limited use of GRRs. The model suggests that families who do not know about, have limited availability, or choose not to use systems that offer a variety of resources to deal with stressors may have a more difficult time in adapting to stress, thus decreasing the family's sense of coherence. Consequently, the family may move closer to the dis-ease end of the health continuum. The limited use of GRRs also may lead to an energy sink. The energy sink not only affects the family, but all of society, because it has the potential to create poor stewardship of resources, increase the use of medical resources and lead to a decreased flow of energy back to the family. As stated earlier, the decreased energy flow and information fed back to the family can be factors that contribute to the disruption and/or breakdown of family functions (Bubolz & Whiren, 1984).

The spiral notation on both feedback loops in Figure 1 depicts that a family's pattern of adjustment and adaptation is not necessarily a direct linear process, but can follow a circuitous route. McCubbin and Patterson (1983) point out that many families take a circuitous route that requires extra time and resources to adapt and adjust to stressful situations. Some families may move in and out of the crisis mode and eventually make the needed adjustments to adapt to a stressful situation, while other families may

never adapt. The inability or the slow process of adapting to a stressful situation may be due to a number of factors, including the family not using available GRRs (Antonovsky, 1985; McCubbin & Patterson, 1983). For example, when first trying to cope with a stressful event, a family may choose not to take advantage of outside systems that offer GRRs, and they may have a difficult time adapting and adjusting to the stressor(s). As the family begins to move towards an energy sink, family members may reevaluate the situation and make needed adjustments by seeking the use of GRRs, which in turn changes the dynamics of dealing with the problem. The ultimate goal is to provide families with a number of resistance resources to help them move as efficiently as possible into a state of adaptation and adjustment, which helps the family to either grow and/or integrate the necessary changes into their lives (Bubolz & Whiren, 1984).

Viewing Religion/Spirituality as a System to Provide GRRs

As stated earlier, the purpose of blending Antonovsky's GRRs with the human ecology theory is to promote two important concepts. First, the family should be viewed as an important partner in dealing with health care. Second, the family should be educated to recognize and use psychosocial resources to improve the family unit's sense of coherence, decrease strain tension and move them closer to the ease end of the health continuum. **The theoretical framework for this research is based on the conceptual model just described, and the premise that one of the systems that has the potential to provide GRRs to the family is religion/spirituality** (see Table 3). For example, most religious/spiritual (R/S) organizations promote the importance of taking care of one's body and provide guidelines that reduce illness-causing behavior. These

Table 3: Religion/Spirituality Viewed as a System that Can Provide Generalized Resistance Resources

Antonovsky's GRRs (Antonovsky, 1985)	**Human Ecology** **Concepts** (Bubolz & Sontag, 1993)	**Religion/Spirituality**
Physical/Biochemical	**Carrying Capacity**	Provides guidelines for healthy living and reduces illness causing practices
Artifactual • Material	**Artifacts** • Physical Objects	Often provides material resources to members and others in need
Cognitive • Knowledge • Information	**Communication** • Information and meaning created and transmitted	Communicates information, such as values, beliefs, and knowledge about life and death
Emotional • Ego identity	**Human Development** • Ability to perceive and act in relation to the environment	Gives a person a sense of who he or she is in relation to religious/spiritual beliefs and offers a purpose for being
Valuative/Attitudinal • Coping strategies	**Decision Making and Management** • Goal setting/planning • Problem solving	Gives spiritual guidelines for decision making and management and offers tools for coping
Interpersonal/ Relational • Social Support • Commitment	**Needs and Values** • Needs for having, relating and being • Committed to a group that is good, right, and worthwhile	Provides social support, a sense of connectedness, teaches that people are valuable and needed.
Macrosocioculture • Cultural stability • Philosophy of life	**Social-Culture** • Societal blueprint • Rituals, beliefs, and values of the family	Gives a philosophy of life, a purpose for being and a cultural identity (McAdoo, 1993)

organizations often provide food, clothing, and shelter to members and others who are in need. R/S teachings also provide a source of knowledge, such as information about values and beliefs that can help people cope with stressors and solve problems. In most cases, religion/spirituality provides individuals with a sense of connectedness and teaches that human beings are valuable because they have been created by a higher power. Furthermore, research has shown that R/S organizations provide individuals a place where they can find social support and give members a sense that they are needed and valued (Levin, 1994; Albrecht-Jenson, 1991; Maton, 1989). Finally, R/S beliefs provide a blueprint for living and offer individuals a philosophy of life and a sense of cultural identity. Through an in-depth review of the literature, Chapter II will look at the potential of religion/spirituality being a system that can provide GRRs. The chapter also will contain a discussion about the limitations and negative influences that religion/spirituality may have on a family.

Based on the theoretical framework and the premise that religion/spirituality can be viewed as a system that provides GRRs, two questions were raised that have helped to shape this research project. First, do families use religion/spirituality as a psychosocial resource to help cope with stressful events? Second, if families do use religion/spirituality to help cope with stress, what factors influence families to use religion/spirituality as a coping mechanism? The following research objectives were derived from these questions.

Research Objectives

One of the purposes of this study was to determine if families used religion/spirituality as a psychosocial resource to help cope with the stress of having a child on the pediatric unit of a hospital. In addition, a recursive path (a priori) model was constructed that included the following nine variables: income, education, race, respondent's age and gender, R/S beliefs, R/S practices, R/S affiliation, and interaction with a spiritual caregiver(s). The researcher investigated if the nine variables were factors in influencing families to use religion/spirituality as a psychosocial resource to cope with the stress of having a child in the hospital. Toward this aim, the research was based on two objectives:

1. To conduct a survey of families who have a child on the pediatric unit of a major metropolitan hospital and to determine if the families used religion/spirituality as a psychosocial resource to help cope with the stress of having a child in the hospital.
2. To construct a recursive path model and to determine if there is a causal relationship between the nine variables in the model, and families choosing to use religion/spirituality as a psychosocial resource to help cope with the stress of having a child in the hospital. Specifically, the researcher will be attempting to ascertain if each of the nine variables contribute to the predictive and explanatory power of the causal model. A discussion of the variables included in the a priori model will be covered in the review of literature in Chapter II.

Conceptual and Operational Definitions

Immediate Family

Conceptual Definition: "A family consists of a householder and one or more other persons living in the same household who are related to the householder by birth, marriage, or adoption. (U.S. Department of Commerce, 1990 p. B-9).

Operational Definition: Individuals who are related to the child biologically, by adoption, or guardianship and live in the same household.

Child on the Pediatric Unit of the Hospital

Conceptual Definition: An individual who is 21 years of age or younger and is currently a patient on the pediatric unit of the hospital who is ready for discharge (as defined by the hospital's definition of age of child admitted to the pediatric unit).

Operational Definition: Age will be verified by a child's adult family member (see Appendix A, question 4).

Religion/Spirituality

Conceptual Definition: The feelings, thoughts, experiences, and behaviors that arise from a search for the sacred, and the means and methods (e.g. rituals or prescribed behaviors) of the search that receive validation and support from within an identifiable group of people. The search also can include non-sacred goals such as searching for identity, belongingness, meaning, health or wellness. (as adapted from the Scientific Research On

Spirituality and Health: A Consensus Report; Larson, Swyers, & McCullough, 1997, p. 21).

Operational Definition: The respondents will be asked to reply to questions on a survey about **R/S practices** (repeated, systematic religious/spiritual activities such as prayer, worship, religious attendance and social support), **R/S beliefs** (acceptance or confidence in religious/spiritual presuppositions) and **R/S affiliation** (a religious/spiritual organization a family is associated with or connected to) [see Appendix A, questions 10-11, 12d-h].

Ability to Cope

Conceptual Definition: A process, based on perception of the situation and the use of existing and new resources, used by individuals and/or families to attempt to deal with significant personal or situational demands in their lives. (Folkman & Lazarus, 1984; McCubbin, Hamilton, & Patterson, 1983).

Operational Definition: The respondent will be asked to reply to a question on a survey about coping (see Appendix A, question 12b).

Stress

Conceptual Definition: "The negative effects of life pressures and events" (Benson & Stuart, 1992, p. 177).

Operational Definition: The respondent will be asked to reply to questions on a survey about his/her perception of the level of stress the family encountered when their child was

in the hospital, the medical reason for the child's hospitalization, and the number of days the child spent in the hospital (see Appendix A, questions 1-3).

Interaction with the Spiritual Caregiver

Conceptual Definition: During the child's stay in the hospital, communication with an individual who is viewed by the family as a conduit of R/S beliefs and practices.

Operational Definition: The respondent will be asked to reply to questions on the survey about their interaction with the spiritual caregiver and the effects of that interaction (see Appendix A, questions 6-9).

The following section will only give operational terms, because the conceptual definitions are commonly understood.

Age

Operational Definition: Age will be measured by asking the family respondent to list his/her birth date (see Appendix A, question 16).

Education

Operational Definition: Educational status will be measured by asking the respondent to check the appropriate educational category that indicates the highest education level reached by a member in the immediate family (see Appendix A, question 17) .

Race

Operational Definition: Race will be measured by asking the respondent to check the appropriate category that specifies his/her race (see Appendix A, question 13).

Income

Operational Definition: Income will be measured by asking the respondent to check the appropriate annual income of the immediate family (see Appendix A, question 18).

Gender

Operational Definition: Gender will be measured by asking the respondent to check either the male or female category (see Appendix A, question 15).

Assumptions

The research is based on the following five assumptions.

Assumption 1: *Religious beliefs and practices are important to most Americans.* The Wallstreet Journal (Holt, 1994) identifies that 90 percent of Americans say they believe in God. A *Newsweek* article, "In Search of the Sacred," noted that words such as soul, sacred, spiritual, and sin are becoming "chic" again (Kantrowitz, King, Rosenberg, Springen, Wingert, Namuth, & Gregax, 1994). A 1999 survey conducted by Brand Futures Group studied the importance of religion in a person's life ("God Back," 1999). Trendsetters (motivated people, oriented toward the future) in the United States, Italy, Britain, France, Germany and Netherlands were surveyed. Of the 15,580 people questioned, researchers found that there was an increasing number of people throughout the world and especially in the United States (59.4%) who identified that religion/spirituality was an important aspect of their lives. Stuart Harris, assistant director of Brand Futures Eurpoa stated, "Presently there is clear evidence that the wave of

religious interest is turning, and above all, among the world's trendsetters – people generally not associated with such a view" (p. 2A).

Assumption 2: *Resources other than conventional Western medicine can be complementary in helping to improve an individual's emotional and physical well-being.* Many professionals are now recognizing that psychosocial influences and behavior can have as profound an effect on individual health as can physiological behavior (Pearsall, 1994; Greenberg, 1993; Benson, 1996). Emmet E. Miller, M.D. (1993) suggests that health is the expression of the whole person, and health care professionals should look at the aspects of an individual's whole being, including all communications and relationships with others and with the environment. Therefore, Miller posits that, when dealing with emotional and physical health issues, it is important to draw from resources that can help address a client's psychosocial needs as well as his or her physical needs. In addition, Americans are increasingly looking for and consistently using alternative therapies in conjunction with their current health care modalities (Alternative Medicine, 1999).

Assumption 3: *Having a child in the hospital is a stressful event for the family.* There is an abundance of evidence that having a family member in the hospital is a stressful event for the family (Friedman, 1998, Lynn-McHale & Smith, 1991; Danielson, et al., 1993; Molter, 1979). When a family member enters the hospital there are a number of stressful concerns that occur, such as family members having to take on new tasks and roles, dealing with the treatment and diagnosis of the family member and negotiating the health care system (Hanson & Boyd, 1996; Lynn-McHale & Smith, 1991; Hodovanic, Reardon, Reese, & Hedges, 1984). Problems often become magnified for families who

have children in the hospital, because the family also has to deal with issues such as separation anxiety, a sense of helplessness in caring for the child, modifications in family activities and goals, and the strain placed on other family relationships (Patterson & McCubbin, 1983; Vaughan-Cole, Johnson, Malone, & Walker, 1998). Furthermore, Bood (1996) submits that the parents or guardians are under a great deal of stress, because "the child relies on his parents to interpret reality" (p. 222). Bood also concludes that the family must be careful in how they treat and react to the child, because if the family's behavior changes toward the child due to the illness, it will increase the child's stress level.

Assumption 4: *Religion/spirituality should be measured using a multidimensional approach.*

Before 1970, researchers usually examined only the relationship between age and formal church participation, but now they have determined that to measure religiosity, one must use a multidimensional approach (Levin, 1994; Ainlay, Singleton,& Swigert, 1992). Davidson and Knudsen (1977) emphasize the importance of looking at both the subjective and behavioral dimensions of religious involvement. Many researchers believe that parameters of measurement should include frequency of participation in R/S activities (e.g. attending religious service, prayer, meditation and scripture reading) and the meaning/beliefs that religion/spirituality brings to a person's life. (Poloma, 1993; Willits & Crider, 1988; Levin & Markides, 1986; Witter, Stock, Okun & Haring, 1985; Pargament, Kennell, Hathaway, Grevengoed, Newman, & Jones, 1998; Koenig, Kvale, & Ferrel, 1988).

Assumption 5: *The survey will be completed by a member of the immediate family.*

The unit of analysis is a family member who will be asked to represent his or her immediate family's R/S beliefs and practices. Therefore, to diminish error, it is imperative that a member from the immediate family (as defined in the conceptual terms) completes the survey. To help assure that a member of the immediate family completes the survey, the beginning of the survey states who should fill it out and gives a definition for the immediate family.

An Overview of the Following Chapters

Chapter II will present a review of the literature, which will look at a family science perspective on stress and coping, and the relationship between religion/spirituality and health. The chapter then will conclude with a description of the operational map showing the path diagram (a priori model) that depicts how various constructs may influence the family to use religion/spirituality as a psychosocial resource to help cope. Chapter III deals with the methodology used for the study and will cover the topics of research design, data collection, data analysis, and research limitations. The fourth chapter will discuss the findings in regard to the proposed research questions and whether the hypotheses were supported. Chapter V will conclude with a discussion of the findings and recommendations for further study.

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature will cover three general topics: 1) a family science perspective on stress and coping, 2) the relationship between religion/spirituality and health, and 3) predicative variables that may influence a family to use religion/spirituality as a psychosocial resource. The section focusing on the family science perspective on stress and coping will specifically look at the Double ABCX Model with the intent to give a broader perspective on the family and stress. Even though the *Double ABCX Model is not being used as a part of the theoretical framework* for this research, it substantiates the idea that availability of adequate resources is an essential element in helping a family to successfully cope with stress (McCubbin & Patterson, 1983). The portion of this chapter's literature review that covers the relationship between religion/spirituality and health is divided into the following four sections: a discussion of the term religion/spirituality, religion's historical perspective on the family, religion/spirituality as a provider of all the generalized resistant resources, and the negative influence of religion/spirituality on health.

A Family Science Perspective on Stress and Coping

Families who have successfully survived the rigors of life have had to adjust and adapt to change. As the 1900s progressed, social scientists, especially family science professionals, became interested in this process of adaptation that occurred when a family coped with stressful events. In 1949, Ruben Hill presented one of the earliest family science models that attempted to conceptualize the effects of stress on the family (McCubbin & Patterson, 1983). Hill's model was labeled the ABCX Family Crisis Model. The letters in the model symbolized a specific progression that a family would go through when confronted with a stressor. Hill did make a distinction between a stressful situation and a crisis. He defined stress as an event that caused disruption in the natural flow of the family, which required a family to make adaptive changes so the family unit could manage the stressful event. However, if the stressor was not dissipated or controlled, the family would then move into a crisis situation and reach a state of imbalance.

The first letter in Hill's model was "A," which represented an actual stressful event that had the potential to place a hardship on the family unit (McCubbin & Patterson, 1983). Letter "B" signified the beginning of the interaction phase where a family would begin to use resistance resources to deal with the problem. At this point, a family might actually be able to dissipate or control the stressor without a major disruption to the family unit. Hill chose letter "C" to indicate the next step in the process, which was appraisal. This step looked at how the family viewed a particular event and to what degree they defined the event as a stressor or hardship. The last step in the process, symbolized by the letter "X," stood for crisis. If a family had been unable to dissipate or

control the event during steps "A", " B", or " C", Hill projected that a crisis would occur within the family system.

McCubbin and Patterson (1983) concurred that Hill's model offered a beginning foundation to study the effects of stress on a family. However, when it was used as a theoretical model for other longitudinal studies, it did not adequately explain the process of adjustments and adaptations that a family had to go through when dealing with a stressful event. To compensate for the missing links, McCubbin and Patterson developed a new model called the Double ABCX Model of Adjustment and Adaptation. Following is a brief overview of the model and how it ties into this research project.

aA Factor

Change is a natural process that occurs in a family. Some families will go through more significant changes than others, but all changes have the potential to create stress in a family's life. McCubbin and Patterson (1983) propose that families rarely deal with one change or stressor at a time, but rather "experience a pile-up of stressors and strains particularly in the aftermath of a major stressor" (p. 11). These stressors may come from a number of sources, including individual family members, the family as a unit and/or the community. In the Double ABCX Model of Adjustment and Adaptation this pile-up is labeled as the "aA" factor. During the pile-up, what appears to be the *initial stressor or hardship* can trigger a number of other types of changes (stressors). McCubbin and Patterson describe four additional types. 1) *Normative transitions* are changes that usually are required to deal with a stressor or hardship. As mentioned earlier, a family system is seldom stagnant but is required to change over time. In order for a family to

adapt to a stressor, transition is required. 2) Not only will a family need to adapt to the current change(s), but they also may be required to deal with *prior strain.* In most situations, families have prior issues which have not been completely resolved. When a stressful situation occurs, these unresolved issues usually surface and place additional stress on the family unit. 3) Another type of stressor that can occur is triggered by the *methods and resources used to cope* with the initial hardship. For example, an additional stressor may surface if a chosen manner of or resource for coping is unacceptable to one or more family members. 4) The last type of stressor is the *ambiguity* that can transpire during a stressful situation. Being uncertain about the future or the consequences of an event can heighten the sense of stress that is already being generated in the family system.

A prime example of how a pile-up could occur is when a family has a child in the hospital. Initially, the stress of having a child in the hospital may cause some family members to experience physiological and/or psychological changes as they attempt to deal with the situation. In addition, the initial stressor will cause most families to begin to make normative transitions within the family system. For instance, decisions must be made such as to who will stay with the hospitalized child and who will watch the other children at home, what will the parent do about work commitments, and/or how will other family roles need to shift to meet the challenge. Prior strains such as financial concerns and/or marital conflict may be exacerbated, adding additional stress to the situation. Family conflict also may occur as a family attempts to decide what resources should be used to cope with the situation. Last, and perhaps creating the highest degree of stress, is the ambiguity about the child's health. Will the child get well? How long will it take? Will the family be able to successfully care for the child and/or pay the bills

generated by the illness? As depicted by the model, it is inevitable that stressors will begin to pile-up, requiring even more changes and adaptation within the family system.

bB Factor

The "bB factor," as depicted by the Double ABCX Model, is categorized as the family's adaptive resources. McCubbin and Patterson (1983) identify *existing resources* and *expanded family resources* as the two general types of resources used when dealing with a stressful situation. *Existing resources* would be classified as resources that already are in place and being used by the family. The natural reaction of the family would be to immediately use these resources to help deal with and buffer the effect of the stressor. *Expanded resources* are resources that the family is able to identify and learn to use when dealing with hardships.

The underlying basis of this research study is that if families can identify and use existing generalized resistance resources (GRRs), then they will be better equipped to cope with and adapt to stressful events. The ability to recognize and employ the use of a number of GRRs has the potential to help families dissipate or diminish the effect of the stressor(s). In this study, the family's stressful event is having a child in the hospital. The researcher is proposing that religion/spirituality can be an important resource system that can offer a number of GRRs, which in turn can help a family cope with the stress of having a hospitalized child. McCubbin and colleagues have identified in the discussion of the Double ABCX Model that religion/spirituality can be an important resource in helping a family cope (McCubbin and Patterson, 1983; McCubbin, McCubbin, & Thompson, 1993). They also posit that one of the most important resources available to

the family is social support, because it helps the family deal effectively with a crisis and regain stability. As will be discussed later in this chapter, social support is a key resistance resource that is offered by religion/spirituality.

cC Factor

The "cC" factor signifies the appraisal and the meaning that the family attaches to the situation. McCubbin and Patterson (1983) suggest that when a family is able to redefine a situation in a more positive light, the family is usually able to cope more effectively. This redefining process includes the process of elucidating the issues, realigning the emotional concerns so that they are placed in the proper perspective, and encouraging the family to continue to live life as normally as possible. As will be highlighted later in this chapter, religion/spirituality offers GRRs that allows a family to redefine a stressful situation and reframe it from a more positive or understandable viewpoint. For example, families may reframe issues by agreeing that God will not allow them to go through more than they can endure, and/or that God is in control and will help them cope with the problem no matter what the outcome may be. McCubbin, McCubbin, and Thompson (1993) suggest that the "cC" factor may be one of the most critical steps in helping a family to cope and adapt to a stressful situation.

xX Factor

The "xX" factor indicates how well the family was able to adapt to the stressful situation (McCubbin & Patterson, 1983). Two terms are used to describe the adaptation process: *bonadaptation* and *maladaptation*. *Bonadaptation* is defined as the ability to

achieve a "balanced fit." It does not mean that there is a perfect solution, but that the family is able to maintain or strengthen its integrity, to continue to develop both individually as well as a unit, and to maintain a sense of control (a sense of coherence). *Maladaptation* occurs when the family is out of balance, which in turn causes the family's integrity, developmental process and well-being to be affected. The family begins to experience a decline in its stability, and negative consequences usually begin to affect family members.

Family Adjustment and Adaptation Response – FAAR

Observations made by McCubbin and colleagues (McCubbin & Patterson, 1983) have led them to suggest that a family's adjustment and adaptation response (FAAR) to a stressful situation takes place in three phases. Each phase basically incorporates all the steps (letters) of the Double ABCX Model . The first phase is the *family adjustment phase*. The family becomes aware of the stressor, defines it, and begins to appraise the situation. At this point, the family may use one of three techniques to cope with the situation - avoidance, elimination or assimilation. McCubbin and Patterson point out that the availability of resistance resources will be one of the determining factors in how the family deals with this phase of adjustment. How well the family is able to adjust, theoretically, will fall at some point on the bonadaptation-maladaptation continuum.

The second phase, *family adaptation*, is divided into Level I (*restructuring*) and Level II (*consolidation*) [McCubbin & Patterson, 1983]. During the *restructuring* phase the family acknowledges the stressor(s), constructs a shared definition of the problem, works out a solution and begins to implement a plan to deal with the problem.

McCubbin and Patterson suggest that the availability of resources, including support, are crucial to the success of adapting to this phase. *Consolidation* is the last phase of family adaptation. This phase is very important to the adaptation process, because it is when the family begins to consolidate into a coherent unit. To move through this phase, the family starts to develop solutions that enable all members to make appropriate changes to deal with the stressor(s). Once the changes have been negotiated and identified, the family begins to implement the changes.

As discussed in Chapter I, adjustment and adaptation is not necessarily a linear process. Instead, a family may take a circuitous route that involves extra time and resources to make it to the final destination of bonadaptation. In other cases, families may not be able to adapt and will move toward maladaptation. Based on this perspective, one of the questions that should be asked is how can a family science and/or health professional help a family successfully work through a stressful situation and move towards bonadaptation? Though there may be a number of valid suggestions, one of the primary premises upon which this research is built is the importance of educating the family about GRRs, which can be used to help families adjust and adapt to stressful situations. The next section of this chapter will identify and discuss the importance of using religion/spirituality as a system that has the potential to offer the GRRs.

The Use of Religion/Spirituality as a Conceptual Term

The National Institute for Healthcare Research published an extensive report entitled Scientific Research on Spirituality and Health: A Consensus Report (Larson, Swyers, & McCullough, 1998). The report was based on the Scientific Progress in

Spirituality Conference. One of the tasks of the conference was the establishment of a panel charged to write a conceptual definition(s) for religion and spirituality, which was neither too broad nor too narrow and that could consistently be used in research. The significance of this task was highlighted in the conference report, because without a clear definition, it becomes difficult for both researchers and the general public to understand what is meant when others talk about religion or spirituality. The conference report also stated that without a clear definition it becomes troublesome for disciplines, such as social science, to compare and draw "general conclusions" from studies. The panel designed two separate definitions, one for religion and the other for spirituality. Conceptually, the definitions were written so that they could be blended together to create one definition or used independently. The panel defined spirituality as "the feelings, thoughts, experiences, and behaviors that arise from a search for the sacred" (Larson, Swyers, & McCullough, 1997, p. 21). "Search" was defined to mean someone who "attempts to identify, articulate, maintain or transform" (p. 21), while "sacred" was based on each individual's perception of a "divine being, ultimate reality, or ultimate truth" (p. 21). The panel developed the definition for religion by first acknowledging that religion often begins with a spiritual dimension, because it usually entails a search for the sacred and/or non-sacred (such as finding meaning or identity in life, having a sense of belonging, health, or wellness). However, religion also includes "the means and the methods of the search that receive validation and support from within an identifiable group of people" (p. 21).

Even though the panel recognized that a person could be spiritual and not be religious, they found that in most cases religion and spirituality "co-occur" (Larson,

Swyers, & McCullough, 1997). The panel also determined that it is very difficult "to measure spirituality as a separate construct from religion" (p. 24). They asserted that a common step that occurs in most religious beliefs and experiences is the search for the sacred, which in fact could be labeled spirituality. Therefore, the panel recommended that the construct measured in most research should be referred to as "religious/spiritual measures" (p. 24). The panel also concluded that the general public sees very little difference in the meaning between religion and spirituality, and that most "believers" integrate both into their lives. Based on this reasoning, the researcher will use the designation "religious/spiritual" as the conceptual term in this study. The definition for the religious/spiritual measure is:

> The feelings, thoughts, experiences, and behaviors that arise from a search for the sacred, and the means and methods (e.g. rituals or prescribed behaviors) of the search that receive validation and support from within an identifiable group of people. The search also can include non-sacred goals such as searching for identity, belongingness, meaning, health, or wellness. (as adapted from the Scientific Research On Spirituality and Health: A Consensus Report; Larson, Swyers, & McCullough, 1997, p. 21).

Religion and Family from a Historical Perspective

Through out history most religions have placed an important emphasis on the family as a fundamental unit of society. Families have been viewed as providers and caregivers, as well as important facilitators who teach and model the basic tenets of the family's religious beliefs to the children. In the Judeo-Christian tradition, the family is a vital element in religious teaching. In the book of Genesis in the Bible, the first family is established through the joining together of Adam and Eve, and they are charged to

procreate and care for the earth. Genesis 11 continues to depict the importance of family by giving a long running list of the genealogies of families, while the rest of the Old Testament vividly portrays various family units, showing both the positive and negative of family life (Johnston, 1979). Johnston notes that in ancient Israel the family was considered such an important unit of the Jewish community that severe punishment was metered out to anyone who committed a serious offense against a family.

Likewise, other religions attach a great deal of importance to the family. In the Mormon faith, the family is seen as a fundamental unit of society as well as heaven (Adleman, 1999). The Islamic faith also views the family as an essential element of its faith and strongly encourages believers to marry. Daneshpour (1998) writes that there are two main objectives of marriage in the Islamic community. The first objective is to provide a place of comfort and security for the husband and wife, and second, to procreate and bring forth a new generation of healthy, moral and faithful children. In addition, Friedman (1998) points out that the predominant beliefs of the Asian culture are based on a blending of Eastern religions and philosophies. One of the core values taught in this culture is to focus on the family more than the individual. The family is viewed as very important, and family members are encouraged to have a strong sense of duty and responsibility toward one another.

Religion/Spirituality and the Generalized Resistance Resources

There is a body of research that has examined the positive relationship between religion/spirituality and mental and physical health. David and Susan Larson (1994) of the National Institute of Healthcare Research compiled an annotated bibliography of

systematic reviews and clinical research on religious and spiritual topics. Based on their extensive review, they concluded that there was sufficient research to demonstrate the beneficial effects of religion/spirituality on health. Goodloe and Arreola (1992) also reviewed the literature, which looked at the relationship between religion/spirituality and health. In their article, "Spiritual Health: Out of the Closet," Goodloe and Arreola cite a number of ways that fellow researchers suggest that religion/spirituality can influence health. 1) Human spirituality is a core dimension of an individual and plays a significant role in giving meaning and purpose to life and in helping to determine an individual's well-being. 2) Religion/spirituality helps an individual move beyond self, so the individual can more readily share warmth, love and compassion with others. 3) Religion/spirituality provides meaning and purpose to life, which is an important dimension of health. 4) Religion/spirituality engenders a sense of well-being that is particularly essential in today's culture, because Americans are living in a society where they do not feel "connected," but instead feel a sense of self-alienation, loneliness, despair, fear, boredom and lack of meaning or purpose in life. 5) Optimum health must take into consideration spiritual values, because many of our health issues such as sex education, euthanasia and healthy lifestyles have spiritual overtones.

Other studies have consistently shown that religion/spirituality has a positive influence on an individual's psychosocial health (Matthew, Larson, & Barry, 1993; D. Larson & S. Larson, 1994). One such study, which measured religiousness and its relation to the parent's and child's mental health, was conducted by Strayhorn, Weidman, & Larson (1990). The researchers found that the group of parents who were more religious demonstrated an increased number of positive parenting practices and a lower

sense of hostility. Studies also have shown that in the general population religiously committed people had significantly less psychological distress than the less committed (D. Larson & S. Larson, 1994).

Hadaway and Roof (1978) reported that faith was one of the strongest predictors of an individual's feeling that life was worthwhile. Saudia, Kinney, Brown, & Young-Ward (1991) concluded that religion had a positive influence on adults who were coping with difficult illness. A 12 year review of quantitative articles from the *American Journal of Psychiatry* and the *Archives of General Psychiatry* found that 72 percent of the variables used for religious commitment were beneficial to mental health (Larson, Sherrill, et al., 1992). As will be demonstrated later, religion/spiritualtiy also seems to have a positive influence on an individual's physical health (Benson, 1996; Benson & Stuart, 1992). This may be due to the effect that religion/spirituality has on the psyche, which in turn can affect the nervous and immune system, and the body's ability to heal itself.

Religion/spirituality can be viewed a system which offers multiple resources to its members to help deal with life events and cope with daily stressors. Research has found that religion/spirituality can help in improving the carrying capacity of a believer's body, providing material goods, communicating knowledge and information, shaping one's ego identity, teaching coping skills, offering a place for social support and commitment, and providing a philosophy of life and blueprint by which to live (Benson, 1996; D. Larson & S. Larson, 1994). Even though it cannot be measured, it also must be mentioned that most religions believe that an individual can be emotionally and physically healed through the direct auspice of a supernatural power. Levin (1994) has coined the phrase

"psychodynamics of faith," which means that one's belief in religion or a higher power may be a factor that stands by itself in producing health enhancing, salutary effects. Levin also acknowledges that researchers are not able to measure the supernatural, but this does not mean that the touch of a higher power does not happen. Therefore, researchers should not deny that this can happen, but neither do researchers have sufficient methods to measure and prove that it does occur. The following section will review the measurable resources that religion/spirituality has to offer. These resources will be discussed within the framework of the GRRs as cited in Chapter I.

Physical-Biochemical/Carrying Capacity

There has been a great deal of research that positively associates religion/spirituality with improved health. Religious faith has been found to improve recovery from surgery, lower blood pressure, and decrease the negative effects of chronic disease (D. Larson & S. Larson, 1998). One study has shown that elderly people who attended church, as compared to those who did not, had a healthier immune system (Cerrato,1998). Studies from both the Dartmouth Medical School and the University of Pittsburgh have found that patients who had a strong religious commitment were physically and emotionally healthier after undergoing heart surgery or heart transplants than their counterparts who were not religiously committed (D. Larson & S. Larson, 1998). Schiller and Levin (1988) reviewed 250 studies that had investigated the association between religious affiliation and commitment and morbidity and mortality. They discovered a direct association between religion/spirituality and positive clinical effects regardless of age, sex, race, ethnicity, nationality or study design. In a follow-up

review of the literature, Levin and Vanderpool (1987) concluded that frequent religious attendance was a factor in longer life expectancy. Similarly, McKee and Chappel (1992) discovered that there was less chance of men dying from arteriosclerotic disease when they attended church at least once a week as compared to men who did not. Jenkins' and Pargament's (1995) study of 62-cancer patients, found that the patients who had a stronger perception of God were able to make a more positive adjustment.

Most religions also have guidelines within their belief structure that teach moderation and promotes lifestyles that are less conducive to creating certain health problems. For example, various religious organizations discourage the use of alcohol, tobacco and other drugs; some religions, such as the Mormon and Jewish faith, promote a restrictive diet; and others promote exercise and care of the body (Levin, 1994; Levin & Vanderpool, 1991; Vaux, 1976). Many religions also have specific hygiene criteria, allow expressive display of human emotions and have specific codes on how human sexuality should be expressed. McIntosh and Spilka (1990) found that individuals who practiced their religious beliefs on a daily basis also felt more obligated to live a healthy lifestyle.

The practice of preventive health behavior by religious groups has been very apparent in epidemiological studies. Gardner and Lyon (1982) discovered Mormon women who were active in their denomination had a lower rate of cancer, probably due to their dietary and hygienic practices. The Seventh Day Adventist have long been known for being one of the healthiest subpopulations in the United States due to lifestyle behavior (Levin, 1994). Levin's review of the literature also showed that groups such as

Sephardic Jews, Benediticine Monks, Mormons, Baptist clergy, and Zen Buddhist priests had lower blood pressure.

Artifactual

As discussed in Chapter 1, people with wealth, power, and knowledge are more likely to take advantage of the health care system's resources. For the most part, they also are more likely to deny the benefit of using religious/spiritual (R/S) resources or not use them as frequently (Antonovsky, 1985; Levin, 1994). Inversely, poorer people with negligible resources often use religion/spirituality as one of their main resources to help them cope. One of the ways that many religious institutions interact with individuals is by helping to provide material resources. Often religious groups offer shelter, clothing, food and even health care services such as blood pressure screening and mammograms.

Cognitive/Communication

R/S organizations share knowledge and information in a number of ways. For instance, religious organizations may share knowledge about a number of topics, which helps its members deal with the essentials of everyday living. A case in point is an organization of churches known as F.A.C.E.D (Faith Access to Community Economic Development) [1999] in Flint, Michigan. Individuals in the organization are working with the county's public health department and the local community college to train members to provide health care information and health services to their churches. Their philosophy is if they can have healthier church members, they will be able to have a healthier community, which leads to improved human and economic development. Other

religious organizations are offering information and knowledge via such vehicles as parenting workshops, marriage seminars and financial planning.

Some might argue that most importantly, R/S organizations offer knowledge that educates members about religious beliefs, values, and knowledge of life and death. Kaye and Robinson (1994) found that religious teachings on life and death are very important, because these teachings help to decrease the fear of death and often help people to become more comfortable with the dying process. Pollner (1989) posits that information taught about forgiveness and how to release or resolve shame and anger are very important functions of religious teachings, because without the process of forgiveness or the release of shame and anger, individuals have a greater chance of becoming ill.

Emotional/Human Development

A part of emotional/human development is how individuals view themselves (ego identity) in relation to their environment (Antonovsky, 1985; Bubolz & Sontag, 1993). It encompasses individuals feeling comfortable with who they are in their social and cultural environment, but at the same time being able to picture themselves as individuals. Religion/spirituality, when used positively, can contribute to a sense of connectedness to others and can make a person feel a part of something important (Antonovsky, 1985; Benson, 1996). It also can impart a reason and purpose for being – a knowing of "who I am" and "why I am here." Religion/spirituality also can provide a sense of integration and stability and grant a person a view of who they are based on a life-span perspective. Hadaway and Roof (1978) directed some of the first research that looked at how religion/spirituality could influence an individual's self-worth. They

conducted a secondary investigation of the data from 1971 Quality of American Life Survey. The researchers found that people of religious faith felt that their lives were more worthwhile, had a greater sense of well-being and life satisfaction as compared to those who did not share the same commitment to R/S beliefs. Since that time, other researchers have drawn similar conclusions. Maton (1989) believes that emotional support is one of the great gifts of religion, because it projects the concept that God values, loves and cares for the individual, which in turn increases a person's sense of self-esteem. Pollner (1989) is convinced that religion/spirituality provides an individual with a greater sense of self and contributes to meaning in life, which helps the person build a stronger sense of personal identity.

Valuative-Attitudinal/Decision Making-Management

The ability to be able to cope with and manage a stressful situation may be one of the most important tools an individual or family can have. Researchers continue to propose that religion can provide a number of resources to help cope with stress (Pargament, Ensing, et. al, 1990). Resources such as participating in prayer and/or worship, reading spiritual material, sharing in times of joy and sadness, and seeking spiritual guidance have all been deemed as helpful with the coping process (Kay & Robinson, 1994). Kay and Robinson also found that religion/spirituality is beneficial, because it offers hope, neutralizes stressful situations and gives guidelines for decision making and management. Pollner (1989) and Maton (1989) suggest that religion/spirituality gives a perspective on how to appraise a situation, as well as gives an

orderliness and predictability to life's occurrences. This is important, because it offers an explanation of why certain things happen and helps in the management of the events.

Pargament and Hahn (1986) project that religion/spirituality is important in the coping process, because it allows individuals to attach a meaning to a situation and give them a sense of control. Rothbaum and colleagues generalize that religion/spirituality offers three types of control: interpretive, predictive and vicarious control (McIntosh & Spilka, 1991). An individual uses interpretative control to say that there must be a reason why an event has happened even though it may take a period of time before God shows me why. Predictive control allows the individual to apply a direct religious explanation to why a certain life event happened. An individual who believes that God is in control of a situation and will be able to help him or her through the event is practicing vicarious control. Like Pargament and Hahn (1986), the researchers concluded that using these types of controls offer individuals a sense of meaning in life, especially when they feel they have no control over the situation. Having a sense of meaning in life, and a feeling that ultimately a greater power is in control, helps individuals and families decrease their sense of dis-ease and promotes the feeling that they will be able to deal with the situation.

Interpersonal-Relational/Needs-Values

There has been a great deal of research that has demonstrated that the association between religion/spirituality and health may be partly due to social support, fellowship and the sense of belonging and cohesiveness that is created by a religious community (Levin, 1994; Hadaway & Roof, 1978; Willitis & Crider, 1988; Ferraro & Albrecht-Jensen, 1991). A study by Oxman, Freeman and Manheimer (1995) examined the

relationship of social support and religion on the mortality rate of 233 older patients (55-years and older) who had had elective open-heart surgery. The researchers discovered that the patients who participated on a regular basis in a social group possessed a unique quality, which acted as a life protective mechanism. They also found that the patients' religious beliefs gave them strength and comfort as they recovered. According to the researchers, there was a three times greater risk of death for individuals who did not participate in social or community groups and who did not gain any sense of strength or comfort from religion. It also has been suggested that when it comes to religion/spirituality, social support should not be viewed as limited to other individuals, but also should be seen as the connection or relationship that an individual has with God or a higher power (Pargament & Hahn, 1986). This may be especially important for people who do not feel that they are in control of a situation. Instead, to deal with the problem, they commune directly with God or a higher power and receive a source of support, encouragement and reassurance.

Macrosociocultural/Social-Cultural

Religious organizations have long been known as systems that offer blueprints for living. They give believers a culture or a place in which they can find a set of rules by which to live. Witter, Stock, Okun and Harding (1985) conducted a meta analysis of quantitative research that studied the relationship between religion and subjective well-being. They found that religion/spirituality provided individuals with a sense of social integration and helped them to connect to a larger cultural group with like views. Shuler, Gelberg and Brown (1994) concluded that belonging to a religious community offered

people cultural stability and gave meaning to life. Lazarus and Folkman (1984) stated that "humans are meaning-oriented, meaning-building creatures who are evaluating everything that happens" (p. 171). Perhaps this is why people are drawn toward religious faith, because one of the purposes of religion is to fulfill the individual's need for finding meaning in life (Ferraro & Albrecht-Jenson, 1991). Levin and Vanderpool (1991) posit that religion negates a sense of helplessness, confusion and insignificance. Instead, it provides a sense of tradition, a guide from birth to death and a sense of memory – all of which offer meaning.

The Neutral/Negative Influence of Religion/Spirituality on Health

As Antonovsky (1985) noted, any of the GRRs that can be used to benefit a person also can be used as a negative influence. Religion/spirituality is no different. As the review of the literature has demonstrated there is a preponderance of evidence that establishes the positive relationship between health and religion/spirituality. However, Ferraro's and Albrecht-Jenson's (1991) review of the literature concluded that not all studies have found the same positive results. For example, Markides (1983) studied the strict religious practices of older Mexican Americans. He found that they had increased blood pressure due to their guilt because of their inability to adhere to strict religious norms. The Duke Longitudinal Study conducted by Blazer and Palmore (1976) concluded that there was no association between older adult's religious activities and longevity. Ferraro's and Albrecht-Jenson's (1991) study found that members of conservative denominations had poorer health. However, they proposed that this might be due to the fact that conservative denominations tend to draw more individuals from a

lower socioeconomic level. People in this social stratum are less likely to practice preventive health care, often will not seek out medical treatment and have a more fatalistic attitude about illness. Dein & Stygall (1997) reviewed several cancer studies and discovered no significant relationship between religion/spirituality and coping. Maton (1989) cited research that found that prayer and religious interpretations were not related to individual's ability to cope successfully. It also should be recognized that individuals could become involved in unhealthy R/S practices. For example, some R/S affiliations promote the handling of poisonous snakes, prohibit a member from seeking appropriate medical treatment and/or set guidelines so rigid that members are loaded down with a sense of guilt and/or shame.

Another factor that should be considered is that a family's R/S conviction may be negatively affected when the family is enmeshed in a stressful situation, such as having a child in the hospital. For example, instead of turning to religion/spirituality for strength, the family's stress level may be increased because of their R/S beliefs. For instance, the family may see their child's illness as punishment from a higher power, and this belief makes it more difficult for the family to adapt or adjust to the situation (Castiglia & Harbin, 1992). Whaley and Wong (1991) found that as some families move through the shock and denial of learning that their child has a chronic illness, disability or is dying that the family may reject their R/S beliefs. The family may feel angry and resent any mention of religion/spirituality and/or interaction with a spiritual caregiver (Castiglia & Harbin, 1992).

Building a Predictive Model

As indicated earlier, one of the objectives for this study is to estimate the interrelationship between variables and to specify an a priori model that will predict what factors influence a family to use religion/spirituality as a psychosocial resource. Based on this objective, the question then becomes what are the independent variables that should be used in the model? The variables that will initially be tested to build the model are income, race, education level, the respondent's gender and age, and the family's R/S practices, beliefs, affiliation and interaction with a spiritual caregiver(s). Following is a discussion of the variables.

Religious Practices and Beliefs

Researchers have determined that religion/spirituality is multidimensional, and its effects cannot be measured by using only one dimension such as church attendance (Levin, 1994; Pargament, Ensing et al., 1990). Instead, to measure the effects of religion/spirituality, a researcher must look at several factors such as values, beliefs, attitudes, religious attendance and social support received from the R/S community. Levin (1994) believed that how frequently one was involved in R/S activities and the depth of that involvement influenced one's psychosocial and physical health. Two of the categories he used as a measure for religion/spirituality were the "psychodynamics of belief systems" and the "psychodynamics of religious rites." He noted that the psychodynamics of the belief system gave meaning and purpose to life and made one feel peaceful and self-confident. The psychodynamics of religious rites included participation in R/S practices such as worship, rituals, and fellowship. Levin concluded that these

effects of religion/spirituality could help individuals by replacing such emotions as anxiety and loneliness with a feeling of being cared for and loved.

Rutledge, Larson, Levin, and Lyons (1995) used a similar division when determining the pattern of how R/S coping manifested itself in believers. The researchers presented the idea that individuals used religion/spirituality to cope "intrapsychically" as well as "institutionally." Intrapsychical coping is defined as someone's R/S values, beliefs and attitudes. On the other hand, institutional coping has to do with the practice of religion such as attending religious services and fellowship. In a similar fashion, Witter, Stock, Okun and Haring (1985) discussed the importance of operationalizing religion by measuring both religious activity and religiosity (meaning and importance that religion has to the person).

Pargament, Ensing et al. (1990) also found that individuals' beliefs in God and the frequency that they practiced their faith influenced their health. The researchers studied 586 members of Protestant churches and looked at what religious variables individuals used to cope with negative events. They found four key themes that were associated with positive outcomes in coping. The first was the belief in a just and loving God. This belief helped individuals appraise the event in a more positive light, as opposed to someone who felt that the negative event was a punishment from God. Second, was the tenet that God was a supportive partner in the process, and even if the person felt he/she did not have much control, God did. The third theme was the importance of participating in religious practices such as scripture reading, attending religious services and prayer. The fourth benefit was that people who did attend church coped more effectively if they

also endeavored to gain closeness to God and used their religious/spiritual beliefs as guidelines to deal with the negative events.

A number of studies have found that religious beliefs can positively influence an individual's coping skills. Willits and Crider (1988) reported that individuals who believed in the existence and divine character of a higher power were usually healthier. Ferraro & Albrecht-Jenson (1991) also found that how close one feels to God would influence health. Johnson & Larson (1998) discovered that when people gained a sense of meaning, optimism and safety from their R/S beliefs, they had an increased sense of well-being, which in turn helped them to cope. Also, individuals who demonstrated an intrinsic pattern of R/S beliefs were healthier and more likely to use these beliefs to cope (Larson & Larson, 1994).

Some of the first studies that discovered that religion/spirituality might have a positive influence on health occurred when researchers included church attendance as a measurement in health studies (Levin, 1987). Since then, investigators have progressed by looking at a variety of R/S practices that might influence one's health. A number of studies have found that a variety of activities such as worship, prayer, participating in sacraments and rituals were beneficial in coping and/or improving health (Willits & Crider, 1988; Levin, 1994; Ferraro & Albrecht-Jenson, 1991). Levin, Larson, and Puchalski (1997) concurred that spiritual practices were beneficial in helping to promote health-related behavior, and because these practices provided social support, they also helped individuals cope. In much of the researcher, prayer seemed to be a very important factor in helping individuals cope with negative events (McIntosh & Spilka, 1990; Willits & Crider, 1988).

Strawbridge, Cohen, Shema & Kaplan (1995) concluded in their study that frequent religious attendance was associated with less depression, lower blood pressure and increased perception of health and life satisfaction. The researchers conducted a 28-year study that tracked the association between religious attendance and mortality. They found that mortality rates were lower for frequent religious attendees. They postulated that this occurred because of the increased social contact, greater stability in marriages and a tendency for religious individuals to practice better health habits.

Hathaway and Pargament (1991) suggest that one of the conditions that must be in place for an individual to use religion/spirituality as a means of coping is availability. They argue that without a R/S background, an individual is less likely to think of or use religion/spirituality as a resource. Conversely, if individuals have experienced a greater involvement in R/S activities, they are more likely to perceive religion/spirituality as an important means of coping. One might then question, if a spiritual caregiver is available to the family, when they have a child in the hospital, would this be a factor in influencing the family to choose to use religion/spirituality as a coping resource?

Interaction with a Spiritual Caregiver(s)

The researcher is defining the term, "spiritual caregiver" as an individual who is viewed by the family as a conduit of religious and spiritual beliefs and practices. This could include such people as the hospital chaplain, parish nurse, priest, nun, pastor, rabbi and imam. Spiritual caregivers who participate in hospital visitations have the potential to fulfill a number of roles to help patients and families cope (McKee & Chappel, 1992; Widerquist & Davidhizar, 1994 ; Handzo, 1996; Hanson & Boyd, 1996). For example,

the spiritual caregiver often offers comfort and social support to the family. Spiritual caregivers can help families and patients find hope, attach meaning to a stressful situation and value the importance of the family working together to make it through the crisis. The spiritual caregiver also can facilitate the expression of feelings and act as a conduit to help families deal with guilt, shame, forgiveness and anger. In addition, they act as counselors for dying patients, help families deal with grief, and make funeral and burial arrangements (Wilson, 1989).

In studying the role of hospital chaplains, McKee and Chappel (1992) have suggested that chaplains may be of tremendous help in the healing process, because they, along with other spiritual caregivers, are often viewed as "physicians of the soul" (p. 201). Maton (1989) concluded that chaplains offer spiritual support and a more positive appraisal of an event, this in turn helps individuals to reduce the negative effects of a traumatic situation. Widerquist & Davidhizar (1994) state that chaplains "bring transcendence to the individual in distress, pain and crisis, inviting persons to respond in their spirit" (p. 648). Handzo (1996) sees chaplains as individuals who offer hope and help a patient or family gain a new perspective and way of thinking about God during a time of crisis.

Whether a hospital chaplain or a visiting spiritual caregiver, one of the most important contribution either one can make is to act as catalyst to remind people that religion/spirituality can be used as a coping mechanism. As mentioned earlier, Hathaway and Pargament (1991) stated that one of the conditions that increases the possibility of using religion/spirituality to cope is that individuals find themselves in a compelling situation. Spiritual caregivers who are ministering to individuals in the hospital are often

surrounded by compelling situations where patients and families are not able to explain or resolve the traumatic event by the use of secular resources. Therefore, the patient and families may be looking for another available resource to help them cope with the negative circumstance. The availability of spiritual caregivers to serve as symbols and providers of religion/spirituality offers a new resource for the patients and their families to use in the coping process. The essence of concern, comfort, hope and support that spiritual caregivers bring with them into the hospital room is indeed a very compelling resource that many often reach for in a time of crisis.

Three factors that may influence a family's receptiveness and interaction with a spiritual caregiver are the family's R/S practices, beliefs, and affiliation (Levin, 1994; Rutledge, Larson, Levin & Lyons, 1995; Levin & Vanderpool, 1987). If a family is actively involved in R/S practices and beliefs, they may see the interaction with a spiritual caregiver as a positive extension of their faith (Jenkins & Pargament, 1995). However, if the family has a different R/S affiliation than the visiting spiritual caregiver (e.g. hospital chaplain), the family may view the interaction as obtrusive. For example, an orthodox Jewish family may be very uncomfortable with a spiritual caregiver from another faith. The family may feel that the spiritual caregiver does not understand their needs and/or may be fearful that they are being proselytized.

Religious/Spiritual Affiliation

A review of the literature has shown that there has been a statistically significant association between religion/spirituality and health across a variety of religious affiliations, including studies on Catholics, Protestants, Jews, Hindus, Buddhists, Parsis

and Muslims (Levin, Larson & Puchalski, 1997). However, individual research does show there may be some difference in specific religions, and a religion's influence on well-being and health. Levin and Vanderpool (1987) suggest that how a R/S affiliation affects one's health may be dependent upon how the culture in which one lives views that religion. In example, they cite religious groups such as the Christian Scientists and Holiness sects who have viewpoints that are often at odds with the philosophy of mainstream society. This conflict of viewpoint may in fact create enough stress in a religious member's life that it has a negative effect on the person. However, Levin and Vanderpool (1987) suggest that groups such as Orthodox Jews, Mormons and the Amish may actually be promoters of positive health, because they "foster psychological peace and a sense of social integration even though they value beliefs and practices not shared by the dominant culture" (p. 597). Hadaway and Roof's (1978) data from the 1971 Quality of American Life Survey found that the importance of faith negatively affected "life's worthwhileness" among Jews. They also sight McCready's 1976 study that showed that overall Judaism is a more pessimistic faith as compared to Christianity. In a study that looked at religious activity, denominations, membership and life satisfaction, McClure and Loden (1982) found a mixed result among various religious groups. The researchers discovered that Catholics and fringe Christian groups had a stronger sense of worthlessness as compared to Protestant groups. Mormons and Baptists spent more time in R/S activities and responsibilities as compared to Catholic and Jews. Baptists and Jews had a greater sense of satisfaction with their religious activities than Mormons. Jews and Mormons had less overall life satisfaction, and Baptists and Mormons were the happiest with their religious affiliation. There is not a great deal of research that

pinpoints the effects of specific religion on health; more investigation needs to be done in this area.

Race

In the book, *Family Nursing: Research, Theory, and Practice*, Friedman (1998) acknowledges that religion is very intertwined with race. She writes that for many cultural groups religion/spirituality is a key construct that shapes families' health values, beliefs and practices. From her observation and research, she noted that Hispanic-American families readily reach out for spiritual support when a family member is going through a health crisis. In comparing Latinos to Anglos, she found that the Latinos were more likely to accept that God, prayer and faith were important methods of coping with their child's cancer. Between 85 to 95 percent of Hispanic-Americans are Catholic (Jackson & Saunders, 1993; Friedman, 1998). Most Hispanic's R/S beliefs are based on the Catholic precepts that a higher power guides an individual's life and is in control of when that life will end (Friedman, 1998; Edelman & Mandle, 1998; Jackson & Saunders, 1993).

African-American families are very dedicated to their religious community and beliefs, and a majority of African-Americans are Protestant (Friedman, 1998; Jackson & Saunders, 1993). A central system in the African-American community is the church, and it provides a place for expression, socialization and spiritual growth. In this community, religion/spirituality plays a significant role in many families' lives, and pastors within the community are viewed as very influential people (Edelman & Mandel, 1998; Ashwill & Droske, 1997). When comparing black middle-class to white middle-

class families, Friedman (1998) concluded that the black families placed a higher priority on their R/S beliefs. Jenkin's and Pargament's review of the literature also found that African Americans used religious coping more often than Caucasians. Levin, Chatters and Taylor (1995) investigated the effects of religion on health status and life satisfaction among Black Americans. They found that Black adults attend church frequently; many are church members and are often engaged in religious practices such as prayer and reading devotional material. Levin and colleagues also stated that one of the reasons religion/spirituality has an influence on the well-being of African-Americans is because the Black church has done an excellent job in attempting to buffer and change conditions within society that are harmful to the Black community's health.

It becomes more difficult to pinpoint the effects of R/S beliefs for Asian-Americans. Friedman (1998) writes that, "the influence of the philosophies/religions of Confucianism, Taoism, and Buddhism are deeply ingrained in the Asian culture. Thus whether or not an Asian overtly identifies with these systems of thoughts/beliefs, he or she inadvertently follows their prescriptions, which are often synonymous with cultural norms/values" (p. 54). Friedman identifies a number of core values of this ethnic group, none of which are related directly to belief in a higher power. Jackson and Saunders (1993) point out that the philosophical and religious roots of Asian Americans often create a sense of fatalism. This group's philosophical/religious beliefs tend to promote the concept that one should move with the natural rhythm of life and accept one's fate, instead of challenging and resisting the situation.

Many individuals from the Middle East practice the Islamic faith. Daneshpour, (1998) points out that Islamic culture values the strong traditions and rituals that tie

families and religious beliefs closely together. Ghazizadeh (1992) states that, "Islam prescribes a set of spiritual, social, economic, political, sexual, dietary, and military guidelines that make the daily life of Moslems inseparable from their religion" (p. 227). During family distress, Daneshpour explains that Muslim families are more likely to deal with their stress by staying close to other family members and "making a strong connection to God (Allah)" [p. 363]. The Muslim family makes this strong connection through prayer and believes by sitting quietly and praying, they can get in touch with their true self and Allah. This in turn helps them to accept self and the pain that comes from a stressful situation.

In the past, Caucasians have been found to have a higher life satisfaction in relation to their religious beliefs as compared to non-whites (Hadaway & Roof, 1978). However, as Friedman (1998) points out, many families in today's society have become more secular, and thus religion/spirituality has less influence on these families. Studies have shown that as Americans receive a higher level of education and are upwardly mobile they tend to become more secular and less religious (Ferraro & Albrecht-Jensen, 1991). These findings may be most applicable to Caucasians, because they are more likely to fit this socioeconomic profile.

Income and Education

Relatively little research has investigated the relationship between income and education levels as related to the use of religion/spirituality as a coping mechanism. Zuckerman, Kasal, and Ostfeld's (1984) study of the poor showed that religiousness had a protective effect on their health. In past research, Hadaway and Roof (1978) cited two

studies that concluded that the level of income had very little influence on religion's relationship to the quality of life. Comstock and Partridge (1972) found that middle-class people attended church more frequently than those in a lower social class. However, more current studies have shown that people with wealth, power, and knowledge are more likely to take advantage of health care resources, and for the most part, deny or do not use religious resources as frequently (Antonovsky, 1985; Levin, 1994). Ferraro and Albrecht-Jenson (1991) noted that people with a higher social status were less conservative and less involved in R/S activities. Jenkins and Pargament (1995) noted the same pattern in the use of religious coping. Adults with a higher socioeconomic level used religion less as a coping resource as compared to adults with a lower socioeconomic status.

Gender

Mixed reviews seem to prevail on the issue of whether or not gender is related to R/S and health. Zuckerman, Kasal, and Ostfeld (1984) studied the psychosocial predictors of mortality among the elderly poor and found evidence that religiousness had a protective effect on both elderly males and females. Hadaway and Roof (1987) came to similar conclusions when they examined whether religious meaning and religious belonging were positively associated with life satisfaction. They found no difference between males and females in respect to the importance of faith, but they did find a slightly stronger male relationship to religious membership, participation and the feeling of life satisfaction. A look at religiousness and personality characteristics among college students by Mayo and colleagues concluded that there was a positive correlation between

religiousness and mental health for male students but not for female students (as cited in Matthew, Larson, & Barry, 1993).

Koenig (1990) found that women mentioned religious behavior as being a positive benefit to their mental health almost twice as often as did men. Likewise, a 1987 study by Brown on stress, social support and health in urban blacks indicated that religion seemed to appear less important for black men than it did for black women. Levin, Chatters and Taylor's (1995) research found that African American and Caucasian women participated more in religious activities than their male counterparts. Likewise, Jenkin and Pargament's (1995) review of the literature concluded that women, as compared to men, were more likely to use religion as a coping resource. Though studies differ in their findings when studying the influence of religion/spirituality on gender, the more current studies tend to lean toward females being more actively involved in religion/spirituality than their male counterparts.

Age

Studies have delineated that R/S activities tend to change over the life cycle, but not necessarily R/S beliefs. Albrecht and Cornwall (1989) cited research that showed that R/S activities tend to decrease during the teens and early twenties. As individuals reach the late twenties and thirties, they begin to increase their activity levels. According to Albrecht and Cornwall this may be due to the fact that they are reaching child-bearing ages, taking on an adult status and beginning to deal with more serious problems that come as one ages. Moody (1998) also suggests that parents with younger children are more likely to attend R/S services, but participation drops off after middle age. Cox and

Hammond's (1988) review of the literature found a consistent pattern in adult church attendance. They state "that church attendance hits a low between18 and 24, remains relatively stable between 25 and 54, rises slightly after 54 and drops slightly after 80" (p. 3).

Moody (1998) reports that adults over 65 are more likely to attend church on a regular basis as compared to those who are under 30. Levin's (1993) research found that 50 percent of older adults attended religious service a minimum of once a week. He also found an older individual is more likely to express a belief in God. A meta analysis of the literature supports that the relationship between religion and subjective well-being was strongest in older people in comparison to the younger generations (Witter, Stock, Okun & Harding, 1985). However, other research points out that even though religion/spirituality appears to be an important part of an older adult's life, there is little evidence that as one ages they become more religious (Johnson, 1995; Ainlay, Singleton, & Swigert, 1992; Chatters & Taylor, 1994). Consequently, individuals may be more active in practicing and expressing their R/S beliefs as they age, but this does not mean that they become more religious/spiritual.

Building a Path Diagram

One of the objectives of this research project was to build a recursive path model that would identify variables which influence a family to use religion/spirituality as a psychosocial resource to cope with the stress of having a child in the hospital. Figure 2 is an a priori model in the form of a path diagram that gives an overview of the nine variables involved in this process. As depicted on the map, the variables are classified

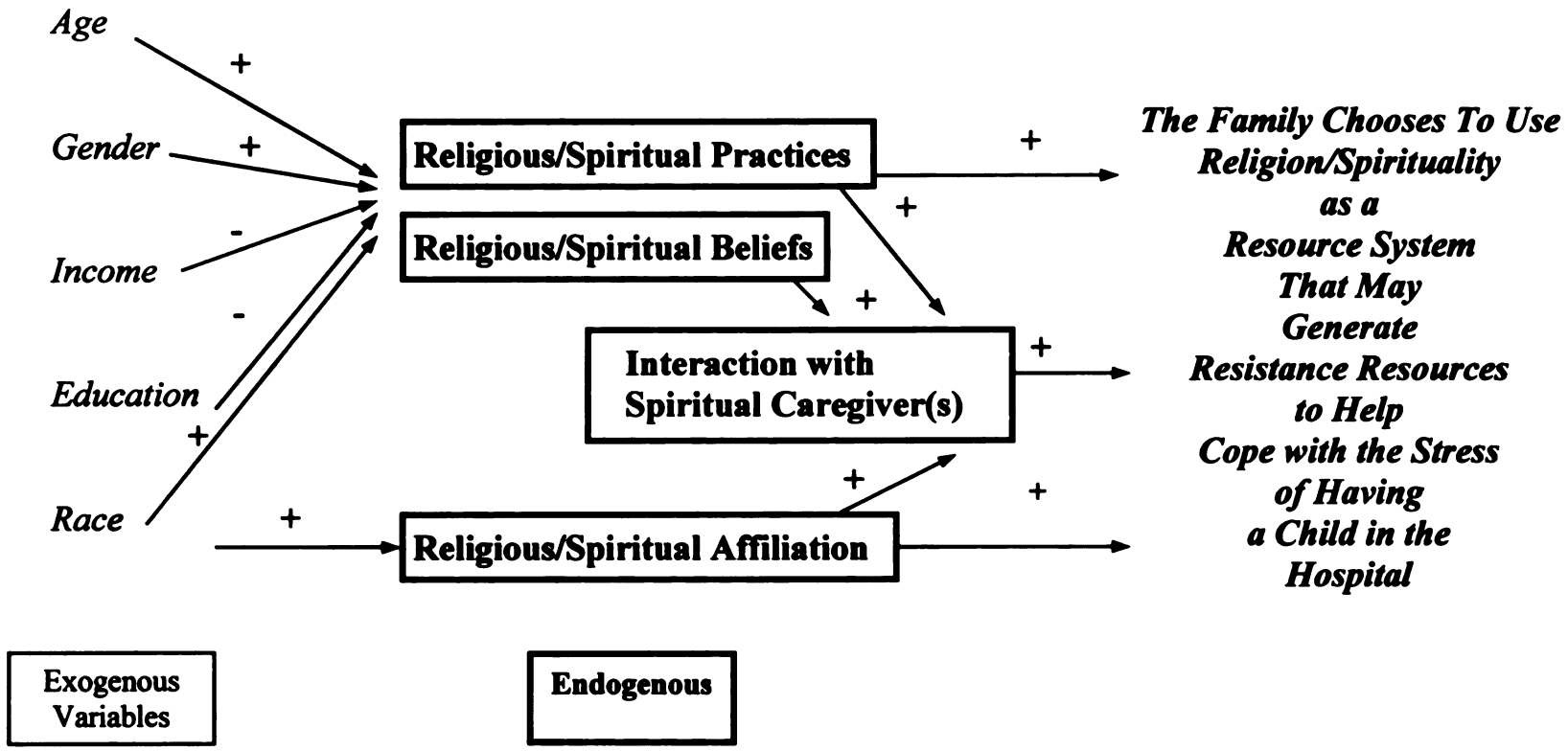


Figure 2: A Path Diagram Predicting How Various Constructs Influence the Family's Use of Religion/Spirituality as a Psychosocial Resource to Help Cope with the Stress of Having a Child in the Hospital

into the subgroups of exogenous and endogenous variables. The exogenous variables consist of the respondent's age and gender and the family income, education and race. The variables included in the endogenous subgroup are the family's R/S practices and beliefs, interaction with spiritual caregiver(s), and R/S affiliation.

Based on the review of the literature, the researcher began to construct the diagram by hypothesizing whether the exogenous and endogenous variables would have a positive or negative causal effect on the dependent variable. In this path diagram, age is designated as having a positive (+) relationship, because past studies have shown that as persons age they tend to become more actively involved in their faith (Moody, 1998; Albrecht & Cornwall, 1989; Cox & Hammond, 1989). However, these findings may be due to a cohort effect. The relationship between religion/spirituality and age may change as new cohorts are studied. Gender also is characterized as having a positive causal relationship. This designation was made because the researcher assigned the female gender a positive (+) sign. This is based on the review of literature, which shows that the female gender is more likely to be positively related to R/S practices and belief (Jenkin & Pargament, 1995; Koenig, 1990; Levin, Chatters & Taylor, 1987).

Individuals with higher education and income levels tend to be more secular and are not as likely to use religion/spirituality as a resource to cope (Levin, 1994; Albrecht-Jenson, 1991; Antonovsky, 1985). Therefore, a negative (-) causal relationship was designated in the path diagram based on the assumption that the higher a family's education or income levels, the less likely the family is to be actively involved in R/S practices and beliefs.

The review of the literature has shown that a large number of people in each racial group practice some form of R/S beliefs. However, it should be noted that income and education might be an important factor when attempting to determine if some racial groups are more R/S than others. Groups in the United States such as Hispanics-Americans and African-Americans have less education and lower income levels than their Caucasian counterparts (Edelman & Mandel, 1998; Friedman, 1998). Research has shown that individuals with lower levels of education and income may more likely view religion/spirituality as an important resource in their lives (Levin, 1994; Antonovsky, 1985). The researcher has assigned a positive (+) notation to subjects who identify themselves as a member of a minority race in the United States such as Hispanics-Americans, African-Americans, and Arabic-Americans. A negative (-) notation was assigned to individuals from the Caucasian race. Thus, the path diagram, which shows race as a positive exogenous variable, is based on the premise that minority races in the United States will have a more positive (+) causal relationship with religious/spiritual practices and beliefs as compared to Caucasians.

The exogenous variable, race, also is shown in the path diagram as having a positive (+) causal relationship with a family's religious/spiritual affiliation (Friedman, 1998; Elelman & Mandel, 1998; Daneshpour, 1998; Jackson & Saunders, 1993). For example, many, but certainly not all, Hispanic Americans associate with the Catholic faith, Arabic-Americans with the Islamic faith, African-Americans with a Protestant faith, and Caucasians with either a form of Christian or Jewish affiliations.

Just as the path diagram illustrates that the exogenous variables have a causal relationship with religious/spiritual practices, beliefs and affiliations, the diagram also

projects that the endogenous variables, R/S practices, beliefs and affiliation, have a positive (+) causal relationship with the family's interaction with a spiritual caregiver(s). As cited earlier, families that actively participate and/or acknowledge their R/S beliefs may view a spiritual caregiver as a positive extension of their religion/spirituality, and thus be more willing to interact with a spiritual caregiver (Levin, 1994; Rutledge, Larson, Levin & Lyons, 1995; Levin & Vanderpool, 1987). This may especially hold true, if the spiritual caregiver is of the same R/S persuasion as the family.

As indicated on the path diagram, R/S affiliation is proposed to have a positive causal relationship with a family choosing to use religion/spirituality as a resource. The literature differs on which R/S affiliation is most likely to foster the idea that a person's faith can act as resource to help one cope. Even though the literature is unclear, R/S affiliations must be ranked to test the path diagram. Kline (1998) states, "The literature for relatively new research areas can be very limited, so decisions about what to include in the model sometimes need to be guided more by the researcher's experience and intuition than by published works" (p. 99). Intuitively, the researcher ranked the R/S affiliations from high to low as follows: Catholic/Islam ranked equally, Protestant, Jewish, spiritual but no religious affiliation, and no religious/spiritual affiliation.

The final phase of the path diagram indicates that all of the endogenous variables have a positive (+) causal relationship with the family choosing to use religion/spirituality as a resource to help cope with the stress of having a child in the hospital. As discussed earlier in the review of the literature, individuals with R/S backgrounds are more likely to use religion/spirituality as a means of coping than individuals who have no association with religion/spirituality (Hathaway and Pargament,1991). In addition, Hathaway and

Pargament note that the availability of religion/spirituality is a factor in individuals choosing to use religion/spirituality as a resource to cope. Therefore, the researcher has hypothesized that a family's R/S practices, beliefs, and affiliation and the family's interaction with a spiritual caregiver(s) at the hospital is causally related to the family choosing to use religion/spirituality as a resistant resource to cope with the stress of having a child in the hospital.

Chapter III will discuss the statistical technique that was used to test the proposed a priori model. Other methodological procedures used in the research project also will be discussed.

CHAPTER III

METHODOLOGY

The methodology used in this research is described in this chapter. Four main sections covering research design, data collection, data analysis and research limitations are included.

Research Design

This research study used a descriptive, cross-sectional design. The aim of this study was to survey families who have a child on a pediatric unit of a large metropolitan hospital. The study was conducted under the auspices of the Pastoral Services Department, the Customer Relations Department, and the Pediatric Unit Nurse Manager. *A pediatric inpatient survey* was used as the instrument to study the relationship between the use of religion/spirituality as a psychosocial resource and the ability of a family to cope with the stress of having a child in the hospital. The primary use of the research data was to estimate the causal relationships between exogenous and endogenous variables that are included in the recursive path model (see Figure 2), and to evaluate the model's goodness-of-fit.

Research Hypotheses

As discussed in Chapter 1, the research is based on two objectives: 1) to conduct a survey of families who have a child on the pediatric unit of a major metropolitan hospital to investigate the use of religion/spirituality as a psychosocial resource to help cope with the stress of having a child in the hospital, and 2) to construct a recursive path model to determine if there is a causal relationship between the path diagram's nine observable variables and families' choosing to use religion/spirituality as a psychosocial resource to help cope with the stress of having a child in the hospital. Based upon these two objectives, two hypotheses were formed.

Hypothesis One: Using R/S as a Coping Resource

Hypothesis one refers to the relationship between the family's perceived ability to cope with having a child in the hospital (**dependent variable**), and the family using religion/spirituality as a coping resource (**independent variable**).

Hypothesis 1: There is a positive relationship between the use of religion/spirituality as a resource, and the ability of the family to cope with the stress of having a child in the hospital.

Hypothesis two expresses that there is a causal relationship between the variables in the path diagram (see Figure 2).

Hypothesis 2: As depicted in the a priori model, there is a causal relationship between the predictive variables and the family's use of religion/spirituality as a resource to help cope with the stress of having a child in the hospital.

Data Collection

The Sample

The sample for the study was drawn from immediate family members who had a child on the pediatric unit of a major metropolitan hospital. A description of the sample can be found in Chapter IV. During a six-week period, surveys were distributed each day to a family member who had a child being discharged from the pediatric unit. Pediatric unit daytime volunteers distributed the survey to the family member. The subject was asked to complete the survey, place it in an attached envelope, seal the envelope, affix an enclosed seal across the flap of the envelope, and return it to the volunteer before he or she exited the hospital. The volunteers deposited the sealed envelopes in a file box in the office of the Nurse Manager of the Pediatric Unit. Approximately 225 patients are discharged per month (Pediatric Nurse Manager, personal communication, September 2, 1999).

The researcher set the minimum sample size of 100 surveys to be collected. There is no absolute standard set for sample size in the structural equation modeling procedure of path analysis. However, if the model is not complex, then a medium sample size of 100 to 200 is acceptable (Kline, 1998; Hair, Anderson, Tatham & Black, 1995). Statistical stability is lost in the procedure if the subject/pathway is less than five to one (Kline, 1998). The researcher used a total of 16 pathways in developing the path analysis, which means that at a minimum of 90 completed surveys should be collected.

County Demographics (Based on Hospital's Location)

The 929 bed teaching hospital is located in a metropolitan area in southeast Michigan. The hospital is located in a county that has a Planning and Economic Development Department. The following demographic information, unless otherwise specified, was provided by a technical assistant from this department (Technical Assistant, personal communication, September 19, 1999). The July 1, 1996 U.S. Census population estimates for the county where the hospital is located was 1,162,098. Of this number, three percent are Hispanics, 86.8 percent White Non-Hispanics, 8.4 percent African Americans, .003 percent American Indians and .03 percent Asian Pacific Islanders. The median family income in 1997 was 57,360 dollars and the average housing cost was 177,997 dollars. The number of females living in the county in the year 2000 is expected to be 593,488 with the median age of 36.4 years. The projected number of males living in the county in the year 2000 is 625,396 with the median age of 38.4 years. The 1990 educational attainment for persons 18 years and over was as follows: 32.8 percent had less than a high school diploma, 20.5 were high school graduates, 18.7 percent some college, no degree, 5.1 percent an associate degree, 14.2 percent a bachelor's degree, and 8.7 percent had a graduate or professional degree [1990 US Census Data]. According to the 1990 Census there are 369 Protestant churches, 52 Catholic churches, and 32 Jewish synagogues located in the county (County Profile, 1993).

Distributing and Collecting the Surveys

Permanent day volunteers on the pediatric unit, who help to service the family and patient during the child's stay in the hospital, distributed and collected the surveys. The volunteers were chosen for the following reasons. 1) There was an increased likelihood that surveys would be completed and collected if the parent or guardian is personally asked to complete it on the day of discharge. 2) The volunteers have the ability to distribute the survey early enough on discharge day to allow adequate time for the survey to be completed. 3) The volunteers already are recognized by the patient and families. Thus it was felt that the survey, which asked questions about the sensitive topic of religion/spirituality, would be less threatening coming from a recognizied individual. To ensure a consistent procedure in distributing and collecting the surveys, all volunteers participated in a training session conducted by the researcher. The training session included a description of the research, review of the survey, general guidelines and procedures to be used in distributing and collecting the survey. See Appendix B for the specification sheet that was used during the training session.

The Instrument

The instrument (see Appendix A) used in the study was a survey developed by the researcher. Survey development involved a number of steps. First, several meetings were held with the Director of the Pastoral Services Department and the chaplains. These meetings involved discussions about the type of interaction chaplains and/or other spiritual caregivers have with families and patients, and the type of questions needed to be included in the survey. Next, to gain a better understanding of the type of interaction

the chaplains and or visiting spiritual caregivers might have with patients, the researcher spent a 12-hour day shadowing six of the chaplains. As reflected in Chapter II, review of the literature also was an important source in developing questions that would be appropriate to help measure the multidimensionality of religion/spirituality. The next step was writing the initial survey and having it reviewed by the Director of the Pastoral Services Department, the Director of Customer Relations Department, and the Nurse Manager of the Pediatric Unit.

The Pastoral Services Department, the Customer Relations Department, and the Nurse Manager of the Pediatric Unit requested that the survey not be more than two pages in length. On the day of discharge, families are anxious to leave the hospital, and the hospital staff felt that a family member would be more willing to accurately complete a short survey. Also, on the same day or immediately after discharge, each family is asked to fill out an additional one-page pediatric unit survey.

The questions in the survey were used to gather the following information from the respondent.

- *The level of perceived stress the immediate family experienced while having a child in the hospital.*

1. Using a ranking from 0 to 4 (with 0 = no stress and 4 = very high stress) how stressful was it for your immediate family to have a child in the hospital?
2. What is the medical reason (or diagnosis if you know it) for your child's hospital stay?
3. During this specific hospital stay, how many days has your child been in the hospital?

- *How well the family thinks they are coping.*

1. My immediate family has a difficult time coping with having a child in the hospital.
   1) completely disagree 2) somewhat disagree 3) neither agree/nor disagree
   4) somewhat disagree 5) completely agree

- *The importance of religion/spirituality as a resource in helping the immediate family cope with having a child in the hospital.*

1. My immediate family's religious/spiritual beliefs were important in helping to cope with having a child in the hospital.
   1) completely disagree 2) somewhat disagree 3) neither agree/nor disagree
   4) somewhat agree 5) completely agree

- *The immediate family's participation in religious/spiritual practices.*

1. Participation in religious/spiritual activities (e.g. prayer, scripture reading) plays an important role in my immediate family's life?
   1) completely disagree 2) somewhat disagree 3) neither agree/nor disagree
   4) somewhat agree 5) completely agree

2. My immediate family seeks out people from our religious/spiritual community, when we need help or support?
   1) completely disagree 2) somewhat disagree 3) neither agree/nor disagree
   4) somewhat agree 5) completely agree

3. How often does your immediate family attend religious/spiritual services?
   ____ times per (weeks ~ months ~ years) —— Please circle the correct time period

- *The immediate family's religious/spiritual beliefs.*

1. My immediate family's religious/spiritual beliefs gives us a sense of meaning and purpose in life.
   1) completely disagree 2) somewhat disagree 3) neither agree/nor disagree
   4) somewhat agree 5) completely agree

2. Religious/spiritual beliefs are a source of strength for my immediate family in everyday living.
   1) completely disagree 2) somewhat disagree 3) neither agree/nor disagree
   4) somewhat agree 5) completely agree

3. My immediate family's religious/spiritual beliefs give us a sense of hope.
   1) completely disagree 2) somewhat disagree 3) neither agree/nor disagree
   4) somewhat agree 5) completely agree

- *The types and the importance of the interaction the immediate family had with a spiritual caregiver(s) while the child was in the hospital?*

1. During your child's stay in the hospital how many times did you interact with a spiritual caregiver(s)? _____ times during my child's stay in the hospital

2. During this hospital stay, please identify the spiritual caregiver(s) with whom your family interacted? (Check as many as applies)
   ___ hospital chaplain ___ imam ___ pastor ___ parish nurse ___ priest
   ___ rabbi ___ other (please specify)

3. In the hospital, what type of interaction did your immediate family have with a spiritual caregiver? (Check as many as applies)
   ___ prayer ___ explored spiritual/emotional issues
   ___ other religious/spiritual activities ___ general conversation
   (please specify)

4. While in the hospital, how did your immediate family's interaction with a spiritual caregiver(s) help? (Check as many as applies)
   ___ provided comfort ___ provided hope ___ an outlet for expression of feelings
   ___ was not helpful ___ other (please specify)

- *The immediate family's religious/spiritual affiliation?*

1. What is your immediate family's religious/spiritual affiliation?
   ___ Catholic ___ Islam ___ Jewish ___ Protestant
   ___ Spiritual but not religious affiliation ___Other (please specify) ___ None

- *Additional demographic information about the immediate family (race, annual income, education level, child's age, and respondent's age and gender).*

Confidentiality

No questions on the *pediatric inpatient survey* asked for the respondents' names, addresses or telephone numbers. The respondent was asked to seal the completed surveys

in an attached envelope and affix a seal across the flap of the envelope so that the volunteers who collected the surveys did not have access to the answers. Volunteers deposited the surveys in a file box in the Pediatric Unit Nurse Manager's office. The original *pediatric inpatient surveys* are secured in the researcher's home with all other dissertation-related records. In addition, the hospital required the researcher to sign a policy form stating that all information, other than for the purpose of the research, will be kept confidential.

Approval for Research

Both the hospital and Michigan State University's institutional research committees gave approval for this research. Michigan State's University Committee on Research Involving Human Subjects reviewed and approved the research on November 22, 1999 (IRB# 99-690, Category 1-C). The hospital's Human Investigation Committee approved the research on December 22, 1999. The research was exempt under paragraph one of the Department of Human Health and Services Federal register [45 CFR, 46.101 (b) (2)].

Reliability and Validity

To increase the reliability of the study, the researcher wrote questions that were simple and easy to understand and that were directed at immediate family members who should have found the questions relevant to their experience of having a child in the hospital. A five-point Likert scale was used in a number of questions when the respondents were given categories from which to choose. Research shows that Likert

scales of five or more categories are more reliable (SPSS, 1998). There were two other factors that added to the survey's reliability. The first is that having a child in the hospital generally will leave a marked impression on the family. It has been shown that if an event has had a great influence on an individual, that a person will have a higher recall of the event (SPSS, 1998). The surveys also were distributed and collected on the day of the child's discharge, which provided a greater chance for the family to have accurate rather than retrospective recall. In addition, three questions were used as indicators for both religious/spiritual practices and beliefs, and four questions have been identified as measurements for the construct, interaction with the spiritual caregiver. According to the SPSS Manual on Survey Writing (1998), when three or more questions are used to measure a construct, tests can be run to determine the question's internal consistency reliability. Hair et al. (1995) denote that as few as two indicators per construct can be used to measure reliability. Rubin and Babbie (1997) project that in most cases survey research has strong reliability. The reason for this is that the questions and statements are exactly the same in each survey completed by the respondents.

Even though Rubin and Babbie (1997) believe that surveys are high on the reliability scale, they note that they are weak in validity. They posit that weak validity is due to the artificiality of survey format. Few people would normally answer a question using the wording that occurs on a Likert scale. Keeping this in mind, Rubin and Babbie suggest that when assessing the data gathered from a survey, a researcher should regard it only "as approximate indicators of what we have in mind initially in framing the questions" (p. 365). Face validity has been used to assess the questions in the survey. As already indicated, the survey was based on a review of the literature and was assessed by

the Pastoral Services Department, the Customer Relations Department, and the Nurse Manager of the Pediatric Unit.

Pilot Testing

A pilot test was conducted to investigate the effectiveness of the survey. During a ten-day period, pediatric unit, day volunteers were asked to distribute and collect the surveys. Before the distribution, the researcher trained the volunteers on the appropriate procedures to be used. The pilot test survey also included a cover letter (see Appendix C) that the volunteers gave to the family member. The letter asked the respondents to complete the survey and to highlight or circle any unclear terms or phrases. The respondents also were encouraged to write any comments on the survey or the comment sheet to identify any problems or concerns. The family members were then instructed to place the survey in an envelope, seal it, and place a seal across the flap of the envelope.

Fifteen surveys were collected over a ten-day period. Of the 15 surveys collected, 13 were completed. The respondents seemed to be able to fill out the surveys without a problem, and there were no written comments from the respondents about any problems they encountered filling out the survey. Based on the completion of the survey, no changes were made in the wording of the survey questions. However, the researcher made a few cosmetic changes to the survey so that it would be easier for respondents to read and complete.

During the pilot test, the pediatric unit, day volunteers who had worked on the weekends were no longer serving at the hospital. It was determined during the pilot test that a great number of discharges from the pediatric unit occurred over the weekend.

Therefore, many families did not receive the opportunity to fill out a survey, because their child had been discharged on Saturday or Sunday. The problem was corrected before the final research phase began. Through the help of the hospital, a pediatric unit volunteer for the weekend was secured and trained in how to distribute and collect the surveys. It also should be noted that although physicians discharge patients in the evening hours, there were no volunteers who worked during the evening. Therefore, collection only took place during the hours from 9 a.m. to 4 p.m.

Data Analysis

The data analysis incorporated the use of descriptive statistics to summarize the central tendency and variability of the data. The level of measurement of each question dictated the format in which the summary of data is presented. Following is a discussion of how the specific hypotheses were analyzed.

Hypothesis One: *There is a positive relationship between the use of religion/spirituality as a resource, and the ability of the family to cope with the stress of having a child in the hospital.*

A scattergram was used to identify and present a pattern of a possible linear relationship between the family members' use of religion/spirituality as a resource, and their perceived ability to cope with the stress of having a child in the hospital. A Spearman's rho test was utilized to look at the strength and direction of the relationship between the ranks of the independent variable and the dependent variable. This nonparametric statistical test was chosen because of the use of ordinal level variables.

Hypothesis Two: *As depicted by the a priori model, there is a causal relationship between the predictive variables, and the family's use of religion/spirituality as a resource to help cope with the stress of having a child in the hospital.*

The statistical method used to analyze the data was path analysis, which is a statistical technique of structural equation modeling. The purpose of path analysis is to study causal relationships between a set of predictive variables by analyzing the structure of the data. The process is similar to multiple regression. However, instead of regressing a dependent variable on one independent variable at a time, the dependent variable is regressed on every independent variable that is predicted to affect it. The statistical procedure then weighs the strength and direction of the relationships among the hypothesized variables (Leong & Austin, 1996).

Hair et al. (1995) outline procedures to be used in this statistical process. The path diagram, as depicted in the operational map, is translated into structural equations and then specified in a measurement model. The purpose of the measurement model is to specify what indicators will be used for each construct and to measure each construct's reliability for estimating causal relationships.

The data then are entered into a correlation matrix for estimation, and Pearson product moment correlation is used to measure the relationship between variables. Structural equation modeling is a very robust statistical technique that can be used to measure different levels of data. A structural model is then employed to a) determine if there is an adequate number of equations used in the model, b) evaluate goodness-of-fit, c) evaluate any potential problems within the model, and d) make needed model changes.

Path analysis is the means for testing a hypothetical a priori model (path diagram), which has been formulated using theory and review of the literature. Through the statistical procedures mentioned above, the data are analyzed to see if there is a "cause and effect" among the variables. If it is determined that the data are consistent with the model, one can only state that the model is not "disconfirmed" by the path analysis.

Research Limitations

There are a number of limitations that occur when one is using a cross-sectional study to survey families. Cross-sectional surveys are a snapshot of only one timeframe and do not show any relationships that might exist over a period of time. This becomes a problem, because as Albrecht and Cornwall (1989) point out, religion/spirituality is dynamic in nature. It is not uncommon to see a family's or individual's faith pattern ebb and flow over a lifetime. For instance, a family may go through a period of increased faith, followed by a period of decreased faith or vice versa. Therefore, the question becomes, if the subjects had been surveyed at a later point in time, would they have responded in the same way?

Even though a great deal of effort and research was put into writing the survey, there are always inherent problems when using such an instrument. Rubin and Babbie (1997) have determined that surveys, especially those used in cross-sectional studies, work well for external validity but offer limited internal validity. They write that surveys

> . . .represent the least common denominator in assessing people's attitudes, orientations, circumstances, and experiences. By designing questions, that will be at least minimally appropriate to all respondents, you may miss what is most appropriate to many respondents. In this

> sense surveys often appear superficial in their coverage of complex topics (p. 364).

As discussed in the review of literature and assumption four, religion/spirituality is multidimensional and can be a very complex measure. A more thorough job of measuring the multidimensional aspect of religion/spirituality could occur if the researcher had not been limited to a two page survey. This also limits the richness of data that can be gleaned, because it is not possible to use additional assessments that more accurately measure the family's level of stress and the family's perceived coping skills.

The families that choose to complete the *pediatric inpatient surveys* may do so because of selection bias. Therefore, how families truly feel about using religion/spirituality as a coping resource may be skewed. Another bias that may occur is the identifiable connection of the *pediatric inpatient survey* with a spiritual caregiver(s). The recipient of the survey may give a biased response if he/she equates the spiritual caregiver(s) as a direct representative of religion/spirituality. The family member's response also may be affected by the contact that he or she had with a particular spiritual caregiver. For example, even though all hospital chaplains have been trained to serve on the pediatric unit, only one person is assigned as the primary chaplain for this unit (Department Head of Pastoral Services, personal communication, September 14, 1999). This can pose a problem if a family has had or perceives a conflict in any interaction they may have had with this particular chaplain and/or any other visiting spiritual caregiver. In addition, a family's opinion may be skewed if the spiritual caregiver with whom they interact is of a different religious/spiritual (R/S) persuasion than the family.

Choosing only one family member to represent the immediate family can skew the findings, because the family member's responses may not be representative of the rest of the family. However, as Copeland and White (1991) point out, questions generally are asked only of one member of the family. The reason for this is that most statistical methods require that data come from individuals who are independent from other individuals in the study. Consequently, it should be remembered when using only one family member to complete the survey that the data could be given from a perspective that differs from the rest of the immediate family.

It also is important to understand that the definition for immediate family in this study may be different from other studies. Therefore, one must be careful in generalizing findings from this study to other areas of family research, because the conceptual definitions may be different.

Last, it must be remembered that an important element of most R/S groups is a higher power, a supernatural being. When measuring the effects of religion/spirituality on psychological and physical health, a definitive analysis would include a measurement on the supernatural effects of a higher power. However, as Levin (1994) notes, science is about measuring the natural, therefore we cannot measure the supernatural because it is outside of nature. Therefore, researchers do not have the ability to measure or control for every aspect of religion/spirituality, especially the effects of the supernatural.

CHAPTER IV

RESULTS

This chapter presents the results of the data analyses used to describe the sample and test the two hypotheses posed for this study. First an analysis was conducted to determine if there was a relationship between families' ability to cope with the stress of having a child in the hospital and the use of religion/spirituality as a psychosocial resource. A path analysis then was implemented to investigate if the data collected were consistent with the a priori model, which looked at characteristics of families who would choose to use religion/spirituality as a coping resource. Modifications were made to the model and multiple regression analysis was conducted to determine the model's fit.

The results of the data analysis are divided into two sections. The first section uses descriptive statistics to give an overview of the sample. The second section addresses hypothesis one and two by presenting the results of the statistical analysis used to assess each hypothesis.

Surveys were collected from immediate family members who had children on the pediatric unit of a hospital. On the day of a child's discharge, pediatric daytime volunteers passed out and collected the surveys. During the six-week period, 306 children were discharged from the hospital during the day. Thirty-five percent (n = 107)

of the immediate families (one member per family) who had children being discharged completed a survey. Further discussion about the collection procedure and implications of the finding can be found in Chapter V.

Upon review of the collected surveys, two problems were identified. The first problem was the lack of interaction between the respondents and spiritual caregivers. Of the 107 family members surveyed, only 25 indicated that their immediate families had interacted with a spiritual caregiver. This provided inadequate observations to measure the effect of this construct in the path analysis. It was therefore decided to modify the path diagram by removing this construct (see Figure 3). Further discussion about removal of this construct will be covered in Chapter V.

In addition, there was a large number of surveys that contained missing responses. One of the debates that is occurring in the use of path analysis relates to the assumption that numbers of observations among variables in the path diagram need to be equal (personal communication with statisticians, March, 2000). This is being questioned because more advanced models deal with less restrictive sets of assumptions. However, after careful consideration of the data, a more conservative approach was used. Surveys only were included if the questions to be used for measurement in the path analysis were completed. Sixty-nine out of the 107 surveys met this criterion.

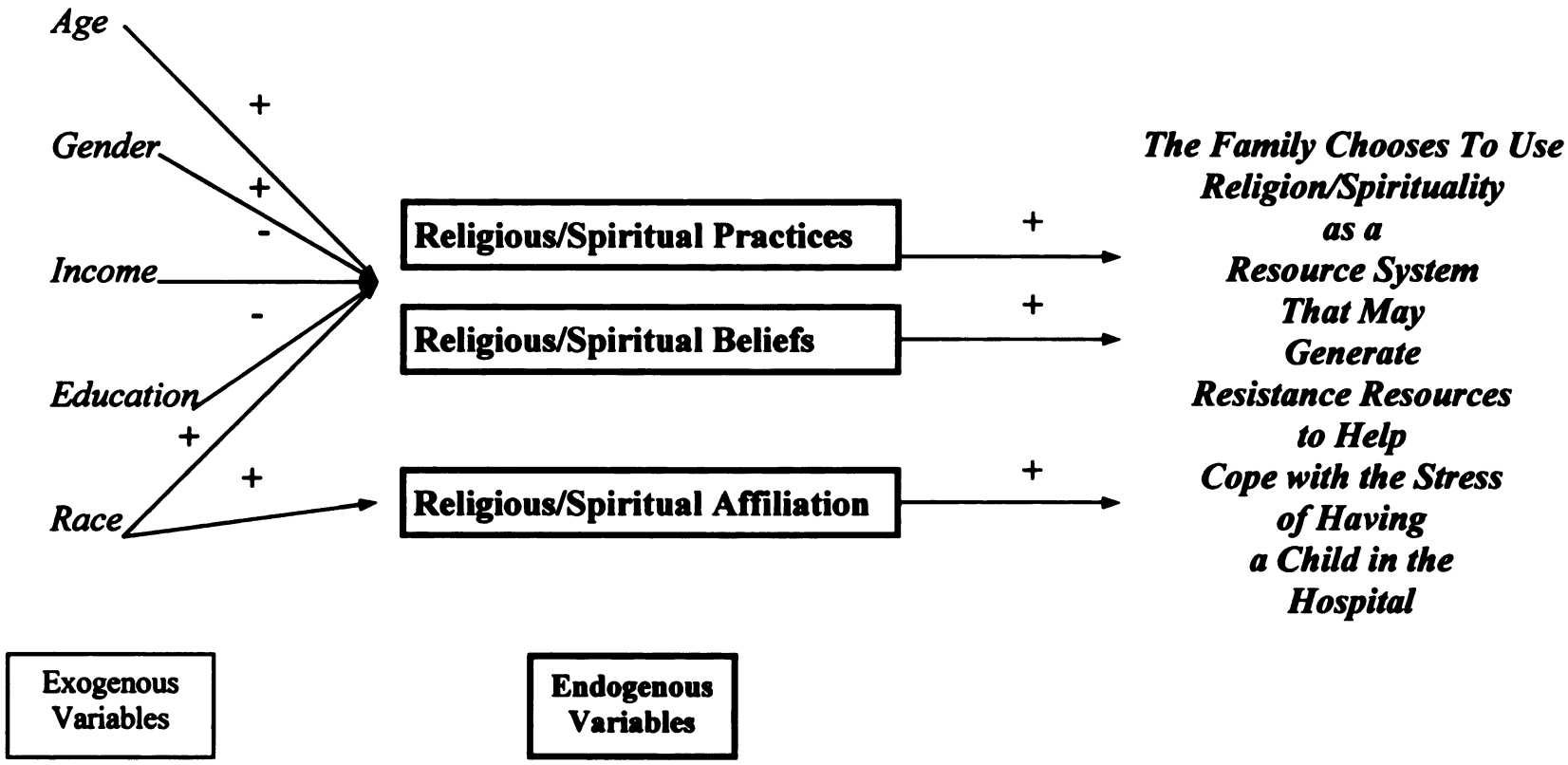


Figure 3: Modified Path Diagram of How Various Constructs Influence the Family's Use of Religion/Spirituality as a Psychosocial Resource to Help Cope with the Stress of Having a Child in the Hospital

Description of the Sample

Demographic information was gathered about the child, the respondent and the immediate family. The data were summarized using descriptive statistics. Table 4 shows that the mean age of the children was 5.03 years (sd=5.63), with the mean of 3.30 (sd=1.97) days spent in the hospital. Thirty-nine (56.5%) of the children were male, with 30 (43.5%) female.

Table 4: Descriptive Statistics of Children's Age, Days Stayed in Hospital, and Gender

	Number	Mean	SD	Range	
				Minimum	Maximum
Age of Child	69	5.03	5.63	.01	22
Days Child in Hospital	68*	3.30	1.97	1	13
	Frequency	**Percentage**			
Gender of Child	Total = 69				
Male	39	56.5			
Female	30	43.5			

*Missing data = 1

The respondents also were asked to provide demographic information about themselves and their immediate families. Table 5 presents the results of the analysis. The mean age of the respondents was 33.96 years (sd = 7.44). It was decided to collapse the variable, race, into the categories of white and non-white, because of the lack of racial diversity in the sample. Fifty-eight (84.1%) of the respondents were white, while 11 (15.9 percent) were non-white. Of the non-white, nine of the respondents were African American. Of the family members who completed the survey, 54 (78.3%) were

Table 5: Respondents' Mean Age; Frequency of Family Members' Race, Gender, Relationship to Child, R/S Affiliation, Family's Income & Highest Education Level

	Number	Mean	SD	Range	
				Minimum	Maximum
Family Member's Age	69	33.96	7.44	17	51
	Frequency	**Percentage**			
Race					
White	58	84.1			
Non-white	11	15.9			
Total	69	100.0			
Gender					
Male	15	21.7			
Female	54	78.3			
Total	69	100.0			
Family Member's Relationship to Child					
Mother	52	76.5			
Father	12	17.6			
Grandmother	1	1.5			
Guardian/Other Family	1	1.5			
Other	2	2.9			
Total	68*	100.0			
R/S Affiliation					
Catholic	21	30.4			
Islam	1	1.4			
Jewish	3	4.3			
Protestant	34	49.3			
Spiritual Not Religious	5	7.2			
No R/S Beliefs	5	7.2			
Total	69	100.0			
Family Highest Education					
Graduate/Professional	17	24.6			
4-year College Degree	19	27.5			
2-year College Degree	6	8.7			
Some College No Degree	17	24.6			
High School	10	14.5			
Total	69	100.0			
Family's Annual Income					
75,000 or More	31	44.9			
50 – 74,999	19	27.5			
30 – 49,999	9	13.0			
29,999 or Less	10	14.5			
Total	69	100.0			

*Missing data = 1

female, with 52 (75.4%) of whom were the child's mother. The other family members who completed the survey were as follows: 12 (17.6%) fathers, one grandmother (1.5%), one (1.5%) guardian/other family member, and two (2.9%) other. As Table 5 indicates, 34 families (49.3%) had a Protestant affiliation. Twenty-one of the respondents (30.4%) were Catholic, three (4.3%) were Jewish, one (1.4%) was Islamic, five (7.2%) said their family was spiritual but had no religious affiliation, and five (7.2%) had no R/S affiliation.

The respondents were asked to specify the highest educational level reached in their immediate family. It should be noted that this is not necessarily the respondents' education level. As specified in Table 5, 17 of the subjects (24.6%) marked that the highest educational level in their family was graduate/professional, 19 (27.5%) a four-year college degree, 6 (8.7%) a two-year college degree, 17 (24.6%) some college but not completed, and 10 (14.5%) indicated a high school degree. As presented in Table 5, 31 (44.9%) of the families had an annual income of $75,000 or more, 19 (27.5%) $50-74,999, nine (13%) $30-49,999, and 10 (14.5%) of the respondents' families had an annual income of $29,999 or less.

The respondents were asked to identify their immediate family's stress level related to having a child in the hospital, the difficulty in coping with having a child in the hospital, and if the family's religious/spiritual (R/S) beliefs helped them to cope. All of the measurements were based on a five-point Likert scale. The question that asked respondents to rank the family's level of stress used a range from 0 for no stress to 4 for very high stress. The other two questions used a range from 1 for completely disagree to 5 for completely agree. Table 6 summarizes the findings. The mean for the immediate

family's stress level was 2.81 (sd = 1.15), a mean of 3.38 (1.34) for the difficulty of coping, and a mean of 3.97 (sd = 1.32) for the use of R/S beliefs in helping the immediate family cope.

Table 6: Descriptive Statistics of Immediate Families' Stress Level, Difficulty of Coping, and the Use of R/S Beliefs to Help Cope With Having a Child in the Hospital

	Number	Mean	SD	Range	
				Minimum	Maximum
Stress Level of Having Child in Hospital	69	2.81	1.15	0	4
Difficulty of Coping	69	3.38	1.34	1	5
R/S Beliefs Helping to Cope	69	3.97	1.32	1	5

Description of the Scaled Variables

Descriptive statistics were obtained for the two-scaled variables used in the path analysis. The scaled constructs included R/S practices (attending R/S services, participating in R/S activities, seeking out support from R/S community), and R/S beliefs (a source of strength, gives a sense of meaning and purpose, gives a sense of hope). Table 7 lists the scaled constructs and the mean score for each of the construct's subscales.

Three questions (subscales) were used to measure R/S practices. The subscales, participating in R/S spiritual activities and seeking out support from the R/S community, were rated using a 5-point Likert scale ranging from 1 for completely disagree to 5 for completely agree. The mean score for participating in R/S activities was 3.91 (sd = 1.3), and for seeking out support from R/S community was 3.64 (sd = 1.27). The third

subscale measured the number of times per year the immediate family attended R/S services with a mean of 44.13 (sd = 54.42).

Table 7: Descriptive Statistics of the Scaled Variables

	Number	Mean	SD	Range	
				Minimum	Maximum
R/S Practices					
Participation in R/S Activities	69	3.91	1.30	1	5
Seeks Support from R/S Community	69	3.64	1.27	1	5
Number of times per year	69	44.13	54.42	0	360
R/S Beliefs					
Source of Strength	69	4.17	1.15	1	5
Sense of Meaning and Purpose	69	4.13	1.19	1	5
Gives Hope	69	4.19	1.14	1	5

Three subscales measured the construct, R/S beliefs: R/S beliefs as a source of strength, gives a sense of meaning and purpose, and gives a sense of hope. The three questions were rated using a 5-point Likert scale ranging from 1 for completely disagree to 5 for completely agree. As indicated in Table 7, the mean for a source of strength was 4.17 (sd = 1.15), the mean for a sense of meaning and purpose was 4.13 (sd = 1.19), and the mean for gives hope was 4.19 (sd = 1.14).

Test of Hypotheses

Two hypotheses were proposed for this study. Each of these hypotheses was evaluated by using inferential statistical analyses with an alpha level of .05 as the decision criterion for determining the statistical significance of the findings.

Hypothesis One

Hypothesis one looked at the relationship between the families' perceived ability to cope with the stress of having a child in the hospital, and the families choosing to use religion/spirituality as a coping resource. Using a five-point Likert scale, the subjects were asked to respond to a question about their family's stress level, and a second question about how difficult it was for their family to cope with having a child in the hospital. The second question was built into the survey to be used as a reliability check to see if the family member gave similar responses to the two questions. This was based on the premise that if individuals perceive a situation to be very stressful, they also will indicate that it is more difficult to cope. Pearson product moment correlation was used, and there was a significant relationship ($r = .588$; $P < .00$) between the two constructs.

To assess the degree of relationship between the families' use of religion/spirituality as a resource and the ability of the families to cope with the stress, the Pearson product moment correlation was used instead of Spearman rho as indicated in the methodology section. This decision was made because of the robustness of the Pearson product moment correlation to analyze data measured by a five-point Likert scale (SPSS, 1998). To assess this hypothesis, the researcher correlated both the perceived stress level of the families and the families' difficulty of coping with the use of religion/spirituality as

a coping resource. The results indicated that while the families' child was in the hospital, neither the families' stress level ($r = .035$; $p > .05$) nor the family's difficulty in coping ($r = .065$; $p > .05$) were decreased by the use of religion/spirituality as a coping resource. Hypothesis one was rejected.

Hypothesis Two

It was stated in hypothesis two that the data would be consistent with the a priori model. As indicated earlier, the construct, interaction with spiritual caregiver, was removed from the original path diagram (a priori model) due to inadequate number of observations (see Figure 3). Path analysis, a form of structural equation modeling, was used to analyze the hypothesis. Path analysis is based on the theoretical framework and review of the literature, and its purpose is to show the causal relationship between variables. This type of statistical procedure assumes that "strong theoretical support can make estimation of causation possible" (Hair, et al., 1995, p. 618). In the model, some questions were scaled to build the constructs, R/S practices and R/S beliefs. Table 8 contains a list of variables and specifies how they were used in the path diagram. The statistical program that was used to assess the path diagram analyzed the contribution of each scale item and also measured and corrected the scales for reliability.

Path analysis requires an estimation of the proposed model, which is accomplished through the use of bivariate correlations. All of the variables to be used in

Table 8: Variables and Their Measures for Path Analysis

Variable Name	Type	Measurement
		Survey Questions
Race	Categorical	What is your immediate family's race?
Education	Categorical	What is the highest educational level reached in your immediate family?
Income	Categorical	What is the approximate annual income of your combined immediate family?
Age	Actual Number	What is your birth date?
Gender	Categorical	What is your gender?
R/S Practices	Scale	1. How often does your immediate family attend religious/spiritual services? 2. Participation in religious/spiritual activities (e.g. prayer, scripture reading) plays an important role in my immediate family's life. 3. My immediate family seeks out people from our religious/spiritual community when we need help or support.
R/S Beliefs	Scale	1. Religious/spiritual beliefs are a source of strength for my immediate family in everyday living. 2. My immediate family's religious/spiritual beliefs give us a sense of meaning and purpose in life. 3. My immediate family religious/spiritual beliefs give us a sense of hope.
Affiliation	Scale	What is your immediate family's religious/spiritual affiliation?
R/S Support to Cope	Single Item	My immediate family's religious/spiritual beliefs were important in helping to cope with having a child in the hospital.

the path analysis were reviewed, and if necessary were recoded for use in the statistical package. Correlations among the variables age, gender, income, education, race, R/S practices, beliefs, affiliation, and support were computed. The correlation matrix in Table 9 was then used as the input data for the path analysis.

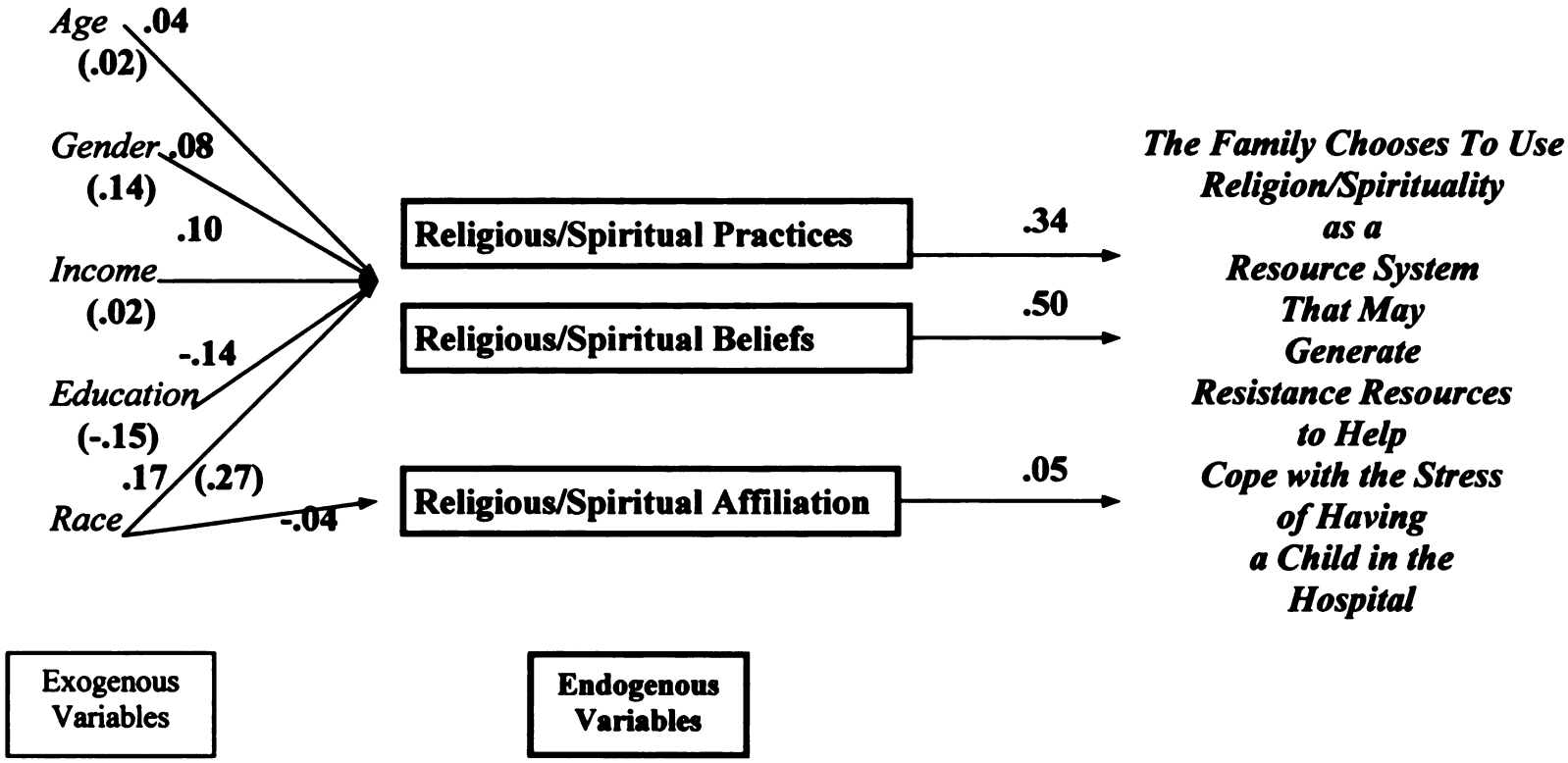
Table 9: Correlations for Path Analysis

	Race	Education	Income	Age	Gender	Practices	Beliefs	Affiliation	Support
Race	***1.00***								
Education	-0.02	***1.00***							
Income	0.10	0.63	***1.00***						
Age	-0.16	-0.29	-0.31	***1.00***					
Gender	0.14	0.31	0.27	-0.16	***1.00***				
R/S Practices	0.18	-0.07	0.03	0.01	0.08	***1.00***			
R/S Beliefs	0.29	-0.11	-0.02	0.00	0.13	0.79	***1.00***		
R/S Affiliation	-0.04	-0.11	-0.27	0.17	0.10	0.46	0.35	***1.00***	
R/S Support	0.02	-0.11	-0.02	0.10	0.04	0.76	0.79	0.38	***1.00***

PACKAGE was the statistical program used to conduct the path analysis. The program employs three criteria to assess the fit of the model (path diagram). First, path coefficients are assessed to examine the relationships among the variables and the consistency with the theoretical rationales. Second, the residual matrices are examined for statistically significant deviations, and confidence intervals are drawn around the obtained correlations to examine whether the predicted correlations fall within their range. Last, a global test of the overall fit of the model was conducted using a Chi square test.

Figure 4 shows the path coefficients calculated for the model. The path coefficients in relation to age and R/S practices and beliefs were 0.04 and 0.02, respectively. The paths between gender and R/S practices and beliefs were 0.08 and 0.14, respectively. The path coefficients for income and R/S practices were 0.10, and 0.02 for income and R/S beliefs. The paths between race and R/S practices and beliefs were 0.17 and 0.27, respectively. All of these paths move in a positive direction, though some of the paths showed a negligible relationship. Two of the endogenous variables presented a negative relationship. As predicted, education had a negative relationship with R/S practices and beliefs, -0.14 and –0.15, respectively. In addition, race showed a negative relationship with R/S affiliation (-0.04).

The path coefficients indicated that there was a positive path between R/S practices and the family choosing to use religion/spirituality as a coping resource (0.34). A positive path also occurred between R/S beliefs and religion/spirituality as a coping resource (0.50). The construct, R/S affiliation, had a negligible path relation with religion/spirituality as a coping resource (0.05). The residual matrix in Table 10



Exogenous variables' path coefficients on top signify R/S practices
Bottom path coefficients ( ) on exogenous variables signify R/S beliefs

Figure 4: The Path Diagram as Estimated by Path Coefficients

Chi square = 35.18; df = 12
P < .000

Table 10: Residuals from Path Analysis

	Race	Education	Income	Age	Gender	Practices	Beliefs	Affiliation	Support
Race	***0.00***								
Education	0.00	***0.00***							
Income	0.00	0.00	***0.00***						
Age	0.00	0.00	0.00	***0.00***					
Gender	0.00	0.00	0.00	0.00	***0.00***				
R/S Practices	0.00	0.00	0.00	0.00	0.00	***0.00***			
R/S Beliefs	0.00	0.00	0.00	0.00	0.00	0.71	***0.00***		
R/S Affiliation	0.00	-0.11	-0.27	0.16	0.10	0.46	0.36	***0.00***	
R/S Support	-0.19	-0.03	-0.02	0.10	-0.05	0.38	0.26	0.34	***0.00***

shows that several of the residuals were 0.20 or higher, indicating that the model was problematic because of the large degree of unidentified relationships.

The measurements of higher income and education level were positively skewed, however, the PACKAGE program used ordinary least squares, which has the capability of adjusting for violations of nonnormal data (Hair, et al., 1995). The global Chi square (Chi-square = 35.18; df = 12; p<.000) indicated that the observed data and the expected (model) observations were significantly different. Thus, the data were not consistent with the model.

Further analysis of the residuals and the path coefficients indicated that none of the exogenous variables had significant path coefficients and did not contribute to the model's overall strength, while two of the endogenous variables had stronger path coefficients. Due to these factors and the homogeneity of the exogenous variables, the decision was made to drop the exogenous variables from the predictive model and look only at the contributions of the endogenous variables.

Multiple regression was used to analyze the modified model. To assess the explanatory power of the predictive variables (R/S practice, belief and affiliation), the variables were simultaneously regressed with the dependent variable, the families' use of religion/spirituality as a coping resource. This approach was chosen because it was consistent with simultaneous regression in path analysis.

As depicted in Table 11, the measurements of the variables were standardized so that they could be compared. Following is the formula for the standardized model.

$$Y = .342\ (\text{R/S practice}) + .502\ (\text{R/S beliefs}) + .044\ (\text{R/S affiliation}) + e$$

The standardized estimate for the model showed that a one standard deviation change in the construct, R/S practices, on an average is associated with a .342 standard deviation change in the use of religion/spirituality as a psychosocial resource when all other independent variables are being held constant. The construct, R/S beliefs, had a .502 standard deviation change and R/S affiliation had a .044. Focusing on the standardized estimations, R/S beliefs had the largest positive relationship with the families' use of religion/spirituality as a psychosocial resource to help cope with the stress of having a child in the hospital. R/S practice had a moderate positive relationship, and R/S affiliation had a negligible relationship.

Table 11: The Beta Coefficients of the Predictive Variables Used in the Multiple Regression Model

	Beta Coefficients	Significance
R/S Practices	.342	.006
R/S Beliefs	.502	.000
R/S Affiliation	.044	.583

The model demonstrates a high level of explanatory power with an R^2 of 81.80 percent and an adjusted R^2 of 65.3 percent. The ratio of explained to unexplained variance is statistically significant at .000, with at F value of 43.742. The magnitude of the R^2 as well as the adjusted R^2 indicate a good fit with the modified model.

In summary, hypothesis one was rejected. The data did not indicate that there was a positive relationship between the use of religion/spirituality as a resource and the ability of the family to cope with the stress of having a child in the hospital. As a result of the modification of the predictive model, hypothesis two was partially supported. The data

did show that a majority of families (50.7 % completely agreed, 18.8% somewhat agreed) believed that religion/spirituality was important in helping them to cope with the stress of having a hospitalized child, and that the families' R/S practices and beliefs had a significant influence on the family choosing to use religion/spirituality as a psychosocial resource.

CHAPTER V

DISCUSSION

The results of the research are discussed in the first section of this chapter, including a brief summary of the respondent's comments about what good spiritual caregiving includes. Even though this question was not a measure of either hypothesis, the information is included in the chapter because of the richness of the data. The generalizability of the findings is then reviewed, followed by a discussion of the findings. Implications for health care and family science professionals are covered in the third section, with the final portion of the chapter providing recommendations for future research.

The purpose of the study was to ascertain if there was an association between the use of religion/spirituality as a resource, and the ability of families to cope with the stress of having a child in the hospital. Analyses also were used to investigate the characteristics of families who used religion/spirituality as a resource.

Data were collected for a six-week period, covering mid-January through the third week of February. The surveys were collected during this time frame to avoid encountering any major religious holidays that might have influenced a family member's

response. As discussed in Chapter IV, only 69 out of the 107 surveys were used, because a large number of surveys contained missing responses.

Pearson product moment correlation was used to assess the association between religion/spirituality and the family's ability to cope with the stress of having a child in the hospital. The a priori model, upon which hypothesis two was based (see Figure 4), was first tested by using path analysis. The statistical program used to conduct the path analysis was PACKAGE. The program employed three criteria to assess the fit of the path diagram. First path coefficients were assessed to examine the relationships among the variables and to see if they were consistent with the theoretical rationales. Second, the residual matrices were examined for statistically significant deviations, and confidence intervals were drawn around the obtained correlations to examine whether the predicted correlations fall within their range. Last, a global test of the overall fit of the model was conducted using a Chi square test.

Subsequently, the a priori model was modified and multiple regression was used as the mode of analysis. Multiple regression can be use to build a predictive model by analyzing the relationship between a dependent variable and two or more predictor variables (Hair, et al., 1995). Each predictor variable is weighted to determine how much it helps to explain the dependent variable. From the results of an analysis, predictor variables can be combined to form a model that best predicts the dependent variable.

Findings

As discussed in Chapter IV, hypothesis one was rejected, and based on the modifications of the a priori model, hypothesis two was partially supported. The results

showed that families' religious/spiritual (R/S) practices and beliefs had a significant influence on whether they chose to use religion/spirituality as a coping resource. There were contradictory findings regarding the families' use of religion/spirituality as a psychosocial resource to help them cope.

Hypothesis One

Hypothesis one was rejected because there was no positive correlation between the use of religion/spirituality as a resource, and the ability of the family to cope with the stress of having a child in the hospital. Four questions were initially used as subscales to measure families' ability to cope with the stress of a hospitalized child. Respondents were asked to: a) identify their stress levels on a zero (no stress) to four (very high stress) scale, b) list their child's medical diagnosis, c) indicate the number of days the child was in the hospital, and d) identify if their family had a difficult time coping with having a child in the hospital (on a 5-pt. Likert scale from completely disagree to completely agree).

The respondents were asked to identify the medical reason for their child's hospitalization. Of the 69 surveys collected, forty-four different medical diagnoses were identified. To use this question in the statistical analysis, each medical diagnoses needed to be ranked according to the potential level of stress it might generate within a family. The pediatric unit nurse manager indicated that it was impossible to rank the diagnoses, because of uncontrolled factors, no two families would react the same way to a medical diagnosis (Pediatric Unit Nurse Manager, personal communication, January, 2000). It became clear that it was impractical to use a medical diagnosis in helping to determine

families' stress levels. For example, the level of stress of the family does not necessarily depend on the seriousness of the illness, but how many times the child has been admitted to the hospital and how familiar the family members are with the procedure. One father, whose son had cancer, wrote "These answers may not be relevant, as we have been in treatment [with our son] for 3 ½ years – with monthly overnight stays – as a result we are very familiar with the hospital. On previous visits, at higher stressed times, [my] answers may have been different." It was decided that this question was an invalid measurement, and it was eliminated from the analysis.

Neither was the number of days a child was in the hospital a good indicator of a family's stress level. For instance, a child who had surgery for a broken arm may have been in the hospital longer than a child with a life threatening illness. Further, when a child is hospitalized for several days, it may become easier for the family to cope as they learn the hospital routine and make adjustments at home. Therefore, the time a child spent in the hospital was not an accurate measurement of the family's stress level.

To examine this assumption, the Pearson moment product correlation was used to assess the relationship between the number of days the child spent in the hospital and the family's stress level ($r = .233$, $p>.05$). The number of days the child spent in the hospital also was correlated with the family's ability to cope ($r = .133$; $p>.05$, respectively). Neither of the findings was significant. It was decided to use this measurement only as a descriptive statistic.

The questions regarding the families' stress level and how difficult it was to cope also were correlated to determine if there was a relationship between the two

measurements. Pearson product moment correlation was used, and there was a significant relationship ($r = .588$; $P < .00$) between the two constructs.

Consequently, only two measurements, the family's stress level and the difficulty in coping, were used to determine if there was a positive relationship between the families' use of religion/spirituality as a resource, and the ability of the family to cope with the stress of having a hospitalized child. The results indicated that while the child was in the hospital, neither the families' stress level ($r = .035$; $p > .05$) nor the families' difficulty in coping ($r = .065$; $p>. 05$) were decreased by the use of religion/spirituality as a coping resource. Hypothesis one was rejected.

Even though hypothesis one was rejected, the families did indicate that they used religion/spirituality to help them cope. Of the respondents, 50.7 percent "completely agreed" that their families' religious/spiritual (R/S) beliefs were important in helping to cope with the stress of having a hospitalized child, and 18.8 percent "somewhat agreed." This raises the question of why the findings were inconsistent. One of the reasons may have been the brevity of the survey (additional discussion will occur later in the chapter).

The hospital personnel had requested that the survey be two-pages in length. They felt that at discharge, a family member would more likely complete a short survey. However, a longer survey with each construct measured with several questions would have been preferable. It also would have been beneficial to use separate instruments, which had been tested for reliability and validity, to independently measure the respondents' stress level, coping ability, and stage of coping. The survey contained only one question each about the families' level of stress and the difficult time the family had coping with a child in the hospital. Using a standardized instrument to more accurately

measure the families' stress level and another to measure the families' ability to cope and the stage of coping would have enhanced the study.

Hypothesis Two

The a priori model as depicted in Figure 3 was rejected, because the fit of the path model was not consistent with the data. However, the path coefficients of the a priori model indicated that there was a positive relationship between the family's R/S practices (0.34) and beliefs (0.50) and the family choosing to use religion/spirituality as a psychosocial resource to cope. Based upon these finding and the homogeneity of the exogenous variables, it was decided to modify the model and include only the three endogenous variables (R/S practices, beliefs & affiliation). Multiple regression analysis was used to look at the explanatory power of the modified model. The next section will discuss the findings as related to the path analysis and the exogenous variables found in the path model.

Exogenous Variables

The exogenous variable, age, had little effect on R/S practices and beliefs (see Figure 4). Age was coded for the path analysis to indicate that as individuals age, the more likely (positive) they are to participate in their faith. The mean age of the respondents was 33.96 years (sd = 7.44), with the respondents' age ranging from 17 to 51 years. Of the respondents completing the survey, 94.1 percent indicated that they were the child's parents. Albrecht and Cornwall (1989) posit that adults often begin to view

religion/spirituality as an important part of their life as they begin to have children. In addition, Benson (1996) has found in his research and medical practice that it is not unusual for hospitalized patients and/or their families to turn to "the faith factor" as a means of coping and healing. Therefore, being a parent with a child in the hospital may override any effect that age would have on participation in R/S beliefs and practices.

As specified in the path diagram in Figure 4, gender had a very small effect on R/S practices (.08) and a somewhat larger effect (.14) on R/S beliefs. The exogenous variable, gender, was coded to show a more positive relationship between females and R/S practices and beliefs as compared to males. Though the path coefficients were small, the findings are consistent with current research that shows that females, as opposed to males, tend to be more actively involved in religion/spirituality and are more likely to use it as a coping resource (Levin, Chatters, & Taylor, 1995; Jenkin & Pargament, 1995). When interpreting this data, it should be remembered that 78.3 percent of the respondents were female. The results may have been different if there had been a greater number of males participating in the study.

It was designated in the path diagram that families with higher income levels would have a negative association with R/S practices and beliefs as compared to their counterparts with lower income levels. However, as illustrated in Figure 4, the path analysis generated a positive path between income and R/S practices (.10) and income and R/S beliefs (0.2). Even though these are very small path coefficients, they do indicate a change in direction from that specified.

The average income level of this sample was positively skewed as compared to the county where the hospital was located and in the entire United States. Of the 69

respondents, 44.9 percent indicated an annual family income of 75,000 dollars or more, and 27.5 percent had an annual family income of 50,000 to 74,999 dollars (see Table 5). In 1997, the median income for families in the county was 57,360 dollars (County Profile, 1993). In addition, the 1997 annual median income for the United States was 37,005 dollars (US Census Bureau, 1999), which is significantly lower than the sample for this particular research. Therefore, one cannot generalize these findings to other populations.

It was specified in the path diagram (Figure 4) that there was a negative relationship between education and R/S practices and beliefs. The statistical analysis did indicate a negative path (-.14) between education and R/S practices and R/S beliefs (-.15). These findings were consistent with the review of the literature.

The final exogenous variable, race (minority status would have a more positive effect), did have a mediating effect on R/S practices (.17) and R/S beliefs (.27). However, race showed a very small but negative effect (-.04) on R/S affiliation, which was inconsistent with the model. Eighty-four percent of the respondents were white and 16 percent were non-white. Due to this lack of diversity among the respondents, the variable, race, was collapsed into the two categories of white and non-white. The small number of non-white respondents (n = 9 out of 11 in the non-white category were African Americans), skewed the data, because there was not enough variation to accurately assess this path.

The homogeneity of the exogenous variables and the lack of significant path coefficients indicated that these variables did not contribute to the a priori model. As discussed earlier, the model was changed to include only three predictive variables, with

multiple regression being used to explore the power of the modified model. The next section will discuss the findings of this analysis.

Predictive Variables in the Modified Model

The predictive variables in the modified model were R/S practices, beliefs and affiliation. The magnitude of the R^2 (.818) and the adjusted R^2 (.653) indicated a good fit with the modified model.

A small beta coefficient (.044) was found between R/S affiliation and the family choosing to use religion/spirituality as a psychosocial resource. In this sample, there seemed to be little relationship between a particular R/S affiliation and a family choosing to use religion/spirituality as a coping mechanism. Again, these findings may be due to the lack of diversity within the sample. As Table 5 presents, 49.3 percent of the families were Protestant and 30.4 percent were Catholic, with only a small percentage of the sample representing the other five categories. A larger number of respondents may have garnered a more diverse sample, which in turn may have generated different findings.

The most positive effects that occurred in the modified model were between R/S practices and beliefs and the dependent variable, families choosing to use religion/spirituality as a psychosocial resource to cope with the stress of having a child in the hospital. A moderate effect was found between R/S practices (.342) and the dependent variable, and an even stronger relationship was expressed between R/S beliefs and the families' use of religion/spirituality as a resource to cope with stress (.502). These findings are consistent with other research.

Hathaway and Pargament (1991) proposed that it is unlikely that individuals with little or no R/S background would use religion/spirituality as a resource. Conversely, if individuals have a greater involvement in religion/spirituality, there is an increased probability that they will perceive it as an important means of coping. It also is more likely that families who have stronger R/S beliefs will have stronger R/S practices (Levin, 1994), and in turn will be more inclined to choose religion/spirituality as a resource for coping.

As compared to R/S beliefs, R/S practices had a smaller mediating effect on families choosing to use religion/spirituality as a coping mechanism. The difference in the two constructs may be due to the type of effect the construct has upon a family. Many researchers use Gordon Allport's concept that individuals will have either an intrinsic religious orientation or an extrinsic religious orientation (Pargament et al., 1990; Larson & Larson, 1994). Individuals with an intrinsic religious orientation tend to live their R/S beliefs day by day and are more likely to use their R/S beliefs to cope (Larson & Larson, 1994). Individuals with extrinsic religiosity may be actively involved in R/S practices, but may not have internalized or live out the beliefs that are a part of their particular R/S affiliation. Instead, they use religion/spirituality as a means of status or obtaining security. People with either orientation will usually call upon their religion/spirituality during a stressful event (Larson & Larson, 1994). Of the two religious orientations, researchers have found that people who internalize R/S beliefs tend to be more active and successful in using religion/spirituality as a coping mechanism, (Pargament, Ensing, et al, 1990). The findings in this study are consistent with Allport's theory. R/S beliefs, which is intrinsically oriented, had a stronger mediating effect on the family choosing to use

religion/spirituality as a coping resource as compared to the extrinsic orientation of R/S practices.

The data showed that a majority of family members viewed religion/spirituality as an important psychosocial resource to cope with the stress of having a child in the hospital. However, it must be remembered that this is inconsistent with the findings of hypothesis one. Further consideration of these contradictory findings will be covered in the discussion section. It also was concluded that prior R/S beliefs and practices influenced the families' use of religion/spirituality as a resource.

Additional Analysis: Responses to the Question about Good Spiritual Care

Of the 69 surveys used in the research, 26 of the respondents (38%) replied to the question, "In your opinion, what kind of things would good spiritual care include when a patient is in the hospital?" The responses were varied and included such items as the importance of the spiritual caregiver offering hope and comfort, consoling and listening to the family, and being friendly and respectful to family members. However, the two most common comments about good spiritual care were related to visitation and prayer. Thirty-eight percent of the respondents who answered the question cited that visiting the family in the hospital at least once was an important aspect of spiritual caregiving. In addition, 42 percent wrote that prayer with the family was very important. One of the subjects stated, ". . .to have a spiritual caregiver see the family and child and pray together. It is a comforting thought for parents to know that someone else cares and is praying and thinking of your child." Another subject reflected, "[I would like]...for each

spiritual caregiver to be in contact with each patient whether very ill, or just a cold. I find it really helps when a prayer is said."

Generalizability of the Findings

Rubin and Babbie (1997) point out that collection of data, even though carefully planned, may generate issues that affect the generalizability of the research. This section will discuss aspects of data collection that may have limited the findings. Though the sample size was within the guidelines for path analysis, a larger sample may have offered a greater diversity of race, income, education, R/S affiliations and a higher number of male subjects. As discussed earlier, the sample size was diminished because of incomplete surveys. This may have been due to the layout or wording of the survey, and/or the personal nature of the questions. In addition, only 35 percent of the families who had children in the hospital during the six-week research period consented to filling out the survey. According to Rubin and Babbie (1997), a response rate of 50 percent or higher is important, because it decreases the chance of obtaining data that is biased. One of the factors that contributed to the low response rate was the number of surveys collected during the weekdays. Based on weekly averages, a total of 30 children were discharged during the week, but only four to five surveys were collected. An average of 19 children was discharged each weekend, with an average of 13 surveys collected. This inconsistency in the survey collection may have been due to the hesitation of the weekday volunteers to participate in the study. It should be noted that the volunteers were given training, and no objections to collecting the surveys were voiced. The pediatric unit nurse manager did remind the weekday volunteers about the importance of collecting the data.

An exit interview of the pediatric volunteers also was helpful in identifying two other problems. Though the volunteers did not keep a specific count, they indicated that some of the family members declined to fill out the surveys because of language barriers, and the family member did not want to use an interpreter. The surveys also were given out on the day of the child's discharge, and many of the family members did not want to take the time to complete the survey.

Self-selection bias also may have determined if an individual was willing to complete a survey. For instance, if family members had little interest in religion/spirituality, they may have declined to complete the survey, while other family members who were actively involved in religion/spirituality may have been more inclined to do so. Also when filling out a survey, a respondent, because of his or her R/S background, may have felt obligated to answer questions about religion/spirituality in a positive manner.

Discussion of Findings

As discussed in Chapter I, identifying and using psychosocial resources to cope is important in helping family members deal with the stress of having a child in the hospital. Bood (1996) states that family members are critical in every aspect of a child's hospital stay and return to health. Therefore, family members need to use available resources to sustain their own emotional and physical health so they are better able to help their child.

Bubolz and Whiren (1984) propose that higher levels of energy are essential for a family to adapt to stressors in their internal and external environments. The more

resources the family has available to help them cope, the more likely the family is to sustain the energy level that is needed to deal with all of the consequences of having a hospitalized child. Bubolz and Whiren refer to the lack of energy to deal with stressors as an "energy sink," where the family is so drained that they can no longer successfully deal with their problems. Antonovsky (1985) would propose that this "energy sink" has a negative effect on family members, and has the potential to move them toward the dis-ease end of the health continuum. This negative transition may not only affect family members' health, but also has the potential to negatively affect the hospitalized child. One way for families to help prevent an energy sink is to recognize and use generalized resistant resources (GRRs) to cope with their stressors.

As depicted by the conceptual model (see Figure 1), families need to be aware of and encouraged to use available GRRs to help them cope with a stressful event. This research proposed that religion/spirituality can act as a system to provide GRRs and help families cope with stressors. When family members were questioned about whether their immediate family's R/S beliefs were important in helping them to cope with having a child in the hospital, 50.7 percent completely agreed, while 18.8 percent somewhat agreed. This response appeared to contradict the findings of hypothesis one that indicated that the use of religion/spirituality as a psychosocial resource neither decreased the families' stress level or the difficulty in coping with the stress of having a child in the hospital. The inconsistencies of these findings may be due to the coping stage in which families found themselves when the family members filled out the survey. McCubbin and Patterson (1983) point out that a major family crisis is not usually instantaneously resolved, but evolves and resolves itself over a period of time. They suggest that a family

dealing with a major stressor goes through a process of coping, which includes recognizing the stressor, identifying resources the family needs to adapt, assigning a definition and meaning to the situation, and adapting to the situation. This process may take a circuitous route, with the resolution of the stressor, if resolution occurs at all, taking a period of time.

Hathaway and Pargament (1991) also agree that there are several elements that are a part of the coping process. Like McCubbin and Patterson (1983), they posit that after the recognition of the stressor, the next elements (phases) of coping include an appraisal of the situation to see if there are adequate coping resources to deal with the crisis and an attachment of meaning to the situation.

Hathaway's and Pargament's (1991) research on the religious dimensions of coping found that religion/spirituality could positively contribute to the initial phases of the coping process, because it offered a way to appraise and give meaning to a crisis. The family members' responses in this research were consistent with Hathaway's and Pargament's findings. Of the respondents, 53.6 percent completely agreed that religion/spirituality provided meaning and purpose, and 23.2 percent somewhat agreed. A majority of the respondents (56.5 percent) completely agreed that religion/spirituality gave their family hope, while 20.3 percent somewhat agreed. The observations were similar when the respondents were asked if religion/spirituality was a source of strength for their family (53.6% and 26.1%, respectively). McCubbin and Patterson (1983) point out that families often use religion/spirituality to redefine a situation and give it meaning. They believe the process of attaching meaning to a situation is a critical part of the coping

process. In this research, it appeared that families used religion/spirituality to help them appraise and give meaning to the stress of having a hospitalized child.

Hathaway and Pargament (1991) also suggest that religion/spirituality can be an important part of the adjustment and adaptation phase where individuals begin to sense a decrease in their stress level, and an increase in their ability to cope with and successfully meet the demands brought about by the stressor. However, this research found that the use of religion/spirituality as a coping resource did not decrease families' stress level or difficulty in coping. The incongruent findings within this study may be due to the coping stage that families were at when respondents completed the survey. For example, the families may have used their R/S beliefs as a resource to appraise and attach meaning to the situation, but had not moved to the next stage in adjustment and adaptation. It also is possible that religion/spirituality was used to appraise and attach meaning to the situation, but was not influential in the rest of the coping process.

McCubbin, McCubbin and Thompson (1993) posit that an essential component of a family's appraisal process is the family schema. The family schema can be defined as a composite of shared values, goals, beliefs, priorities and expectations that the family uses to center and anchor them during a crisis. It is used in the appraisal of a stressful situation and helps determine what resources the family will use to deal with a stressor. The researchers suggest that a family's R/S beliefs, or the lack thereof, are a component of the family schema and therefore, can play a role in how a family chooses to deal with a stressor. As found in this study, families' R/S beliefs had a significant influence on whether families chose to use religion/spirituality as a psychosocial resource.

Dein and Stygnell (1997) highlight the importance of health care professionals talking to patients and families and identifying if R/S beliefs are a part of the family schema. They write that asking patients and families about R/S beliefs, ". . . may make them feel that members of the treatment team are interested in him or her [sic] as a whole person" (p. 295). Dein and Stygnell also posit that this type of interaction may not only offer hope and support to the patient and family, but also may help to increase the patient's and family's cognitive coping function. They suggest that the pastoral care staff should be viewed as an important part of the hospital's treatment team and when appropriate, the pastoral care staff should be collaborating with the treatment team in helping to provide resources and care.

Dein's and Stygnell's (1997) suggestion to use pastoral care staff as part of the treatment team would mean that many medical care centers would need to reassess the amount of resources they are allocating to their pastoral care services. In this particular study, only 25 families had the opportunity to see a spiritual caregiver in the hospital. One of the reasons for this minimal amount of interaction was the lack of funding for a full time chaplain to work on the pediatric unit (Department Chair of Pastoral Care, personal communication, March 2000).

As discussed earlier in the chapter, 26 of the 69 subjects responded to the question about what should be included in good spiritual care. The two items most consistently mentioned were prayer and a visit by a spiritual caregiver. Thirty-eight percent of the 26 respondents said that visitation by a spiritual caregiver was important. One family member commented that each patient should receive a visit from a spiritual caregiver, whether the patient is very ill or just has a cold. Forty-two percent of the 26

respondents wrote that prayer was a very important part of spiritual caregiving. One respondent suggested that parents be asked if they would like a spiritual caregiver to pray for their child as soon as the child is admitted. Another stated that she was flattered to think that someone else was praying for her child to recover.

Previous research supports both prayer and visitation by a spiritual caregiver as beneficial. In a hospital setting, spiritual caregivers often have a "right to access" that other professionals are denied, because families are seeking out individuals they can trust and with whom they can be open (Hathaway & Pargament, 1991; Wilson, 1989). Research also has shown that families want to be given information about hospital chaplains and their services (Lynn-McHale & Smith, 1991). Patients and families often view spiritual caregivers as a conduit of hope, helping the family deal with the crisis of having a loved one in the hospital (Widerquist & Davidhizar, 1994; Maton, 1989)

Research has established that prayer is beneficial to both patients and families during a family member's illness. Benson (1996) has found that when he teaches his patients techniques to elicit relaxation, 80 percent of them choose prayer. Upon further investigation, he discovered that prayer lowers anxiety and fear and increases the will to live. Poloma (1993) reports that prayer contributes to an individual's sense of well-being. Prayer also was beneficial for individuals who were getting ready to undergo cardiac surgery. The day before the surgery, the patients were asked if prayer was helpful (Saudia, Kinney, Brown, &Ward, 1991). Ninety-six of the 100 patients indicated that they used prayer as a coping mechanism, with 70 designating that it was very helpful. Saudia and colleagues also cited that family caregivers used prayer to manage stress.

Implications for Health Care Professionals

Despite the rejection of hypothesis one and only partial support of the modified a priori model, other findings in the study corroborate that health care professionals should consider religion/spirituality as a psychosocial resource. In this sample of family members, religion/spirituality appeared to be an important part of the family schema. A majority of the families indicated that their R/S beliefs were a source of strength, which gave them a sense of meaning, purpose and hope in life. The families also actively practiced their faith and on average attended R/S services 44.13 times per year.

As discussed earlier, the family schema is used in the initial appraisal of a stressful situation to deal with a stressor (McCubbin, McCubbin and Thompson, 1993). It acts as an anchor to help center the family during a crisis. Based on this study, the families' R/S beliefs were an important part of their family schema. Taking this into consideration, health care professionals need to become sensitive to families' R/S needs. This can be accomplished in a number of ways. For example, the health care professional should ask a family if their R/S beliefs are important. If a family acknowledges the importance of religion/spirituality in their lives, then they should be encouraged to use it as a psychosocial resource. As Dein and Stygnell (1997) point out, just asking a patient and family about their R/S beliefs, gives them a sense that the health care professional cares about them as whole individuals. In addition, many health care sites, such as hospitals, have a pastoral care staff that works with the medical personnel to meet the patients' and families' R/S needs. The medical staff may find it beneficial to work more closely with the pastoral care team and direct them toward families and patients who would benefit from a spiritual caregiver.

Managers of health care facilities also need to consider if they are giving adequate consideration to the use of religion/spirituality as a resource. They need to determine if sufficient funding is being given to the pastoral care department and if the facility makes it easy for community-based spiritual caregivers to interact with patients and their families. In this particular study, only 25 families had the opportunity to see a spiritual caregiver in the hospital, but at the same time a majority of the respondents indicated that religion/spirituality was an important resource.

The topic of religion/spirituality can be a very sensitive subject. Nonetheless, as indicated in this study, it is often an important part of a family's schema. Therefore, health care personnel need to be trained regarding the implications of religion/spirituality and health and ways to address the subject with patients and their families.

Implications for Family Science Professionals

A common theme in family science and related fields is helping families to adapt and adjust to change (Olson, 1993). An important stage of the adjustment and adaptation process is identifying the stressor(s) and determining available coping resources (Fischer & Sollie, 1993). Families generally will appraise a situation and identify needed resources based on their family schema (McCubbin, McCubbin & Thompson, 1993). As previously cited, religion/spirituality is often an important component of the family schema. As research continues to verify that religion/spirituality can contribute to physical and mental health (Benson, 1996; Larson & Larson, 1994; Larson, Sherrill, et al., 1992; Levin & Vanderpool, 1991) family science professionals need to consider if they are addressing the use of this resource.

In the past, family scholars have basically ignored the importance of religion/spirituality in the family (Doherty, Boss, LaRossa, Schumm & Steinmetz, 1993). Doherty and colleagues suggest that this is an oversight, because the family is "one of the main agents for the transmission of ethics, values, and religious traditions..." (p. 17). They believe that the issues concerning ethics, values and religion need to become an important topic of study in family theory and research.

There are a number of questions about religion/spirituality and the family that can act as a catalyst for family science research and practice. One question that arises from this study – does religion/spirituality contribute to all stages of the adjustment and adaptation process? The findings in this research demonstrated that families used religion/spirituality in the initial phases of coping by offering a way to appraise and give meaning to the crisis. A majority of the families indicated that their R/S beliefs were a source of strength, which gave them a sense of meaning, purpose and hope in life. However, the use of religion/spirituality did not decrease families' stress level or difficulty in coping with the crisis. It would be beneficial to determine if religion/spirituality has an influence on different stages of coping.

It also is important to determine if the use of religion/spirituality as a resource varies according to age, race and socio-economics. Even though this question was addressed in the study, the small sample size and the lack of diversity within the sample did not allow accurate measurement.

Family educators have the important role of helping to strengthen and enrich families' lives. This is done in a number of venues from parenting classes to classes on aging. These programs are based on the premise that families have the strength and

resources to grow and develop (Hennon & Arcus, 1993). One of the challenges of the family educator is to recognize and encourage the use of a variety of resources, one of which is religion/spirituality. As found in this study, many families viewed religion/spirituality as a resource that provided meaning and purpose to life and was a source of strength and hope. Family educators need to become familiar with the current research on the benefits of religion/spirituality as a resource and share it with their clients. When discussing this topic, an approach can be used that recognizes the sensitivity of the subject and the diversity of R/S beliefs within a community.

Recommendations for Future Research

As in the case of most research, the results of this study raised further questions. While some of the findings of the study were consistent with past research, others had mixed results. For example, more research needs to be conducted to determine the influence of age, education, income, gender, and race on the use of religion/spirituality as a psychosocial resource. Based on this study the following is recommended:

- If a similar study was conducted, it needs to take place in a more diverse hospital setting or at several diverse hospitals concurrently (e.g. rural, suburban, and urban hospitals). This would offer a broader range when investigating race, R/S affiliations, income, and education levels. In addition, most of the relatives who completed the surveys were mothers. There might be greater variance in this finding when looking at a more diverse population. A study also could be conducted that used only mothers as the unit of analysis and controlled for the diversity within the sample.

- In addition, a similar study should investigate the distinction between the families' use of religion/spirituality to deal with stress and the use of religion/spirituality to help cope. The use of standardized instruments to measure stress and coping would provide a more reliable investigation of the relationship between religion/spirituality and the two constructs.
- As stated earlier, religion/spirituality is dynamic in nature. A longitudinal study could investigate the families of chronically ill children to determine if the families use religion/spirituality as a resource over time.
- Research needs to take place on different types of hospital units. This would help give a broader perspective to see if families in similar but yet different circumstances, use religion/spirituality as an important coping resource. The study could be conducted to examine the families' use of religion/spirituality while controlling for the effects of the family members' medical diagnoses.
- Additional research, with a larger sample, needs to study the effects of interaction with a spiritual caregiver on the emotional and/or physical well-being of patients and families.
- In many studies, including this one, the Protestant faith is recognized as one group. However, there is a great deal of diversity within this category. In future studies, it would be interesting to investigate how different Protestant faiths view and use religion/spirituality as a psychosocial resource.
- It is recommended that researchers study community-based spiritual caregivers to determine how actively involved they are in hospital visitation, the importance they

place on hospital visitation, and if they feel their presence is beneficial to the hospitalized patient or family.

- It also is suggested that a qualitative approach be used to observe families, their stress levels, and the use of religion/spirituality to cope with the stress of having a child or other family member in the hospital. This approach would offer a richness of data and could possibly open up new avenues for research. A qualitative study also might offer more tangible results that hospitals and spiritual caregivers could immediately implement.
- The question still remains, can a model be built that will predict the characteristics of immediate families who choose to use religion/spirituality as a psychosocial resource to cope with the stress of having a child in the hospital? Therefore, a logical extension of this research is to continue to explore variables that could be included in such a model.
- It would be interesting to investigate family scholars' and family educators' attitude about incorporating religion/spirituality into family research and theory. Conducting a meta-analysis of the literature would give an overview of past use of religion/spirituality in family theory and methods.
- Another interesting study would be to look at the fluctuation of the use of religion/spirituality as a coping mechanism throughout the family life cycle.

APPENDIX A

Survey Cover Letter

Date xxxxxxx

Dear Family Member,

You are invited to participate in a study. Vicki Kloosterhouse, a Ph.D. candidate at Michigan State University, in conjunction with XXXX hospital, is conducting research to see if families use religion/spirituality to cope with the stress of having a child in the hospital.

We would appreciate if you would take a few minutes to **honestly** respond to this short two-page survey. All responses are **confidential**. You are under no obligation to participate. There are no known risks, beyond those of everyday life, involved in participating in this study. Your privacy will be protected to the maximum extent allowable by law.

We appreciate your consent and willingness to help us by filling out this survey. After you have completed the survey please place it in the attached envelope, seal the envelope, and place the enclosed "thank you" seal across the flap. Please return it to the pediatric unit volunteer before your child is discharged from the hospital.

Thank you for filling out this survey, your input is invaluable. The ultimate goal of this research is to build a more effective program to service XXXX's pediatric patients and families. If you have any questions please contact Vicki Kloosterhouse at (248) 360-3018. In addition, you can contact Dr. David Wright, the Chair of Michigan State University Committee on Research Involving Human Subjects, at (517) 355-2180.

Thank You,

Vicki Kloosterhouse, Ph.D. Candidate
Department of Family and Child Ecology
Michigan State University

Pediatric Unit Survey

Thank you for taking time out of your busy schedule to answer these questions. When you have completed the survey, please place it in the attached envelope, seal the envelope and place the seal across the closed flap. This will ensure your confidentiality. Return the envelope to the pediatric unit volunteer.

Answer the questions in the survey **according to your immediate family's viewpoint.** Immediate family is defined as individuals who are related to the hospitalized child biologically, by adoption or guardianship and live in the same household. Please circle your responses or fill in the blank.

1. Using a ranking from 0 to 4 (with 0 = no stress and 4 = very high stress) how stressful was it for your immediate family to have a child in the hospital?
   0 1 2 3 4

2. What is the medical reason (or diagnosis if you know it) for your child's hospital stay?
   _____

3. During this specific hospital stay, how many days has your child been in the hospital?
   _____

4. What is the age of your hospitalized child? _____ If you know the exact birth date please write here _____

5. What is the gender of your child? _____ Male _____ Female

6. During you child's stay in the hospital how many times did you interact with a spiritual caregiver? _____ times during my child's stay in the hospital
   If you answered "0" skip to question 10

7. During this hospital stay, please identify the **spiritual caregiver** with whom your family interacted. (Check as many as applies)
   ___ Hospital Chaplain ____ Imam ____ Pastor ____ Parish Nurse ____ Nun
   ___ Priest ____ Rabbi ____ Other (please specify) _____

8. In the hospital, what type of interaction did your immediate family have with the spiritual caregiver? (Check as many as applies)
   ____ prayer ____ explored spiritual/emotional issues ____ general conversation
   ____ other religious/spiritual activities (e.g. communion, scripture reading) – please specify) _____

9. While in the hospital, how did your immediate family's interaction with a spiritual caregiver(s) help? (Check as many as applies)
   ____ provided comfort ____ provided hope ____an outlet for expression of feelings
   ____ was not helpful ____ other (please specify) _____

The next section is important, because it will give us a better understanding and sensitivity to patients' and families' needs. Please circle, check or fill in the most appropriate answer.

10. How often does you immediate family attend religious/spiritual services?
    ____ times per week (week ~ month ~ year)— **Please circle the correct time period**

11. What is your immediate family's religious/spiritual affiliation?
    ____ Catholic ____ Islam ____ Spiritual but no religious affiliation ___ None
    ____ Jewish ____ Protestant ____ Other (please specify) _____

12. Beside each statement please check whether you completely disagree (CD), somewhat disagree (SD), neither agree/nor disagree (N), somewhat agree (SA), or completely agree (CA).

	CD	SD	N	SA	CA
a. Interaction with a spiritual caregiver(s) was beneficial in helping my immediate family cope with the stress of having a child in the hospital.					
b. My immediate family has a difficult time coping with having a child in the hospital.					
c. My immediate family's religious/spiritual beliefs were important in helping to cope with having a child in the hospital.					
d. Religious/spiritual beliefs are a source of strength for my immediate family in everyday living.					
e. My immediate family's religious/spiritual beliefs give us a sense of meaning and purpose in life.					
f. My immediate family's religious/spiritual beliefs give us a sense of hope.					
g. Participation in religious/spiritual activities (e.g. prayer, scripture reading) plays an important role in my immediate family's life.					
h. My immediate family seeks out people from our religious/spiritual community when we need help or support.					

13. What is your immediate family's race?
    ____ African American ____ Hispanic ____ White/Caucasian
    ____ Asian ____ Middle Eastern ____ Other (pleas specify) _____

14. What is your relationship to the child who was the patient?
____ Mother ____ Father ____ Guardian/Other Family Member
____ Grandmother ____ Grandfather ____ Other (please specify) _____

15. What is **your** gender? ____ Male ____ Female

16. What is **your** birth date? _____ (month/day/year)

17. What is the highest educational level reached in your immediate family?

___Did Not Complete High School	___High School	___Some College But Not Completed	___2-year College	___4-year College	___Graduate/ Professional (e.g. MD, JD)

18. **(Optional)** What is approximate annual income of your combined immediate family?
___ $29,999 or less ___ $30 – 49,999 ____ $50-74,999 ___ $75,000 or more

19. In your opinion, what kind of things would good spiritual care include when a patient is in the hospital? For this question, please write any thoughts or ideas that you may have. If you need more room for your comments, please write them on the back of the survey.

APPENDIX B

Pediatric Unit Volunteer's Specification Sheet

Thank you for your willingness to help with this research project. One of the characteristics of a successful research study is that consistent procedures are used throughout each phase of the study. Since you have the important task of distributing and collecting the surveys, it is critical that each volunteer consistently follows the same procedures. Listed below are guidelines to help you successfully accomplish this task.

- On the day of a child's discharge please distribute the survey and the attached envelope to an immediate family member of the child. An immediate family member is defined as an individual who is related to the hospitalized child biologically, by adoption, or guardianship and lives in the same household.
- When distributing or collecting the surveys you need to have a neutral demeanor about the contents of the survey. This means that you should not express or engage in a conversation about how you personally feel about religion/spirituality, or its influence on helping a family to cope with a stressful event. If you are asked your opinion, you can make a noncommittal statement such as, "It will be interesting to see the results of the study."
- When you distribute the survey please do the following:
  1. Hand the survey to an immediate family member of the child. Explain to the individual that the hospital is conducting research in conjunction with the pediatric unit.
  2. Inform the family member that the survey should only take 10 to 15 minutes to complete and that you will be back later to pick up the completed survey.

3. If the family member cannot speak or cannot read English, please inform the nurse's station. The family will be connected to an interpreter via a telephone line.

- When you collect the survey please do the following:

4. Make sure that the family member has placed the survey in the envelope, sealed it and affixed a seal across the flap of the envelope. For the sake of confidentiality, it is important that you do not see the respondent's answers.

5. If the respondent chose not to fill-out the survey, please assure the family member that it is all right. Ask the individual if he or she would be willing to write on the survey why they chose not complete it. Tell the family member that it is important for the researcher to know why someone may not want to fill out the survey (e.g. the respondent felt the topic of religion/spirituality was too personal). Please assure the person that his or her response will be confidential. If the family member chooses not to respond all he or she needs to do is to write the reason for not completing the survey at the bottom or the side of the survey, place the survey in the envelope, seal it, affix the seal across the flap of the envelope and give it to the volunteer.

6. After collecting the surveys please return them to the file drop box at the nurse manager's office.

Thank you for your help!

Vicki Kloosterhouse

APPENDIX C

Pilot Cover Letter

November, 1999

Dear Family Member,

XXXXX Pastoral Services Department, Customer Relations, the Pediatric Unit, and Vicki Kloosterhouse, a Ph.D. candidate at Michigan State University are preparing to conduct research to study how spiritual caregivers (e.g. chaplains and visiting clergy) can more effectively serve **pediatric patients** and their **families**. An important part of the research is a survey that we will be asking immediate family members of the children on the pediatric unit to fill-out

Before we begin the study we need to conduct a pilot program to see if immediate family members are able to fill out the survey without any problems or concerns. Therefore, we are asking if you would be willing to consent to being a part of this pilot by filling out the *pediatric inpatient survey*. All of your responses will be **confidential** and **none** of your responses will be used in the actual study. However, comments or suggestions that you make on the survey will be very beneficial in helping us to improve the survey before the research actually begins. There are no known risks, beyond those of everyday life, involved in participation in this study.

To participate in the pilot please do the following:

1. Read and fill out the enclosed *pediatric inpatient survey*.
2. Highlight or circle any unclear terms or phrases that are hard to understand.
3. Write any comments that you feel will help improve the survey directly on the survey or on the attached comment sheet. You may wish to comment on such items as terms being used and/or the length and space of the survey.
4. Once you have completed the survey please place it in the attached envelope, seal the envelope, and return it to the pediatric unit volunteer.

Thank you for your help. The comments and notations you make will be helpful in generating any needed changes. The ultimate goal of this research is to build more effective programs to service XXXX Hospital's pediatric patients and families. If you have any questions please feel free to contact Vicki Kloosterhouse at (248) 360-3018.

Sincerely,

Vicki Kloosterhouse, Ph.D. Candidate
Department of Family and Child Ecology
Michigan State University

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