

THESIS

MARRIAGE AND FAMILY THERAPISTS' GERONTOLOGICAL KNOWLEDGE

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ABSTRACT

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The demographics of the United States indicate a growing number of individuals 65 years old and older. These aging generations have similar as well as different behavioral health issues as compared to younger generations. Marriage and family therapists are psychotherapy providers who may begin to see older adults in therapy at greater numbers than previously experienced. Yet, whether these practitioners are prepared for older adult clients is questionable. The hypothesis for this research project states that greater amounts of education/training in aging issues and gerontological study that a marriage and family therapists have will be related to higher knowledge levels of and more positive attitudes towards the older population. The measures used in the study were the Facts on Aging Quiz (multiple choice format) and the Aging Semantic Differential. Marriage and family therapists in the state of Colorado comprised the sample. The total number of recruited participants was 1222; the final number of participants was 65. Statistical analyses included Pearson's correlations and a MANOVA. The results of the data did not support the hypothesis. No relationship existed between education/training and knowledge of and attitude towards older adults. The instrument used to measure knowledge in this study may help explain the unexpected results. Biased language as well as the order of the knowledge and attitude instruments may have influenced the results. Although no statistical relationship was found among the variables, the results point to a low knowledge level on the part of the sample of marriage and family therapists that may negatively affect their ability to support older adult clients.

Keywords: marriage and family therapy, education, attitudes, older adults

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INTRODUCTION

The demographics of the United States population are changing. An increase in life expectancy and a decrease in fertility rates have influenced this shift (Martin, 2011). For example, in 2008, people 65-74 years old (i.e., 20.8 million people) were a group 9.5 times larger than the same group in 1900. In contrast, people 75-84 years old (i.e., 13.1 million people) were a group 17 times larger, and people 85+ (i.e., 5.6 million people) were a group 46 times larger than in 1900 (Administration on Aging, 2010; Arias, 2006). Additionally, the birthrate needed to maintain a stable population is 2.1 births per woman. The birthrate in the United States is 1.9 births per woman (Jackson, 2002). As a result, the United States population is shrinking and the percentage of those over the age of 65 is growing.

This shift in demographics will have a broad effect on U.S. society at the individual, family, community, and policy level. More specifically, family therapists should be concerned with how the increase in the older population will impact the practice of marriage and family therapy. Currently, the smallest client population for marriage and family therapists are clients over the age of 65 (Beaton, Dienhart, Schmidt, & Turner, 2009; Northey, 2002). As the Baby Boom generation (i.e., those individuals born between 1946 and 1964) begins to wrestle with significant late-life challenges such as retirement, caregiving, and late-life divorce, marriage and family therapists will be presented with an opportunity to treat this new client-base. However, whether marriage and family therapists are prepared to treat this population is a question that needs to be answered.

The purpose of this study is to explore the connection between education and training and the knowledge and attitudes marriage and family therapists have about older adults. To that end, the research questions for this study are as follows: What do marriage and family therapists know about the aging population? Do education and/or training with regard to the older population make a difference in knowledge level and attitudes of marriage and family therapists towards this population? Using family systems theory and complexity-extremity theory as a framework, the literature review will address the attention paid to aging issues and gerontology in marriage and family therapy research, the need for therapy in the older adult population, the use of therapy by this population, the desirability for and effectiveness of therapy in the older adult population, and current training in formal marriage and family therapy (MFT) programs.

Theoretical Lens

Previous work looking at the connection between the education and training and the knowledge and attitudes marriage and family therapists have about older adults did not use theory to frame the research (Yorgason, Miller, & White, 2009). In order to strengthen the research in this area, two different theories will be used as a theoretical lens for the current study. First, family systems theory (FST) can provide a framework with which to understand the older adult client-therapist relationship as a system. Ageism can be viewed as input into that system, which causes the dysfunctional communication outlined in FST. Second, ageism can then be informed by complexity-extremity theory. As a result, both family systems theory and complexity-extremity theory will be used to create the theoretical lens for this research on the education and

training and the knowledge and attitudes marriage and family therapists have about older adults.

Family systems theory emerged from systems theory but was not applied to families until after World War II (Bateson, Jackson, Haley, & Weakland, 1956). At that time there was a switch in focus from faults or qualities of the individual to a study of the transactions, or communication, between family members. Therapists and researchers recognized that a family was greater than its parts and that the interactions between those parts not only defined the family but also were a source of dysfunction (Smith, Hamon, Ingoldsby, & Miller, 2009). Further, FST strives to understand the patterns of behavior that arise without looking for an underlying cause or blame. Those patterns are then studied to determine how to alter them in order to resolve the dysfunction being experienced by the family. The idea is to treat the pattern not the individual. For example, treatment involves focus on communication skills, which is thought to lead to more balanced family cohesion and adaptability (White & Klein, 2008).

Within FST, the system is defined as “a boundary-maintained unit composed of interrelated and interdependent parts such that an alteration in one part affects all components of the system” (Smith et al., 2009, p. 131). The therapist and the individual, couple, and/or family client can be described as such a system. The therapist-client relationship is bounded by confidentiality that prevents flow of information outward. Inwardly, ethics define and bound the energy within the relationship so that therapist and client do not become enmeshed. Also, the client-therapist entity is interrelated and interdependent. The entity cannot exist if the client does not need the services offered and if the therapist does not have the skills to offer or the desire to provide those skills to

the client. With a change in either the need or the skill/desire, the entity is altered. For example, if an older adult client seeks therapy from an MFT practitioner, but that practitioner alienates the client with assumptions based on ageist stereotypes, the relationship between client and therapist will not thrive and the client is likely to discontinue therapy. Without interrelatedness and interdependence, the system cannot exist or experience positive development.

Once the therapist-client relationship qualifies as a system, the basic assumptions of FST can be applied to that system to explain the relationship. One of the main tenets of the theory is that the locus of pathology is not within any one unit of the system; rather, the connections between each unit are dysfunctional (Smith et al., 2009). Thus, pathological communication between units results in dysfunction, or in the case of therapist and client, failure to develop a strong therapeutic relationship. A strong therapeutic relationship is paramount to successful therapy (Sprenkle, Davis, & Lebow, 2009) and can, therefore, be considered one goal of the therapist-client system. Additionally, both pathological communication and feedback loops are main concepts in FST. These concepts will be explored further in the following sections in order to tie FST into the presuppositions for this study.

With ageism defined as pathological communication in the older adult-client system, an explanation of that ageism is necessary. To that end, ageism can be understood using complexity-extremity theory. This theory explains that the complexity of the information one has regarding another group is negatively correlated with the extremity, or negativity, with which one evaluates that group (Jussim, Coleman, & Lerch, 1987). For example, if a therapist has little knowledge of older adults then the therapist

will have more extreme, or stereotypical, views of older adults. The foundation for this theory was derived from attribution theory (Martinko & Thomson, 1998), which is rooted in the study of social cognition (Hamilton, 1979; Kelley, 1971). Linville and Jones (1980) argue that the social cognition constructs underpinning attribution theory did not go far enough to explain the construction of stereotypes. Linville and Jones conducted research showing that the complexity of schemas used by groups drives the extremity of the evaluation of other groups.

Linville and Jones (1980) labeled the two identified groups as either in-groups or out-groups. In-groups were described simply as being those groups of people with whom one is most exposed; out-groups were described as people to whom one is not as exposed (Linville & Jones, 1980). The theory outlines that the more exposure one has to a group, the more complex the information about that group will be, therefore, leading to more favorable evaluation of members of that group (Linville, 1980). Therefore, suggesting that if therapists have more complex understanding of older adults, stereotypes will be refuted and the negative evaluation of the older adult population will change. Thus, using complexity-extremity theory, ageism is a result of low levels of knowledge complexity regarding older adults, which is exacerbated by lack of exposure to this out-group. This low complexity of knowledge leads to an extreme evaluation (stereotype) of older adults. Then, using FST, ageism is input into the older adult-client system, which causes pathological communication resulting in a poor therapeutic relationship. Simply put, the older adult client-therapist relationship is in need of family therapy.

Attention in the Literature

One avenue to increasing the complexity of information about the older adult population to marriage and family therapists is research. Disappointingly, the MFT literature over the 31-year span from 1975 to 2006 does not show an appreciable change in focus on the older population. Researchers separately conducted three content-analysis studies across that three-decade time frame. The earliest of these studies was conducted by Flori (1989) and considered family concerns in later life in two prominent journals from 1976 through 1985. Some of the topics for which the author was searching in the literature included research on the longevity of marriages, transitions into retirement, caregiving to ill spouses, sibling relationships, and the impact of Alzheimer's disease on the family system. The author discovered that the journals evaluated did not cover later life issues to a significant degree. Rather, Flori (1989) posited that older adults in the context of marriage and the family represented a "new frontier" in family therapy (p. 289).

Indeed, based on Flori's (1989) research, the attention in the literature to the older adult population was sparse and presented a significant gap in the literature. Flori's call was for an increase in gerontological research in the family therapy realm. Ten years later VanAmburg, Barber, and Zimmerman (1996) again reviewed prominent journals relevant to MFT to see if the trend in research had shifted at all toward a more gerontological focus. They reviewed the literature from 1986 to 1994. The authors hypothesized that they would see an upswing in the trend of research including older adults. However, they found that there was not an appreciable trend in the literature.

Recently, Lambert-Shute and Fruhauf (2011) examined the literature from 1997 to 2006 looking for the prevalence of family gerontology and aging individual studies. The authors were disappointed to find that their review did not reveal an increase in focus on the older adult population despite the increased awareness of older adults and especially as the Baby Boom generation increases in age. What they did find, however, was even though the amount of gerontological content in such studies did not increase there was a shift in the focus of the articles. The studies reviewed had a later-life focus compared to the previous reviews.

These three studies reveal that a large gap in research on the older adult population continues to exist in MFT journals. Published literature is an avenue for marriage and family therapists to stay abreast of the most current research, but if that research does not provide knowledge about an unfamiliar population, marriage and family therapists lose an opportunity to attain knowledge that can change their perspective and, ideally, alter stereotypes. Therefore, this large gap in research on older adults can be described as a large gap in practitioner knowledge about older adults. Without empirical knowledge, stereotypes and other false information are left to inform therapists regarding older adults. Thus, the need for expanded research on older adults is necessary.

Although the literature does not appear to show an appreciable change in focus, there may be a shift in that trend. A new book by Peluso, Watts, and Parsons (2012) explores the dichotomy between the evolving notions and perceptions about aging by individual clinicians and the lack of such an evolution within the larger field of couple and family therapy. The intent of the book is described as a resource that practitioners and

trainees can immediately use with their older clients. Such a focus can help bridge the gap between discussing and accepting the facts of the aging population and actually implementing changes in clinical practices that will address the facts.

Older Adults' Need for Therapy

As a result of the large gap in the MFT literature, therapists' may assume that older adults do not need therapy and that they do not have issues needing the services of marriage and family therapists. This assumption can be questioned when considering the wave of Baby Boomers turning 65 beginning in 2010. With the Baby Boom generation entering older adulthood, review of that generation's unique experiences is first necessary. The Baby Boom generation is described as different from previous generations. Not only are they anticipated to be longer-lived than earlier generations, but they also have exposure to a different set of experiences than preceding generations. Having "come of age" in the 60s, this cohort experienced the sexual revolution, women's rights, and increased recreational and illegal drug use. These social influences may have affected family dynamics in a way that led this generation to experience greater levels of stress, substance abuse, and sexual pressures (Lambert-Shute & Fruhauf, 2011). Additionally, this generation is more adept at navigating the health care system, has greater financial resources, and has a more positive attitude about psychotherapy (Koh et al., 2010; Yorgason et al., 2009). These issues make the Baby Boom generation excellent customers for the services in which marriage and family therapists are trained.

In addition to generation-specific reasons behind the need for family and marriage therapy on the part of older generations, there are issues unique to older adults that indicate a need for psychotherapy. One of these issues involves the transitions that take

place as individuals and couples enter later life. For example, entering retirement after many years of working is a major life transition (Wang, 2007). Individuals and couples must learn to adjust to a life of no work, less work, and/or different work. For many older adults, their career is rooted deeply in their identity (Szinovacz & DeViney, 1999). Losing or changing that career could cause distress, which could manifest as depression, anxiety, or another behavior health condition. Thus, the transition to retirement is an area in which marriage and family therapists could be of help to the older population.

Another unique area of transition experienced by the older population involves later life family issues. These issues include caregiving, grandparents rearing grandchildren, end-of-life decisions, and widowhood. Difficult and ethically stressful decisions within the family unit can develop in these areas (Barber & Lyness, 2001a; Morgan, 1989; Pinquart & Sorensen, 2003). The stress and anxiety potentially involved in these transitions are can be addressed through the training covered in MFT programs (COAMFTE, 2005), therefore, qualifying marriage and family therapists to help clients with such distress.

Although the older adult population experiences unique reasons for needing psychotherapy, these individuals also experience issues common in the younger generations, again indicating a need for some type of psychotherapy. Depression is just one example. Research findings on the rate at which depression appears in the older adult population are inconsistent, but the research does support the existence of this malady in older generations (Gallo, Anthony, & Methuen, 1994; Katona, 2000; Vacha-Haase, Wester, & Christianson, 2011). The challenge with depression in older adults is obtaining a correct diagnosis. Often the symptoms of depression can be interpreted as

other ailments, such as dementia (Blazer, 1998; Blazer, 2000; Hybels, Blazer, Pieper, Landerman, & Steffens, 2009; Mitchell, Rao, & Vaze, 2010). Even though depression may be more difficult to diagnose in the older adult population, the condition does exist in that population and, therefore, presents a need that marriage and family therapists can fill.

Another issue that is beginning to cut more widely across age ranges is divorce. The divorce rate in older adults is rising quickly (Wu & Schimmle, 2007). With divorce often resulting in stress and reduced well-being (Amato, 2000; Kitson & Morgan, 1990; Thabes, 1997), those couples negotiating the divorce process may seek relief through psychotherapy. Thus, since divorce is a stressful life change and the number of late-life divorces increases, a larger number of older adults as compared to previous generations may be in need of psychotherapy. In summary, not only do older adults have unique late-life struggles that create the need for psychotherapy, but also older adults experience similar struggles such as divorce and depression that can be addressed by the services marriage and family therapists can provide.

Developing an understanding of the need that older adults have for therapy is an area of increased knowledge that can add to the intricacy of information held by therapists. Based on complexity-extremity theory, this intricacy increases the knowledge structures of marriage and family therapists. This increase then can lead to a less extreme evaluation of the older population. FST then indicates that this new input into the system (increased knowledge structures) can change the pathological communication between older adult client and therapist, leading to positive feedback and a change in the system.

Desire for and Effectiveness of Therapy with Older Adults

Another piece of information that can increase the complexity of therapists' knowledge structures of older adults lies in understanding whether older adults value therapy as a treatment option. Negative attitudes towards psychotherapy on the part of older adults have been assumed due to the low numbers of older adults seeking therapy. However, research indicates that older adults have positive attitudes towards psychotherapy (Hodgkinson, 2006). In addition, when older adults pursue psychotherapy, they tend to seek help with family problems (Woodward & Pachana, 2009). Thus, older adults do exhibit positive attitudes toward seeking psychotherapeutic help with issues specifically addressed by marriage and family therapists.

While a desire for therapy is a first step in accepting psychotherapy as a treatment, the effectiveness of that therapy must follow in order to establish whether that therapy is a valid approach to late-life mental health issues. Effectiveness begins with the perception by the client that psychotherapy is a worthwhile pursuit. Schneider (2008) quantified that older adult women had a positive experience in therapy. The participants indicated that they felt safe and listened to during the therapy process. This type of positive experience leads to strong joining and the development of a solid therapeutic relationship, which is the foundation of successful psychotherapy (Sprenkle, Davis, & Lebow, 2009). However, as Sprenkle and colleagues also indicate, the therapeutic relationship alone is not indicative of effective treatment.

Empirically informed studies of different types of psychotherapy with older adults revealed significant improvement in several mental health conditions (Gatz et al., 1999; Mackin & Arean, 2005). Approaches explored included cognitive behavioral therapy,

psychodynamic therapy, life review and reminiscence therapy, and a combined antidepressant and psychotherapy approach. These different approaches proved significantly effective in older adults seeking help for depression, anxiety, sleep disorders, alcohol abuse, and, to some extent, dementia. Thus, knowing that older adults both value therapy as an intervention and respond well to that intervention is knowledge that can positively affect therapists' complexity-extremity levels, in turn encouraging positive communication within the client-therapist system.

Minimal Use of Therapy by the Older Adult Population

Even though the older adult population is growing dramatically and individuals within this population have substantial reasons to seek therapy, older adults are the smallest proportion of marriage and family therapists' client-base. Based on national surveys, MFT clinicians treat a wide range of relational issues as well as serious mental health issues such as anxiety, depression, trauma, and substance abuse (Beaton, Dienhart, Schmidt, & Turner, 2009; Doherty & Simmons, 1996; Northey, 2002). Thus, many of the mental health issues experienced by the older adult population are struggles MFT professionals are experienced at handling. Therefore, the minimal use of therapy by the older adult population does not appear to be due to the lack of need for therapy or the lack of ability to address many of those needs on the part of MFT clinicians.

One reason behind the minimal use of therapy by the older adult population may be ageist attitudes on the part of therapists. Ageism is defined as negative attitudes or behaviors expressed toward an individual based solely on that person's age (Greenberg, Schimel, & Martens, 2002). Some of the common stereotypes accompanying ageist attitudes include the perception that all old people are boring, weak, cognitively impaired,

or have lived long enough lives at 72 years of age that they do not need therapy (Kane, 2004). Unfortunately, these attitudes are prevalent in studies throughout the research on students headed into, educators of, and clinicians practicing in human service professions, including marriage and family therapists (Giles, Paterson, Butler, & Stewart, 2002; Hinrichsen, 2000; Ivey, Weiling, & Harris, 2000; Kane, 2004). In fact, Nelson (2001) goes as far as saying that ageism is socially condoned in the United States. As a result, psychotherapy providers, MFT clinicians among them, may not embrace the older population.

As previously introduced, complexity-extremity theory can provide a framework in which to understand the prevalence of these ageist attitudes. The theory holds that individuals judge others to whom they have little exposure more extremely. This extreme evaluation is a result of a dearth of information because of the lack of exposure (Linville & Jones, 1980). Stereotypes are extreme evaluations of certain groups of people, older adults among them (Greenberg, Schimel, & Martens, 2002); yet, when there is a lack of accurate information, stereotypes provide the only information available on the subject group. For example, marriage and family therapists' client bases have been shown to have few older adults (Beaton, Dienhart, Schmidt, & Turner, 2009; Northey, 2002). This gap in the client base reflects a lack of exposure. Based on complexity-extremity theory, this lack of exposure would then predict that marriage and family therapists would evaluate older adults more extremely. Due to the lack of exposure and the lack of attention in the literature, the information left to marriage and family therapists is stereotypes. Thus, until marriage and family therapists have other avenues of exposure to the older adult population, stereotypes are left to inform clinicians about older adults.

These stereotypes cannot be changed unless the knowledge structures of students, educators, and clinicians are more informed. Once the knowledge structures become more complex through exposure and education, complexity-extremity theory indicates that the extreme evaluations currently observed in the form of ageism will dissipate (Jussim, Coleman, & Lerch, 1987; Linville, 1980).

These ageist attitudes are not only limiting to students, educators, and clinicians but they can also negatively impact older adults' views of themselves. Internalizing a stereotype involving not being worth treatment or being cognitively challenged in such a way as to make treatment ineffective could influence older adults to believe that they should not even consider therapy. Recent research supports that having an external source portray, or activate, such a stereotype tends to be accepted by older adults and leads to a deleterious self-evaluation and lower functioning (Coudin & Alexopolous, 2010; Levy, 2003). With the prevalence of stereotypes in society today, older adults would have a difficult time not being exposed to such activation.

These ageist stereotypes can be represented as negative feedback loops in family systems theory. Feedback loops are the circular loops that take some of the system's output and deliver that output back into the system as input. This feedback can be positive or negative. Positive feedback rewards deviation from the accepted limits of system behavior while negative feedback suppresses the deviation. The terms positive and negative are not value-laden but, rather, indicate whether the change in behavior within the system is permitted (Smith, Hamon, Ingoldsby, & Miller, 2009; White & Klein, 2008). For example, if the wife in an older adult couple is attempting to affect deviation in the system by changing the rules about what and how much the couple eats

due to her husband's recent development of diabetes, the husband may resist the menu changes. The new menu is output in the current system. That output is then input back into the family system. The husband takes in that change and responds to it. If the husband resists the changes, this response is negative feedback. The response is maintaining the system or dampening the deviation. On the other hand, if the husband considers the argument and adjusts his eating habits, this response is positive feedback. The response is changing the system behavior. In other words, the response is amplifying or rewarding the new behavior.

With respect to the therapist-older client system, negative feedback loops involve ageist attitudes that affect both the therapist and the older client. If the therapist holds an ageist attitude, that attitude defines the current rules, or beliefs, in the system. Then, the therapist relates to the older client in a way that supports that current set of rules/beliefs. With ageist attitudes also influencing older clients into internalizing such beliefs (Coudin & Alexopolous, 2010; Levy, 2003), the ageist attitudes represent deviation dampening forces and the system does not change. Thus, therapists and their potential older clients remain in a dysfunctional system dynamic waiting for positive feedback to affect a change in the dynamic.

A final reason the elderly adult population may not pursue therapy with a marriage and family therapist is the status of MFT providers with Medicare. Marriage and family therapists have traditionally focused on the problems of the young, which is reinforced by the exclusion of MFTs from Medicare benefits (VanAmburg, Barber, & Zimmerman, 1996; Yorgason, 2009). If an individual over the age of 65 has discontinued working and only has access to Medicare benefits, that individual is

precluded from any MFT benefit and would be required to pay the provider out-of-pocket for such treatment. With a fixed income, the choice might be to forgo therapy in order to pay other higher priority expenses.

Marriage and Family Therapist Education and Training Regarding Older Adults

Unfortunately, a more serious issue that may be contributing to the lack of the older population in marriage and family therapist client bases is the dearth of training on the older adult population in formal MFT programs. Barber and Lyness (2001b) reviewed course syllabi and curriculum vitae from accredited MFT programs across the country. They found that less than 10% of the programs included courses that incorporated some amount of gerontological and/or late-life family content. Although COAMFTE (2005) sets forth in the MFT educational guidelines that students in MFT programs must have content covering the lifespan, MFT students can graduate without any classes specifically covering aging, aging families, or aging and family therapy (Sandberg, 2002). Additionally, the MFT competencies outlined by Gehert (2007) indicate a requirement to attend to intergeneration patterns as well as age in the context of diversity. Although the competencies do not specifically indicate a need for specific classes on older adult development, they do imply that people are different across the lifespan and, therefore, attending to that diversity is incumbent upon the marriage and family therapist in order to be competent as a professional. Thus, COAMFTE as well as MFT competencies outline a need for education and training with respect to age yet the literature indicates that few programs include specific gerontological or late-life family content.

Even though regulating entities such as COAMFTE (2005) and required competencies for MFT students (Gehart, 2009) indicate a need for knowledge about the

older adult population, there is little to no research on whether a tie exists between education and knowledge and/or attitudes regarding older adults for marriage and family therapists. The literature in fields such as nursing (Jalali-Nia, Salsali, Dehghan-Nayeri, & Ebadi, 2011; Larsen & Zahner, 2011), early motherhood (Shieh et al., 2010), medicine (Custers & Cate, 2011; Rothmann et al., 2011), communication (Murphy, Frank, Moran, & Patnoe-Woodley, 2011), and nutrition (Pletzke, Henry, Ozier, & Umoren, 2010) support an association between education and knowledge. As a result, the expectation is that the more education and training marriage and family therapists have regarding the older adult population, the more knowledge these therapists will have about that population.

Again, the framework of complexity-extremity theory provides support for the tie between training (level of complexity) and attitude (extremity of evaluation). If formal MFT programs are not providing increased education and exposure to the older population, students' knowledge structures cannot become more complex. Without such increased complexity in knowledge structures, complexity-extremity theory predicts that students' will have extreme evaluations (stereotypes) of the older adult population.

Conversely, complexity-extremity theory also predicts that increasing the complexity of knowledge structures leads to less extreme evaluation of the out-group (Jussim, Coleman, & Lerch, 1987; Linville, 1980). This conclusion is supported by research that indicates that education and training on aging and the older adult population makes a positive difference in how younger generations view older adults. Couper, Sheehan, and Thomas (1991) found that after an intergenerational workshop in which high school students interacted personally with older adults, the high school students had

more positive attitudes after the workshop. Additionally, Hinrichsen and McMeniman (2002) found that psychology students placed in geropsychology internships maintained a higher interest in geropsychology, had more positive attitudes about older adults, and had greater knowledge of mental health and aging as compared to non-geropsychology students. This research appears to support complexity-extremity theory in that exposure to an out-group (i.e. older adults) resulted in higher interest in, more positive attitudes about, and greater knowledge of that out-group by an in-group (i.e. student interns).

Interestingly, these in-groups recognize the need for training and education regarding the older adult population. Maggio, Marcotte, Perry, and Truax (2001) asked open-ended questions to current and past MFT students as to what content areas they would include if creating an MFT curriculum. The participants indicated that therapy with older adults should be included. Thus, training in formal MFT programs is missing a focus on the older adult population even though students in such programs acknowledge that education and training with this population should be included in the curriculum.

Returning to the exploration of feedback loops in family systems theory, education and training represent the input into a positive feedback loop for marriage and family therapists and older adult clients. As Smith et al. (2009) state, new information or input is considered the “lifeblood of systems” (p. 131). Without this energy, systems tend toward entropy, or disorganization, which manifests as dysfunctional communication between the members of the system. The therapist-older adult client system can currently be explained as in disorganization and needs new information as input to possibly affect a positive feedback loop. Additional training and education is the

input that challenges current rules (i.e. stereotypes) and sets the system up for positive deviation. If marriage and family therapists obtain accurate information regarding the older adult population, they can then adjust their incorrect beliefs and alter their interaction with older adults, thus affecting a positive feedback loop. Thus, education and training of marriage and family therapists represents new energy that can be brought to the therapist-older adult client system, which can lead to changes in the dysfunctional relationship currently existing.

As the Baby Boom generation begins to wrestle with significant late-life challenges such as retirement, caregiving, and late-life divorce, marriage and family therapists will be presented with an opportunity to treat this group of clients. However, older adult clients do not yet constitute a significant portion of marriage and family therapist client bases. Understanding current education levels, knowledge levels, and attitudes regarding the older adult population becomes important in knowing how prepared marriage and family therapists are for treating this population. Previous researchers have investigated the association between marriage and family therapist knowledge of and their attitudes about older adults (Yorgason et al., 2009). However, that research was not grounded in a theoretical framework. Both FST and complexity-extremity theory lend support to the current study by providing a sound foundation as well as a structure for the current research study. Additionally, Yorgason and colleague's work used vignettes to determine attitudes. Although vignettes are a supported data collection approach (Grønhøj & Bech-Larsen, 2010; Jenkins, Bloor, Fischer, Berney, & Neale, 2010; MacIntyre et al., 2011; Tuffrey-Wijne & Butler, 2010), the study could be strengthened using a reliable and valid instrument. The current study proposes using the

Aging Semantic Differential, which is a reliable and valid instrument (Intrieri, von Eye, & Kelly, 1995; Polizzi, 2003). Thus, using a theoretical lens and reliable and valid instruments, the focus of this study is to explore the connection between the education and training and the knowledge and attitudes marriage and family therapists have about older adults.

Hypothesis

Based on the current education requirements in formal marriage and family therapy programs on older adults and the dearth of literature on that population, I hypothesize that the amount of training and education in aging issues that marriage and family therapists have will be associated with higher knowledge levels of and more favorable attitudes toward the older adult population.

METHODS

Procedures

The procedures for this study included recruiting participants through the Colorado State Board, which is the body that regulates marriage and family therapists within the state of Colorado. Recruitment involved sending postcards to potential participants inviting them to participate in an online survey. A power analysis was conducted so that a target number of participants could be identified. This analysis was especially necessary in order to address whether a second wave of postcards needed to be sent. The survey participants were invited to take was designed to have four parts: demographics, education and training, gerontological knowledge, and attitudes.

Power analysis. The power analysis was determined as follows: for a two-tailed test, alpha of .05, $d = .2$, $\delta = 2.80$, $n = 2(2.80/.2)^2 = 392$ participants; using a $d = .5$, $2(2.80/.5)^2 = 63$ participants. After reviewing power analyses in the literature on education/training's impact on knowledge and attitudes in research areas other than gerontology (Custers & Cate, 2011; Jalali-Nia, Salsali, Dehghan-Nayeri, & Ebadi, 2011; Larsen & Zahner, 2011; Murphy, Frank, Moran, & Patnoe-Woodley, 2011; Pletzke, Henry, Ozier, & Umoren, 2010; Rothmann et al., 2011; Shieh et al., 2010), a $d = .5$ was determined to be a conservative value to use for this research project. The literature revealed that a $d = .2$ was not necessary because education and training in other fields appeared to correlate well to knowledge, and to a smaller extent attitude. Thus, a sample size of 63 was desirable.

Participant recruitment. Prior to recruitment procedures being implemented, Colorado State University (CSU) IRB approval was sought and provided. This study

qualified under exempt status as defined by the CSU Research Integrity & Compliance Review Office. The approval letter is on file and available for review upon request.

The cross-sectional, convenience sample of this quantitative study was derived from licensed marriage and family therapists registered with the Colorado State Board Department of Regulatory Agencies (DORA). The sample was recruited via physical addresses listed with DORA and available for purchase (\$13/license list). The list provided by DORA was an Excel spreadsheet containing identifying information of any individual registered as a licensed marriage and family therapist. Student marriage and family therapists were not included in the list. The total number of entries in the database was 1275 marriage and family therapists. Three of the individuals in the list had a status of “deceased.” As a result, I eliminated those three individuals leaving 1272 potential participants.

To reach the number of participants indicated by the power analysis, postcard invitations were designed, which included a chance to receive one of three \$20 Amazon gift cards for completing the survey (see Appendix I). Once the design was complete, FedEx, adhering to United States Postal Service guidelines for bulk mail postcards, completed production of the postcards. The postcards and the participant list were then provided to Central Receiving on the Colorado State University campus. Central Receiving applied National Change of Address (NCOA) software to verify and recode the addresses. This step corrected address errors and revealed undeliverable addresses. After undeliverable addresses were removed, the final potential participant list numbered 1222. Central Receiving then addressed and applied postage to the postcards and then

put them in the outgoing mail January 28, 2012. The survey remained open until March 9, 2012.

Of the 1222 potential participants, 66 respondents accessed the survey. One of the participants only selected the consent radio button on the first page of the survey and then exited. As a result, that participant was eliminated from the data set, leaving 65 participants. This total number of participants represents a 5.3% response rate for this study (65 participants/1222 potential participants). Similar previous research (Yorgason et al., 2009) had a 9.6% response rate (191 participants/1987 potential participants). Although the response rate for this study was expected to be higher, the rate was not surprising given Yorgason and colleagues' research. Therefore, participant recruitment outcomes do not appear to be other than expected based on the literature.

Once the survey was closed on March 10, 2012, no additional participants could access the survey. If participants accessed the website address, they received a message that the survey was closed. The data was downloaded into SPSS and the email list of participants was separated from all responses. That email list was then randomized using the RAND function in Excel. The first three participants in the randomized list were emailed a \$20 gift certificate from Amazon.

Survey instrument. The postcard sent to each of the 1222 potential participants invited the participants to navigate to a Survey Monkey website where a survey could be completed (see Appendix II). The survey was divided into four sections. The initial section provided informed consent, which upon acknowledgement of the consent navigated the participant to the first section of the survey. This section requested demographic information such as age, ethnic group, degree level, amount of time spent in

clinical practice, and whether or not the participant worked with an older adult client in the past year. The second section requested participants answer questions regarding gerontological training/education history. To obtain information on the participants' aging-related education and training, participants were asked how many formal aging-related courses they took in their marriage and family therapy program and how many aging-related workshops or seminars at a national conference, state conference, or other conference. The possible answers were one to ten-plus.

The third section was comprised of Palmore's Facts on Aging Quiz (Harris, Changas, & Palmore, 1996), which measured knowledge regarding older adults with a multiple choice format. The fourth section was comprised of the Aging Semantic Differential (ASD) (Rosencranz & McNevin, 1969), which measures attitudes regarding older adults. Participants successfully completing the survey were invited to enter a drawing to win 1 of 3 \$20 Amazon gift cards for participation. Providing an email address to enter the drawing was not a requirement to take the survey but it was to enter the drawing. The winners were drawn randomly from the final pool of participants providing email addresses.

Measures

In order to measure gerontological knowledge, participants were asked to complete the multiple-choice version of the Palmore Facts on Aging Quiz. The original Palmore Facts on Aging Quiz (FAQ1) was created in 1988 as a true/false instrument used to measure general knowledge about the older adult population (Palmore, 1988). The instrument was rewritten as a 25-item multiple-choice assessment (FAQmc) that measures general knowledge about the older adult population (Harris, Changas, &

Palmore, 1996). The items include statements regarding physical, cognitive, and emotional attributes of the older population. Sample items include “The senses that tend to decline in old age are: (a) sight and hearing, (b) taste and smell, (c) sight, hearing, and touch, (d) all five senses”; “The proportion of people over 65 who are senile (have impaired memory, disorientation, or dementia) is: (a) about 1 in 100, (b) about 1 in 10, (c) about 1 in 2, (d) the majority”; and “Happiness among old people is: (a) rare, (b) less common than among younger people, (c) about as common as among younger people, (d) more common than among younger people.” This instrument has been used to measure knowledge of aging in human service work students (Birkenmaier, Rowan, Damron-Rodriguez, Lawrance, & Volland, 2009; Flood & Clark, 2009), ministers (Knapp, Beaver, & Reed, 2002), public service employees (Waldrop & Gress, 2002), and health care workers such as dentists, dental hygienists, and nurses (Singleton, Harbison, Melanson, & Jackson, 1993).

Harris, Changas, and Palmore (1996) provide evidence for the FAQmc’s reliability and internal consistency versus the FAQ1. A discrimination index, point biserial correlation, coefficient alpha, and standard error of measurement were used for the determination. The discrimination index measured the difference between the proportion of the high scorers who gave a correct response to an item and the proportion of the low scorers who gave the correct response to an item. The mean discrimination index for the multiple-choice format was .27 while the discrimination index for the true-false version was .28. There was almost no difference between the two formats with respect to discrimination index.

The point biserial correlation measured the relationship between performance on each individual test item and performance on the total test. The point biserial for the multiple-choice format was .03 while the point biserial for the true-false format was .06. The coefficient alpha for the instrument was .15, $p < .05$. The multiple-choice format yielded less measurement error with respondents of average to above average knowledge.

The FAQmc can also be scored to indicate age bias. The distractors in the answer choices were identified by Palmore (1988) as positive, negative, or neutral. Therefore, questions on the FAQmc were coded correct, positive, negative, or neutral with respect to age bias based on Palmore's age bias assignment. This convention was used to score the results of the FAQmc in this study.

To measure attitudes towards working with older adults, Rosencranz and McNevin's Aging Semantic Differential (ASD) (1969) was used. This scale includes 32 Likert-scale items consisting of polar adjectives that describe older adults. Rosencranz and McNevin initially developed three dimensions (i.e., instrumentality, autonomy, and acceptability) to examine attitudes, however, more recent work by Intrieri, von Eye, and Kelly (1995) proposed a four-factor model, which included the dimension of integrity. Scored on a 7-point scale, lower scores indicate more positive, less stereotypical views, and higher scores indicate more negative stereotypical views of aging. Participants' Sum scores of all items were used in this study to determine whether attitudes of respondents tended toward the positive or negative. This instrument has been used to measure attitudes of undergraduate students (Fruhauf, Jarrott, & Lambert-Shute, 2004), aging services providers (Egan, 2011), counseling psychologists (Tomko, 2009), and nursing personnel (Hefner, 2003).

Participants

Ages of participants in the final sample ranged from 27 years to 77 years old, with a mean age of 46.3 years ($SD = 12.66$). The racial makeup of the respondents included 84.8% White, 7.6% some other race, 6.1% American Indian or Alaska Native, 4.5% Hispanic or Latino, 1.5% Asian. There were no respondents reporting an ethnic background of Black or African American or Native Hawaiian or Other Pacific Islander. Most of the respondents were female (i.e., 78.8%). The majority of participants reported completing a Master's degree (i.e., 74.2%) versus 24.2% reported completing a Ph.D. None of the participants reported completing only a Bachelor's degree. The range of years in which respondents received their highest degree was from 1976 to 2011 and the range of years in which respondents received their license was from 1978 to 2012. The majority of respondents completed their practicum (i.e., 75.7%), internship (i.e., 74.2%), and have a practice (i.e., 97%) in either Colorado or California. The majority of respondents (i.e., 40.6%) had been in practice 15 or more years and saw 13 or fewer clients per week (i.e., 62.7%). With respect to older adult client contact, 79.7% of respondents indicated that they saw zero or one older adult client per week. The majority of participants (i.e., 71.2%) reported feeling comfortable or very comfortable working with older adult clients; no respondents indicated being uncomfortable treating older adults but 7.8% reported being very uncomfortable. With respect to clinical confidence with older adults, the majority of respondents (i.e., 53.1%) reported being confident; no respondents reported feeling not at all confident. See Appendix III, Table C1 for participant demographics.

Data Analysis

Of the 65 participants in this study, four participants completed the demographic information but did not complete either the FAQ or the ASD portion of the survey.

Where missing data existed, the value “99” was entered. This missing data value was entered for missing demographic responses as well as missing FAQmc and ASD responses. The value “99” was chosen over the common “9” value because “9” was a valid response in some of the demographic questions (i.e. state of practicum, internship, and practice).

In order to test the hypothesis that the amount of training in aging participants have will be related to higher knowledge levels of the older population and more positive attitudes towards the older population, several sets of statistics were determined. After the measures of central tendency and the frequencies were determined, correlations and multivariate analysis of variance (MANOVA) was conducted.

In order to test for association between training/education and knowledge levels, between training/education and attitudes, and between knowledge levels and attitudes, Pearson correlations for each pair were determined. The Pearson correlation coefficient, denoted by the symbol r , provides a measure of the correlation between two variables, X and Y. Its value can be from +1 to -1, inclusively. A value of +1 indicates a perfect linear correlation such that when X increases by one unit Y also increases by one unit. A value of -1 indicates a perfect negative linear correlation such that when X increases by one unit Y decreases by one unit. A value of 0 indicates no correlation between the variables (Cohen, 2008). Knowing the correlation between variables in this study is important in order to understand whether increased training and/or education has a

positive correlation with either knowledge levels of or attitudes about older adults on the part of marriage and family therapists. If such an association exists, the research can be used to call for increased gerontological training and/or education so that the stereotypes associated with low knowledge levels and poor attitudes can be refuted.

Additionally, a multivariate analysis of variance (MANOVA) was conducted on training/education and the dependent variables of knowledge level and attitude. This analysis was used to evaluate the statistical significance of the effect of one or more independent variables on a set of two or more dependent variables (Weinfurt, 1995). In order to use the MANOVA design, the dependent variables must be correlated. The Pearson correlations revealed that knowledge and attitude are correlated. However, based on the literature, a correlation between knowledge and attitude was anticipated (Couper, Sheehan, Thomas, 1991; Hinrichsen & McMenemy, 2002). One of the benefits of using the test of MANOVA, is that it controls experimentwise alpha. Rather than test each dependent variable (i.e., knowledge and attitudes in this study) separately and increase the risk of making a Type I error in the overall study, MANOVA can be used to test multiple dependent variables simultaneously.

RESULTS

Descriptives and Frequencies

In order to understand what level of knowledge participants had with regard to older adults, the total average score on the FAQmc was considered. A perfect score was 100. The average total score was 69.2 ($SD = 10.1$). The range of scores was a low of 30 to a high of 93. The top five items participants most frequently answered correctly were item numbers 3, 22, 6, 24, and 12. Overall, participants achieved 70% correct answers or better on these five items. The bottom five items participants most frequently answered incorrectly were item numbers 16, 18, 25, 21, and 19. Overall, participants achieved 22% correct answers or lower on these five items. See Appendix III, Table C2 for individual item percentages.

To evaluate participant attitudes regarding older adults, the total average score on the ASD was considered. The lowest possible score was 32 (all negative answers) and the highest possible score was 203 (all positive answers). The average total score was 130.1 ($SD = 17.5$). The range of scores was a low of 103 to a high of 193.

Correlations

To examine whether there was an association between education and knowledge and education and attitude, the Pearson correlation coefficient was determined for each pair of variables. The result of this analysis showed that the correlation between education and knowledge was $r(61) = .13, p > .05$. This finding indicates that in this sample there was not a statistically significant association between education and knowledge. Additionally, the result of this analysis also showed that the association

between education and attitude was $r(59) = -.004, p > .05$. This finding indicates that in this sample there was not a statistically significant association between education and attitude. Substantively, the data seem to indicate that with respect to marriage and family therapist gerontological education there does not appear to be a relationship to either gerontological knowledge of or attitude towards older adults in this sample. See Appendix III, Table C3 for correlations.

Multivariate Analysis of Variance (MANOVA)

As was previously stated, in order to use the MANOVA design, the DVs must be correlated. To examine whether there was a correlation between knowledge and attitude, the Pearson correlation coefficient was determined for the pair of DVs. The result of this analysis showed that the association between knowledge and attitude was $r(59) = .34, p < .01$. This finding indicates that in this sample there was a statistically significant association between knowledge and attitude. In particular, participants with higher knowledge scores tended to have higher (more positive) attitude scores, and vice versa (see Appendix IV, Figure D1). As a result of the outcome of this correlation, a MANOVA analysis was appropriate.

In order to examine whether there was a relationship between education and the correlated DVs of knowledge and attitude, a MANOVA was conducted. The result of this analysis showed that the multivariate main effect for education was Wilks' $\lambda = .72, F(20, 94) = .84, p > .05, \eta^2_p = .15$. This finding indicates that in this sample there was not a statistically significant effect of education on knowledge and attitude. Substantively, the data seem to indicate that marriage and family therapist gerontological education does not appear to have an effect on either knowledge of or attitude towards older adults.

Instrument Reliability

In order to examine the reliability of the FAQmc and the ASD with the current study's participants, an internal consistency analysis was conducted. The result of this analysis showed that the internal consistency of the FAQmc was $\alpha = .58$. This coefficient value is below the normally acceptable level of .70 but matches (Yorgason et al., 2009) or exceeds (Harris et al., 1996) the levels found in previous research. This result indicates that the internal consistency of the FAQmc with this sample is not acceptable. Also, the result of this analysis showed that for the ASD, $\alpha = .94$. This coefficient value is well above the acceptable level indicating that the internal consistency of the ASD with this sample was sound.

DISCUSSION

Based on the previous literature review and the growing aging population, I was interested in understanding what marriage and family therapists know about the older adult population and whether or not there was an association between education and training and knowledge of and attitude towards older adults. The literature indicated that in many populations of study, increased education and training correlated to increased knowledge and positive attitudes (i.e., Rothmann et al., 2011; Shieh et al., 2010). However, only a single study that examined this relationship among marriage and family therapists with respect to the older adult population (Yorgason et al., 2009) had been conducted. As a result, this cross-sectional research study investigated whether or not there was an association between the education and training experienced by marriage and family therapists and their knowledge of and attitudes toward older adults.

The existing literature outlined that the increasing older population was not a significant subject in the flagship MFT publications (Flori, 1989; Lambert-Shute & Fruhauf, 2011; VanAmburg, Barber, & Zimmerman, 1996) even though older adults have a need for therapy (i.e., Amato, 2000; Vacha-Haase, Wester, & Christianson, 2011; Woodward & Pachana, 2009) and benefit from therapeutic interventions (i.e., Mackin & Arian, 2005). Yet, even with these needs and benefits, there are barriers discouraging older adults from seeking therapy (i.e., Kane, 2004). One of these barriers may be the lack of knowledge marriage and family therapists have about the older adult population. This barrier may exist because of the lack of later life education in MFT programs (Sandberg, 2002), even though MFT competencies expect an understanding of late life development (Gehart, 2009). Unlike previous research, which was theory poor, I decided

to frame these factors using both family systems theory (FST) and complexity-extremity theory to help clarify the client-therapist relationship and the effect of ageist stereotypes that emerged as a theme throughout the literature review.

In order to answer the research question regarding what marriage and family therapists know about the aging population, the results of the FAQmc were considered. Overall, the average score on the FAQmc was 62.9%, which is disappointing. Such a score seems to indicate that marriage and family therapists do not know a great deal about older adults. Also, no statistical association between education/training and knowledge in the sample surveyed supported the argument that a good knowledge level existed. This finding is contrary to other areas of research that have found a connection between education and knowledge (Custers & Cate, 2011; Jalali-Nia, Salsali, Dehghan-Nayeri, & Ebadi, 2011; Larsen & Zahner, 2011; Murphy, Frank, Moran, & Patnoe-Woodley, 2011; Pletzke, Henry, Ozier, & Umoren, 2010; Rothmann et al., 2011; Shieh et al., 2010).

These findings may be a function of the design of the FAQmc. This instrument does not have acceptable alpha levels, which may reflect the ability of the instrument to measure what it claims to measure. In fact, the language used in the instrument may be contributing to the low reliability. The instrument uses terms that are considered biased language (i.e. old person, old people, senile) (American Psychological Association, 2010). Such biased language has been shown to prime individuals to make decisions about negative traits more quickly than making decisions about positive traits (Perdue & Gurtman, 1990). Applying this research to the current study, participants may have been primed to answer based on negative stereotypes. For example, question 13 on the

FAQmc was about depression among older adults and whether it was more common before or after the age of 65. The distractors for the question were identified by Palmore (1988) as negative or neutral. More participants answered the question in the negative than in the neutral or correctly. Applying Perdue and Gurtman's (1990) research to this result may indicate that because the term "old people" was used in question 12, participants were primed to choose a negative distractor rather than the more positive correct answer when they arrived at question 13. As a result, the language used in the instrument may be contributing to the poor reliability.

With respect to the research question of whether there is a relationship between gerontological education/training of marriage and family therapists and knowledge and attitudes, statistically there does not appear to be a relationship. Thus, the hypothesis that the amount of training and education in aging issues that marriage and family therapists have will be associated with higher knowledge levels of and more favorable attitudes toward the older adult population was not supported by the results of this research. This result is in contrast to previous research in other disciplines that indicates with more education comes increased knowledge and more positive attitudes towards the subject of the education (i.e. Custers & Cate, 2011; Jalali-Nia, Salsali, Dehghan-Nayeri, & Ebadi, 2011).

One possible reason for the results of this study may be the order of the instruments in the survey presented to participants. Although it is not possible to tell whether any participants skipped ahead in the survey and completed the ASD and then returned to take the FAQmc portion of the survey, it is not likely that participants proceeded through the survey in such a way. As a result, the assumption is made that, if

not all, most of the participants completed the FAQmc prior to completing the ASD. With the FAQmc appearing to contain biased language as defined by the American Psychological Association (2010) and such biased language being tied to priming for selection of more negative answers (Perdue & Gurtman, 1990), it is reasonable to conclude that the FAQmc not only may be a poor measure of gerontological knowledge but it also primed participants to answer more negatively on the ASD. This conclusion seems reasonable when examining the results of the ASD. As with the FAQmc, the overall ASD mean score was surprisingly low (103 out of a possible 203, representing 50.7%). This score represents a very neutral attitude toward older adults, being only 1.5 points above the middle possible score of 101.5. The acceptable reliability of the ASD to measure attitudes towards older adults was shown by previous research (Intrieri, von Eye, & Kelly, 1995) as well as this research ($\alpha = .94$) to have more than acceptable internal reliability. Therefore, either marriage and family therapists have only neutral views of older adults or the FAQmc primed them to answer more negatively than they otherwise might have. Randomly changing the order of the instruments or having the true-false version of the FAQmc for half the participants, may clarify whether the FAQmc did prime participants to answer more negatively than they would have otherwise.

Finally, this study was unable to support previous research conducted by Yorgason and colleagues (2009). In part this was because the statistical analyses used were applied to different variables. For example, the Yorgason and colleagues' study did not examine a Pearson's correlation between the education variable and the FAQmc results. Rather, they calculated an average score (12.1 out of 25) across all participants and then commented on that score. However, and interestingly, the current study did

have an overall higher rate of correct answers on the FAQmc as compared to the previous study. Yorgason and colleagues had an average score of 48.4 % on the FAQmc and the current study had an average score of 62.9%. This comparison is encouraging because of the positive direction of the score movement. Yet, unlike Yorgason and colleagues, I would not describe this result as an average knowledge level. I would characterize this knowledge level as below average for two reasons. First, this level is similar to a D-letter-grade effort in a classroom setting. Such a letter grade is customarily thought of as unacceptable in both secondary and post-secondary academic settings. Second, the Pearson's correlation was not significant between the variables of education and knowledge. Statistically, this means that there is not a relationship between education and knowledge. Thus, even though Yorgason and colleagues conclude that marriage and family therapists have an average knowledge level of older adults, the results of this study suggest that marriage and family therapists have a below average knowledge level of older adults.

Implications for the Theoretical Lens

This study used FST and complexity-extremity theory to frame the platform for the research. FST was used to define the older adult client-therapist relationship as a system. According to the theory, once a system is defined, certain inputs into the system can cause dysfunctional communication, which leads to a break down in the system (Smith et al., 2009). In this study, ageism was described as one input to the older adult client-therapist system. If marriage and family therapists are influenced by ageist stereotypes, FST states that communication between the therapist and older adult client will be dysfunctional. That dysfunction could take several forms. For example, the

dysfunction may be that older adult clients simply do not seek out marriage and family therapists even though older adults do have issues for which to seek therapy.

Complexity-extremity theory then can explain how input of ageism is actually a lack of knowledge that causes a more extreme view of older adults. This extreme view is mitigated once the complexity of understanding increases (Linville & Jones, 1980).

Thus, the hypothesis for this study emerged from the concept that increased education would function to increase the complexity of understanding of older adults and, therefore, increase marriage and family therapists' knowledge of and attitudes about older adults.

Unfortunately, the results did not reveal such a relationship. Because the results failed to show a relationship, positive or negative, between education and knowledge of and attitudes towards older adults, FST and complexity-extremity theory may have been inadequate theories to apply to this research. What did emerge from the results was the suggestion that marriage and family therapists may be influenced and, therefore, primed by biased language and stereotypes. With the biased language in the FAQmc preceding the ASD as a measure of attitude, it is possible that the neutral results of the ASD are an indication that the FAQmc negatively primed participants to answer less favorably on the ASD. As a result, theories explaining influence of individuals as well as theories about priming may be more appropriate for framing the relationship between education, knowledge, and attitude in the marriage and family therapist population.

Limitations

In addition to the FAQmc appearing to be a less than ideal instrument to measure gerontological knowledge and the possible priming of participants due to instrument order, caution should also be used when generalizing the results of this study to all

marriage and family therapists. First, only 1272 registered licensed marriage and family therapists in the state of Colorado were recruited. This is a small subset of the estimated 50,000 marriage and family therapists in the United States (AAMFT, 2011). Responses could be different in other states because aging-related programs and/or policies in other states may differ from Colorado. Additionally, participants more interested in aging topics were more likely to participate. As a result, the low response rate may be reflective of the interest level in the research topic. Thus, generalizing to the remaining 48,000+ marriage and family therapists may not characterize the average marriage and family therapist.

Also, sociodemographic concerns cloud the ability to generalize to the larger marriage and family therapist population. The overwhelming majority of participants identified as White (84.8%). As a result, the potentially varied perspectives of other ethnic groups on older adults are not necessarily reflected in this sample. If other ethnic groups view older adults in a different way, existing knowledge levels and attitudes toward older adults from these ethnic groups would change the outcomes on both the FAQmc and ASD. Thus, having a more diverse sample helps to cancel out the effect of ethnicity on the results.

Finally, with respect to participant recruitment, a follow-up postcard may have resulted in a larger and more varied sample. With only a single mailing, it is possible that only those participants with similar motivations to participate did so, resulting in an increased similarity across the sample. Had a reminder postcard been sent, other participants with slightly different motivations may have taken the survey. Both a larger

and more varied sample contributes to results that are more generalizable to the population of marriage and family therapists (Cohen, 2008).

Future Research

This research study was only an extension of the first step (i.e. building on Yorgason and colleagues (2009) work) in understanding marriage and family therapists' experiences with the older adult population. There are more areas to explore in order to understand the experiences of both therapist and client when it comes to aging issues. One suggestion for future research is to identify those clinicians whose practice is focused on older adults so as to fully understand their experiences. Qualitative research involving interviews with such clinicians may uncover themes and patterns that were unnoticed in this research as well as previous studies. With greater understanding, potential areas of further research will become clearer.

Also, exploring the same experiences from the client side could provide some meaningful information, especially considering that the baby boom generation has entered later adulthood. Their life experiences may have influenced their attitudes toward therapy such that the existing literature may no longer reflect this cohort's feelings regarding therapy. Even though current literature indicates that older adults do seek out therapists for family issues (Woodward & Pachana, 2009), other research has indicated that older generations do not seek therapy as often as younger generations (Hodgkinson, 2006). This trend may have changed with the baby boom generation. Replicating previous studies, as well as designing new studies, is important not only to uncover whether older adult attitudes have changed as new cohorts have entered older adulthood but also to dismiss stereotypes that plague our society.

Additionally, framing future research with a different theoretical lens may provide a different perspective that would shed some light not only on the results of this study but may clarify changes that can direct designs for future research. For example, focus on different theories of stereotyping could help determine different instruments to use to gather knowledge and attitude data. As Levy (2003) has noted, the effect of stereotypes is internal as well as external. As a result, understanding the internalization of stereotypes more fully may shed some light on how and why participants in this study and in future studies react to older adults the way they do. Taking that understanding into account when applying an instrument such as the FAQmc and/or the ASD may provide for a different interpretation of the results. Also, exploration into other theories may reveal different instruments that can take into account the effect of stereotypes.

Finally, considering changes in how to measure gerontological knowledge and attitudes may produce different results in similar future research. Updating the biased language in the FAQmc may mitigate the negative priming that is associated with such language (Perdue & Gurtman, 1990). If terms such as “old person” and “senile” can be eliminated from the FAQmc, the instrument’s reliability to measure knowledge of the older adult population might increase. Although the ASD’s reliability appeared to be sound, the results in this study are suspect due to the question of whether the biased language in the FAQmc negatively primed participants on the ASD. Therefore, the neutral results of the ASD are suspect. As previously mentioned, changing the order of the instruments might reveal the existence of priming, support the reliability of the ASD, and encourage the call to update the FAQmc.

Implications for the MFT Profession

Although the results of this research project do not statistically support a relationship between gerontological education and knowledge and attitude, the less than positive results on both the FAQmc and ASD speak to a need for education and training regarding the older population. With the aging segment of society significantly growing and appearing to be more accepting of psychotherapy than previous generations (Woodward & Pachana, 2009), the expectation is that more older adults will be seeking the services not only of marriage and family therapists but of all providers of psychotherapy. Although the older adult client base presents itself with issues common to younger generations, it also presents issues unique to older adults. Without some understanding beyond the limits of stereotypes, older adult clients are at risk of not being understood and, therefore, not provided the behavioral health support they need from marriage and family therapists.

This necessary increase of understanding outside stereotypes is possible through both education and exposure, such as through research articles. Unfortunately, marriage and family therapists' two broadest avenues for education and training are limited. One of these avenues is a formal course(s) in MFT programs. Yet, MFT programs allow graduates students to graduate without taking any courses on adult development and aging (Sandberg, 2002). Another avenue is through publications such as the *Journal of Marital and Family Therapy*. Again this is troublesome with the literature over the last 30 years not showing an increase in focus on addressing aging related issues (Lambert-Shute & Fruhauf, 2011), this avenue is also quite limited. As a result, the hope is that

marriage and family therapists can use this study as a call for more research on the older population but also for those who work with older adults to share their experiences.

Conclusion

After educating myself through the literature review for this study and analyzing the data collected, I am convinced that the marriage and family therapist profession is poised on the threshold of a new wave of clients for whom we are not fully prepared. Not only do demographic statistics clearly show that the population is aging but the changing perspective of older cohorts suggests that older adults will likely seek out psychotherapy at different rates than previous cohorts. As I started my journey into MFT, I had only intuition and anecdotal experiences telling me that the older adult population was a burgeoning opportunity. Yet, now I have research to support my suspicions. This study may not have found statistical significance in the data but it did reveal that general knowledge of the older population on the part of marriage and family therapists is well below average. When considering only that result, the need for an increased focus on education and training about older adults emerges. Add to that result, the fact that MFT programs do not require formal classes about this population and marriage and family therapists are graduating without preparation and have limited avenues to obtain knowledge about aging issues. This alone should cause marriage and family therapists, educators of marriage and family therapists, and COAMFTE to pause and further consider the importance of increased education and training about aging families.

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Appendix I

Sample Postcard Language

Dear Marriage and Family Therapist,

We (a gerontologist and an MS candidate in MFT) are researching the possible association between marriage and family therapist education/training and knowledge of and attitudes toward the older adult population. The older adult population is the fastest growing segment of our society. To better serve this increasing population, we want to understand whether or not education and training has a tie to knowledge of and attitudes toward this population. We would greatly appreciate your participation in our survey. It should take about 15 minutes to complete and you will have the choice to enter a drawing for 1 of 3 \$20 Amazon gift cards. We intend to use the results to inform the field about the impact education and training may make in working with the older adult population. Thank you in advance for your participation.

To access the survey, please go to the following URL:
<http://surveymonkey.com/s/MFTRResearchSurvey>

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Ms. or Mr. Participant
Street Address
City, CO, Zip

Appendix II

Study Survey

Cover Letter/Consent (preamble)

Marriage and Family Therapists' Gerontological Knowledge

This is an invitation to participate in a research study conducted by researchers at Colorado State University. We are interested in understanding how marriage and family therapists' education and training are related to their knowledge and attitudes towards older adults. We are recruiting marriage and family therapists in Colorado to take our on-line survey so we can understand whether there is an association between education/training and knowledge and attitudes. Your participation is totally voluntary, questions can be skipped, and you can quit the survey at any time by simply closing your browser window. The survey is anonymous. That means that no one, not even members of the research team, will know that the information you give comes from you. The survey should take about 15 minutes to complete.

It is not possible to identify all potential risks in research procedures, but the researchers have taken reasonable safeguards to minimize any known and potential risks. As a result, there are no known risks to participating in this survey. Also, there are also no known benefits for participating in this research project. However, the information you provide will be used to begin to clarify whether knowledge of and attitudes towards older adults is related to educational levels. If the data indicates a possible positive relationship, then education and training can be a vehicle for marriage and family therapists to more fully help the older adult population.

There is no cost to participate. If you complete the survey, you will be prompted to enter into the participant pool to win 1 of 3 \$20 Amazon gift cards using your email address. You can choose not to enter the drawing if you would prefer not to leave an email address.

If you have questions or concerns before or after completing the survey, please feel free to contact the investigators, Dr. Christine Fruhauf, Christine.Fruhauf@colostate.edu, or Jennifer Lawrence, jelawren@rams.colostate.edu. If you have any questions about your rights as a volunteer in this research, contact Janell Barker, Human Research Administrator at 970-491-1655.

By selecting the radio button below, you acknowledge that that you have read the information stated and willingly will complete the survey. Please print this page for your records. (radio button, “I acknowledge that I have read the information stated and am willingly completing this survey.”)

Demographic Information (page 1)

What is your age? Fill in the field.

What is your ethnic group (you may choose more than one)? American Indian or Alaska Native; Asian; Black or African American; Hispanic or Latino; Native Hawaiian or Other Pacific Islander; White; Some Other Race

With what gender do you describe yourself? (Drop down: Female, male.)

What is your degree level? (Drop down: Bachelors, Masters, doctorate.)

In what year did you receive your highest degree? Fill in the field.

In what year were you licensed? If not licensed, type “not licensed” in the field. Fill in the field.

In which state did you complete your practicum for your highest degree? For this question, practicum means time you spent during your program supervised by your faculty while seeing clients. This was likely in an on-campus client center or a campus-run client center. (Drop down box w/ all states.)

In which state did you complete your internship for your highest degree? For this question, internship means time you spent during your program seeing clients but supervised by someone other than your faculty (although your internship may have been with faculty, if so use the same state as your practicum). (Drop down box w/ all states.)

In which state do/did you practice? (Drop down box w/ all states.)

How many years have you spent in clinical practice? (Drop down: 1 – 15+)

On average, how many clients do you see per week? (Drop down: 1 – 40+)

On average, how many older adults (age 65 or older) do you see per week? (Drop down: 1 – 40+)

How comfortable are you working with older adult clients (age 65 or older)? (1 = very uncomfortable, 2 = uncomfortable, 3 = neutral, 4 = comfortable, and 5 = very comfortable)

How clinically confident are you in working with older adult clients (age 65 or older)? (1 = not at all confident, 2 = not so confident, 3 = neutral, 4 = confident, 5 = very confident)

Education and Training (page 2)

This section of the survey is about your aging-related education and training. The term “aging-related” means that the education and/or training curriculum you experienced (class, workshop and/or seminar) provided you information specifically about how

individuals change or do not change as they age and/or what unique challenges older adults (65+ years old) experience.

How many formal aging-related courses in your marriage and family therapy degree program? (Drop down: 1 – 10+)

How many aging-related workshops or seminars at national conferences have you taken? (Drop down: 1 – 10+)

How many aging-related workshops or seminars at state conferences have you taken? (Drop down: 1 – 10+)

Other than at national or state conferences, how many other aging-related workshops and/or seminars have you taken? (Drop down: 1 – 10+)

Gerontological Knowledge (page 3)

1. The proportion of people over the age of 65 who are senile (Have impaired memory, disorientation, or dementia) is:

- a. about 1 in 100
- b. about 1 in 10
- c. about 1 in 2
- d. the majority

2. The senses that tend to weaken in old age are:

- a. sight and hearing
- b. taste and smell
- c. sight, hearing, and touch
- d. all five senses

3. The majority of old couples:

- a. have little or no interest in sex
- b. are not able to have sexual relations
- c. continue to enjoy sexual relations
- d. think sex is only for the young

4. Lung vital capacity in old age:

- a. tends to decline
- b. stays about the same among non-smokers
- c. tends to increase among healthy old people
- d. is unrelated to age

5. Happiness among old people is:

- a. rare
- b. less common than among younger people
- c. about as common as among younger people
- d. more common than among younger people

6. Physical strength:

- a. tends to decline with age
- b. tends to remain the same among healthy old people
- c. tends to increase among healthy old people
- d. is unrelated to age

7. The percentage of people over 65 in long-stay institutions (such as nursing homes, mental hospitals, and homes for the aged) is about:

- a. 5%
- b. 10%

c. 25%

d. 50%

8. The accident rate per driver over age 65 is:

a. higher than for those under 65

b. about the same as for those under 65

c. lower than for those under 65

d. unknown

9. Most workers over 65:

a. work less effectively than younger workers

b. work as effectively as younger workers

c. work more effectively than younger workers

d. are preferred by most employers

10. The proportion of people over 65 who are able to do their normal activities is about:

a. one-tenth

b. one-quarter

c. one-half

d. three-quarters

11. Adaptability to change among people over 65 is:

a. rare

b. present among about half

c. present among most

d. more common than among young people

12. As for old people learning new things:

- a. most are unable to learn at any speed
- b. most are able to learn, but at a lower speed
- c. most are able to learn as fast as younger people
- d. learning speed is unrelated to age

13. Depression is more frequent among:

- a. people over 65
- b. adults under 65
- c. young people
- d. children

14. Old people tend to react:

- a. slower than younger people
- b. at about the same speed as younger people
- c. faster than younger people
- d. slower or faster than younger people, depending on the type of test

15. Old people tend to be:

- a. more alike than younger people
- b. the same as younger people in terms of likeness
- c. less alike than younger people
- d. more alike in some respects and less alike in others

16. Most old people say:

- a. they are seldom bored
- b. they are sometimes bored
- c. they are often bored

d. life is monotonous

17. The proportion of old people who are socially isolated is:

a. almost all

b. about half

c. less than a fourth

d. almost none

18. The accident rate among workers over 65 tends to be:

a. higher than among younger workers

b. about the same as among younger workers

c. lower than among younger workers

d. unknown because there are so few workers over 65

19. The proportion of the U.S. population now age 65 or over is:

a. 3%

b. 13%

c. 23%

d. 33%

20. Medical practitioners tend to give older patients:

a. lower priority than younger patients

b. the same priority as younger patients

c. higher priority than younger patients

d. higher priority if they have Medicaid

21. The poverty rate (as defined by the federal government) among old people is:

a. higher than among children under age 18

- b. higher than among all persons under 65
- c. about the same as among persons under 65
- d. lower than among persons under 65

22. Most old people are:

- a. employed
- b. employed or would like to be employed
- c. employed, do housework or volunteer work, or would like to do some kind of work
- d. not interested in any work

23. Religiosity tends to:

- a. increase in old age
- b. decrease in old age
- c. be greater in the older generation than in the younger generations
- d. be unrelated to age

24. Most old people:

- a. are seldom angry
- b. are often angry
- c. are often grouchy
- d. often lose their tempers

25. The health and economic status of old people (compared to younger people) in the year 2012 will:

- a. be higher than now
- b. be about the same as now

- c. be lower than now
- d. show no consistent trend

Attitudes (page 4)

Below are listed a series of polar adjectives accompanied by a scale. You are asked to select a radio button along the scale at a point, which in your judgment best describes the social object indicated. Make each item a separate and independent judgment. Do not worry or puzzle over individual items. Do not try to remember how you have marked earlier items even though they may seem to have been similar. It is your first impression or immediate feeling about each item that is wanted.

Older Adult

- Progressive ____: ____: ____: ____: ____: ____: ____: Old-fashioned
- Consistent ____: ____: ____: ____: ____: ____: ____: Inconsistent
- Independent ____: ____: ____: ____: ____: ____: ____: Dependent
- Rich ____: ____: ____: ____: ____: ____: ____: Poor
- Generous ____: ____: ____: ____: ____: ____: ____: Selfish
- Productive ____: ____: ____: ____: ____: ____: ____: Unproductive
- Busy ____: ____: ____: ____: ____: ____: ____: Idle
- Secure ____: ____: ____: ____: ____: ____: ____: Insecure
- Strong ____: ____: ____: ____: ____: ____: ____: Weak
- Healthy ____: ____: ____: ____: ____: ____: ____: Unhealthy
- Active ____: ____: ____: ____: ____: ____: ____: Passive
- Handsome ____: ____: ____: ____: ____: ____: ____: Ugly

Cooperative ____: ____: ____: ____: ____: ____: ____:

Uncooperative

Optimistic ____: ____: ____: ____: ____: ____: ____: Pessimistic

Satisfied ____: ____: ____: ____: ____: ____: ____: Dissatisfied

Expectant ____: ____: ____: ____: ____: ____: ____: Resigned

Flexible ____: ____: ____: ____: ____: ____: ____: Inflexible

Hopeful ____: ____: ____: ____: ____: ____: ____: Dejected

Organized ____: ____: ____: ____: ____: ____: ____: Disorganized

Happy ____: ____: ____: ____: ____: ____: ____: Sad

Friendly ____: ____: ____: ____: ____: ____: ____: Unfriendly

Neat ____: ____: ____: ____: ____: ____: ____: Untidy

Trustful ____: ____: ____: ____: ____: ____: ____: Suspicious

Self-reliant ____: ____: ____: ____: ____: ____: ____: Dependent

Liberal ____: ____: ____: ____: ____: ____: ____: Conservative

Certain ____: ____: ____: ____: ____: ____: ____: Uncertain

Tolerant ____: ____: ____: ____: ____: ____: ____: Intolerant

Pleasant ____: ____: ____: ____: ____: ____: ____: Unpleasant

Ordinary ____: ____: ____: ____: ____: ____: ____: Eccentric

Aggressive ____: ____: ____: ____: ____: ____: ____: Defensive

Exciting ____: ____: ____: ____: ____: ____: ____: Dull

Decisive ____: ____: ____: ____: ____: ____: ____: Indecisive

Epilogue (page 5)

Thank you for completing our survey. We sincerely appreciate your time.

If you would like to be entered to win 1 of 3 randomly drawn \$20 Amazon gift cards, we will need your email address. This address is not connected to the responses you entered and is kept confidential so that no other than the researchers will have access to it.

Please click here to enter the drawing (radio button). (Participant will be directed to another page that will allow them to enter their email address)

Please click here to complete the survey without entering the drawing (radio button). (Participant will be directed to another page, see section No Drawing Entry (alternate page 6))

Drawing Entry (page 6)

Thank you again for participating in our survey. We appreciate your time and effort in providing us responses. And, we would like to reiterate that your responses are completely anonymous. If you have any questions or concerns, please feel free to contact the researchers:

Dr. Christine Fruhauf, Christine.Fruhauf@colostate.edu, or Jennifer Lawrence, jelawren@rams.colostate.edu

The drawing will take place once the survey has closed. If you win, you will be sent a \$20 Amazon gift card via the email address you enter here: (fields to enter email)

<submit button>

No Drawing Entry (alternate page 6)

Thank you again for participating in our survey. We appreciate your time and effort in providing us responses. And, we would like to reiterate that your responses are completely anonymous. If you have any questions or concerns, please feel free to contact the researchers:

Dr. Christine Fruhauf, Christine.Fruhauf@colostate.edu, or Jennifer Lawrence,
jelawren@rams.colostate.edu

Appendix III

Table C1: *Participant Demographics Summary (N = 65)*

Demographic	Range	Percent Total (<i>n</i>)	<i>M</i> (<i>SD</i>)
Age	27 – 77		46.3(12.7)
Ethnicity			
White		84.8 (56)	
Some Other Race		7.6 (5)	
Amer. Indian/Native Amer.		6.1 (4)	
Hispanic/Latino		4.5 (3)	
Asian		1.5 (1)	
Gender			
Female		78.8 (52)	
Male		18.2 (12)	
Degree Level			
Master's		74.2 (49)	
Doctorate		24.2 (16)	
Year Rec'd Degree	1976 – 2011		
Year Licensed	1978 – 2012		
Practicum State			
CO		40.9 (27)	
CA		34.8 (23)	
Other		22.8 (15)	
Internship State			
CO		39.4 (26)	
CA		34.8 (23)	
Other		24.3 (16)	
Practice State			
CO		89.4 (59)	
CA		7.6 (5)	
Other		1.5 (1)	
Years in Practice	1 – 15+		10.3(4.9)
Clients/Week	0 – 40+		11.0(9.1)
Older Adult/Week	0 – 9		2.1(1.8)
Comfort Level			
Very uncomfortable		7.6 (5)	
Neutral		18.2 (12)	
Comfortable		36.4 (24)	
Very comfortable		34.8 (23)	
Confidence Level			
Not so confident		7.6 (5)	
Neutral		10.6 (7)	
Confident		51.5 (34)	
Very confident		27.3 (18)	

Table C2: *Ranking of Items on FAQmc (number of items = 25)*

Item Number	Correct % (n)	Positive % (n)	Negative % (n)	Neutral % (n)
3	95.1 (58)		4.9 (3)	
22	94.9 (56)	5.1 (3)		
6	90.2 (55)	50.8(30)		
24	78.4 (40)		21.6 (11)	
12	71.7 (43)	28.3 (17)		
10	69.5 (41)		30.5 (18)	
9	68.3 (41)	21.7 (13)	10.0 (6)	
5	63.3 (38)	21.7 (13)	15.0 (9)	
2	60.7 (37)	39.3 (24)		
14	55.9 (33)	44.1 (26)		
17	54.4 (31)	45.6 (26)		
15	51.7 (30)		1.7 (1)	46.6 (27)
20	50.0 (28)	50.0 (28)		
4	49.2 (29)	50.8 (30)		
23	48.3 (28)			51.7 (30)
11	47.5 (28)	8.5 (5)	44.1 (26)	
1	38.3 (23)	56.7 (34)	5.0 (3)	
13	36.7 (22)		55.0 (33)	8.3 (5)
7	23.7 (14)		76.3 (45)	
8	23.3 (14)		58.3 (35)	18.3 (11)
16	22.4 (13)		77.6 (45)	
18	22.4 (13)		77.6 (45)	
25	20.7 (12)		79.3 (46)	
21	15.8 (9)		84.2 (58)	
19	13.6 (8)			86.4 (51)

Appendix IV

Figure D1. The Visual Relationship Between Knowledge and Attitude.

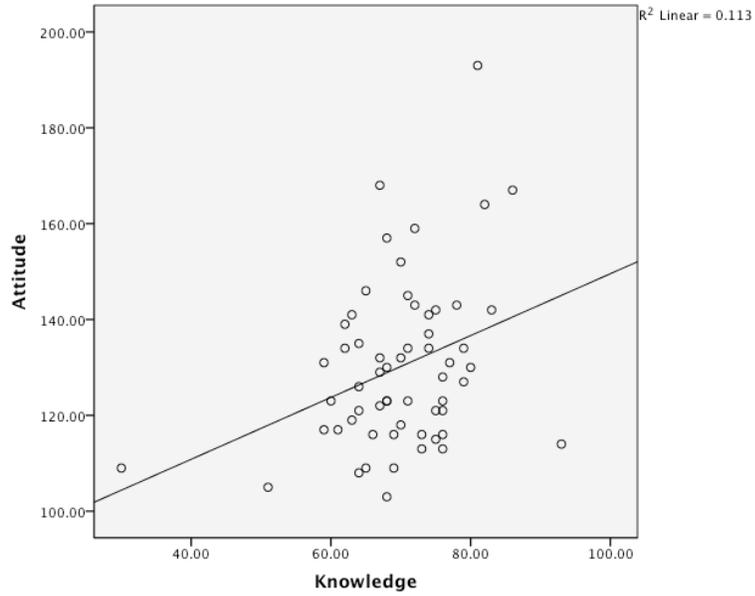


Figure D1. The correlation between the dependent variables knowledge and attitude is a positive relationship.