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THE IMPACT OF DEMOGRAPHIC VARIABLES ON DIFFERENTIATION OF SELF
DURING THE COURSE OF COUNSELING

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Philosophy

By

Kenneth C. Messina

December 2015

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Kenneth C. Messina

2015

DUQUESNE UNIVERSITY
SCHOOL OF EDUCATION
Department of Counseling, Psychology and Special Education

Dissertation

Submitted in Partial Fulfillment of the Requirements
For the Degree of Doctor of Philosophy (Ph.D.)

Executive Counselor Education and Supervision Program

Presented by:

Kenneth Messina
B.A., Psychology
M.A., Community Counseling

AUGUST 13, 2015

THE IMPACT OF DEMOGRAPHIC VARIABLES ON DIFFERENTIATION OF SELF
DURING THE COURSE OF COUNSELING

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ABSTRACT

THE IMPACT OF DEMOGRAPHIC VARIABLES ON DIFFERENTIATION OF SELF DURING THE COURSE OF COUNSELING

By

Kenneth C. Messina

December 2015

Dissertation supervised by Dr. Jered Kolbert

Bowen's natural systems theory has been identified as a foundational theory in learning of family processes (Miller, Anderson, & Keala, 2004). Despite the importance of this theory to the counseling profession, there is a lack of research examining the moderators of Bowen's key construct, differentiation of self. There are few studies that explore the effect of demographic variables on levels of differentiation of self. There is also a lack of literature regarding the impact of these demographic moderators on an individual's ability to increase their level of differentiation of self through counseling. This study investigated the impact of counseling on levels of differentiation of self and the moderating role of various demographic variables on differentiation in an adult clinical population. Participants were adults recruited from a community mental health center in northwestern Pennsylvania at their initial presentation for counseling services.

At the initial counseling session demographic questionnaires and Differentiation of Self Inventory-Revised (DSI-R) were administered with a follow-up administration of the DSI-R was conducted three months later. The results indicated a significant increase in overall differentiation of self, as well as in DSI-R subscale scores of Emotional Reactivity and “I” Position. The study also found that changes in differentiation of self varied as a function of age, with the most change occurring for younger (18-25 year old) participants; no other demographic variables were related to changes in differentiation of self. Potential implications for future research and potential explanations for these results are discussed.

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CHAPTER 1: INTRODUCTION

Statement of the Problem

Bowen's (1978) family systems theory is one of the most commonly used theories of family systems and human behavior (Nichols, 2012). Miller, Anderson, and Keala (2004) identify Bowen's natural systems theory as a foundational theory in learning of family processes. Despite the importance of this theory to the counseling profession, there is a limited amount of research examining the impact of counseling and demographic variables on Bowen's key construct, differentiation of self. There have been several studies that have validated the construct of differentiation of self among various populations. There are few studies that explore relations among demographic factors and levels of differentiation of self. There is also a lack of literature regarding the how differentiation of self varies as a function of demographic variables through the counseling process.

Purpose of the Study

There are multiple purposes of this study. One is to explore the potential relations among differentiation of self and demographic variables such as age, family of origin type, birth order, education level, and gender. This study will also examine if counseling impacts levels of differentiation of self in an adult population, and if demographic variables, including age, family of origin type, birth order, education level, and gender impact changes in differentiation. The study will also examine the impact of counseling and demographic variables on subscale scores on the Differentiation of Self Inventory-Revised (DSI-R). This study will extend the current literature in identifying whether

counseling impacts differentiation of self, and whether differentiation of self varies as a function of these demographic variables.

Research Questions

The current study will attempt to address the following research questions:

1. Are outpatient counseling services associated with a change in differentiation of self in an adult clinical population?
2. Does differentiation of self in an adult clinical population vary as a function of demographic variables, including age, gender, family type (e.g., intact vs. blended/divorced families), birth order, and educational level?
3. Do changes in differentiation of self in an adult clinical population vary as a function of demographic variables, including age, gender, family type (e.g., intact vs. blended/divorced families), birth order, and educational level?
4. Are demographic variables of age, gender, family (e.g., intact vs. blended/divorced families), birth order, and educational level significant predictors of Fusion with Others, Emotional Cutoff, “I” Position, and Emotional Reactivity among an adult clinical population?
5. Does participation in counseling have a differential impact on Fusion with Others, Emotional Cutoff, “I” Position, and Emotional Reactivity among an adult clinical population?

Statement of Potential Significance

The current study aims to extend the literature regarding Bowen’s (1978) theory, specifically the construct of differentiation of self. There is a lack of research regarding whether counseling impacts Bowen's construct of differentiation of self, and whether

differentiation varies as a function of demographic variables. The study also seeks to examine whether demographic variables impact changes in differentiation of self and the subscales associated with the measurement of differentiation of self. The results may help clinicians understand client characteristics that would indicate the efficacy of pursuing efforts to increase levels of differentiation, and identify to researchers demographic variables that warrant further research.

Theoretical Foundation or Conceptual Framework

This study is based on Bowen's (1978) Natural Systems theory and the existing research on the Bowenian concept of differentiation of self and chronic anxiety. Bowen (1978) believed that psychiatric symptoms are a manifestation of a high level of chronic anxiety. This chronic anxiety is multi-generationally transmitted through families until the compounding severity of this chronic anxiety becomes overwhelming, resulting in psychiatric symptomology. Bowen further theorized that an individual's level of differentiation of self can mediate this chronic anxiety. The theory postulates that sufficient levels of differentiation prevent the development of psychiatric symptomology and promote healthy functioning among individuals and families. Those individuals with lower levels of differentiation of self engage in either emotional cutoff or fusion (a blurring of boundaries between the individual and others or the trading of autonomy for security in relationships) resulting in psychiatric symptoms that limit the individual's ability to function autonomously (Kerr & Bowen, 1988).

Bowen (1978) also contended that one's level of differentiation of self is not static, but can change through the individual's efforts to reduce emotional reactivity and increase their ability to function autonomously while remaining in connection with their

immediate and extended family members. While there are specific interventions ascribed to Bowen's theory, it is not the only method for increasing levels of differentiation of self. Bowen considered his theory to be a general theory of human behavior and was not concerned with the development of techniques specific to the theory (Titelman, 1998). The view of Bowen's theory as a general theory of human behavior allows for the development of higher levels of differentiation regardless of therapeutic techniques used to promote this development. Bowen (1978) believed the seeking of therapeutic services represents a move towards a higher level of differentiation as the client is able to see a need for change. He identified the therapeutic relationship as central to the success of increasing differentiation of self. According to Bowen (1978), "the successful introduction of a significant other person into an anxious or disturbed relationship system has the capacity to modify relationships in the system" (p. 342). Bowen believed that this significant other could be an individual psychotherapist, if the psychotherapist is able to manage the intensity of the transference present in sessions (Titelman, 1998). This assertion that an individual psychotherapist could modify the relationships in the system allows for multiple therapeutic approaches to be used by the counselors to address differentiation of self and chronic anxiety through the course of counseling. The introduction of the counselor as this significant other that is able to manage the intensity of transference, while maintaining a strong therapeutic alliance with the client, also allows for counselors to employ a variety of techniques and approaches to increase the client's level of differentiation of self and not only a Natural Systems approach.

Previous Research on Differentiation of Self

Miller, Anderson, and Keala (2004) identified that there is little literature that validates a Bowenian approach to counseling compared to other theoretical approaches. One noted exception to this was the study conducted by Szapocznik, Kurtines, Foote, Perez-Vidal, and Hervis (1983), who examined a clinical population using a one-person Bowenian approach to counseling in comparison to another family therapy model. The results of this study provided evidence that Bowen family therapy was as effective as conjoint family therapy. The lack of research on the effectiveness of a Bowenian approach to counseling is contrasted by the research validating the construct of Bowen's differentiation of self (e.g., Jankowski & Hooper, 2012; Knauth, et al., 2006; Knauth & Skowron, 2004; Skowron & Friedlander, 1998).

Skowron and Friedlander (1998) validated Bowen's concept of differentiation of self through the development of the Differentiation of Self Inventory (DSI). This study by Skowron and Friedlander (1998) found the inverse relationship between differentiation of self and mental health symptoms hypothesized by Bowen's theory. Skowron and Schmitt (2003) provided further validation of the construct of differentiation of self through the revision of the original DSI. The Differentiation of Self Revised (DSI-R) developed by Skowron and Schmitt (2003) increased the reliability of the Fusion of Self and further validated Bowen's construct of differentiation of self. The development of this instrument to measure Bowen's construct of differentiation of self and its revised version led the way for other studies to provide further validation of this construct.

Knauth and Skowron (2004) used the DSI with an adolescent population to further validate the construct of differentiation of self in comparison to the State Trait Anxiety Inventory and the Symptom Pattern Scale. The results of the study conducted by Knauth and Skowron provided further validation of differentiation of self, but also was the first study to validate this construct with an adolescent population. They also found that differentiation of self mediated chronic anxiety and symptom development consistent with Bowen's (1978) theory. Knauth, Skowron, and Escobar (2006) also conducted a study on differentiation of self using an adolescent population. This study looked at the relationship between differentiation of self and high risk adolescent behavior. Knauth et al. (2006) identified a significant relationship between high risk behavior and differentiation of self among adolescents. Skowron, Stanley, and Shapiro (2009) provided further validation of Bowen's construct of differentiation of self, specifically, that higher levels of differentiation lead to higher levels of psychological well-being and interpersonal competence. The study supported the hypothesis that differentiation of self was a productive factor in reducing psychiatric symptoms.

Bartle-Haring, Glade, and Vira (2005) examined the role of differentiation of self in a clinical population during the course of treatment. The study found that participants that began the study with higher levels of differentiation of self had reduced symptoms and a fewer amount of symptoms than those that began treatment with lower levels of differentiation of self.

Demographic Variables

The demographic variables selected for this study were chosen for inclusion due to their identification in the literature and relationship to the current research questions.

Sibling position, family type, gender, age, and educational level were chosen due to their importance in the literature on not only Bowen's (1978) theory, but also the body of literature related to change through the counseling process. Bowen (1978) hypothesized that many demographic variables should not have an impact on an individual's expression of differentiation of self. However, this hypothesis has been contested in the literature. Skowron and Friedlander (1998) found that females were more likely to express lower levels of differentiation of self through emotional cutoff than males. Peleg (2008) also found differences in male and female participants' levels of differentiation of self and DSI-R sub scores as they relate to marital satisfaction. This association between gender and differentiation of self in the literature lends support to the validation of exploring gender in the current study.

Bowen (1978) also specifically looked at age in relation to differentiation of self. Bowen proposed that level of differentiation of self remained static throughout childhood and adolescence as anyone under the age of 25 did not have the ability to successfully differentiate from their family of origin. He also proposed that level of differentiation remained similar throughout the lifespan unless specific efforts were taken to change their level of differentiation of self. Skowron, Holmes, and Sabatelli (2003) contradicted Bowen's proposition as they found that older participants possessed lower levels of emotional reactivity and higher levels of differentiation of self than their younger counterparts.

Bowen (1978) theorized that parents pass on their level of differentiation of self through a process of multigenerational transmission. According to Bowen, children and young adults begin with similar levels of differentiation according to those found in the

family of origin. Allen, Stoltenberg, and Rosko (1990) found that family of origin type defined, as either intact (two biological parents in the home) or divorced/blended, significantly impacted family cohesion, support, and social desirability. Other studies that focus specifically on Bowen's theory also found significant differences in family type as it relates to differentiation of self in adult children (Johnson, Thorngren, & Smith, 2001; Johnson & Nelson; 1998; Johnson et al, 1995).

Bowen (1978) hypothesized that educational level should have no influence on an individual's level of differentiation and this hypothesis has been validated in several studies (Skowron & Friedlander 1998; Peleg 2008; Skowron, 2000; & Skowron & Dendy, 2004). These studies primarily consisted of participants either enrolled in college or having obtained a college degree and were not representative of a clinical population. One study that sought to obtain a clinical sample did find significance in educational level on attitudes toward treatment (Leaf, Livingston-Bruce, Tischler & Holzer, 1987). This contradiction warrants the exploration of the impact of educational level on a clinical population.

The final demographic variable to be examined in this study, sibling position, is one of Bowen's (1978) eight interlocking constructs that are central to his theory. Sibling position, also referred to as birth order, was described by Gilbert and Morawski (2005) as influencing the roles that an individual has in their family of origin and therefore, their level of differentiation. There have been no studies exploring Bowen's concept of sibling position (Capuzzi & Stauffer, 2015) resulting in a deficit in the literature that this study aims to address through the inclusion of this variable.

Summary of Methodology

This quantitative study will follow a similar design to Skowron and Shapiro's (2009) short-term longitudinal predictive design in order to examine the validity of construct of differentiation of self in a clinical population, and examine the relationship between differentiation of self and select demographic variables. Participants' levels of differentiation of self will be measured at two different times approximately three months apart. At each data collection point, participants will complete the self-report Differentiation of Self Inventory-Revised (DSI-R). During the first data collection point, a demographic questionnaire will be completed by the participants to provide information to explore the impact of demographic variables on differentiation of self and changes in level of differentiation of self in the adult clinical population.

CHAPTER 2: LITERATURE REVIEW

This literature review will first discuss Bowen's natural systems theory and the theoretical construct of differentiation of self. The concepts of solid-self and pseudo-self will also be explored due to their importance in understanding differentiation of self as a construct that exists on a continuum that influences a person's ability to function in their emotional system. This section will also examine Bowen's constructs of fusion and emotional cut-off. The similarities and differences between Bowen's theory and several developmental theorists will be explored. The clinical relevance of the construct of differentiation of self in counseling adults will also be reviewed. Subsequent sections will examine the literature related to effectiveness of the Bowenian approach to counseling and research on the construct of differentiation of self as they pertain to the proposed research questions. The few studies that have attempted to identify the impact of demographic variable to differentiation of self will also be reviewed.

Bowen's Family Systems Theory

Bowen's (1978) family systems theory identifies eight interlocking concepts that attempt to provide a comprehensive understanding of human behavior. These eight concepts are: the family emotional system, differentiation of self, emotional cutoff and fusion, family projection process, multigenerational transmission process, triangulation, sibling position, and societal regression. Bowen believed that these concepts provided a scientific understanding of human behavior (Fraser, McKay, & Pease, 2010). The underlying premise that chronic anxiety is omnipresent in life binds together these eight interlocking systems. Chronic anxiety is an inevitable part of life which may be expressed differently and with differing levels of intensity depending on specific family

situations and differing cultural contexts (Goldenberg & Goldenberg, 2013). Kerr and Bowen (1988) further detailed chronic anxiety:

Conceptualized as a system or processes that of action and reaction that, once triggered, quickly provides its own momentum and becomes largely independent of the initial triggering stimuli. The principle generators of chronic anxiety are peoples' reactions to a disturbance in the balance of a relationship system. (p. 113)

Bowen (1978) believed the seeking of therapeutic services represents a move towards a higher level of differentiation as the client is able to see a need for change. He identified the therapeutic relationship as central to the success of increasing differentiation of self. According to Bowen (1978), "the successful introduction of a significant other person into an anxious or disturbed relationship system has the capacity to modify relationships in the system" (p. 342). Bowen believed that this significant other could be an individual psychotherapist, if the psychotherapist is able to manage the intensity of the transference present in sessions (Titelman, 1998). This assertion that an individual psychotherapist could modify the relationships in the system allows for multiple therapeutic approaches to be used by the counselors to address differentiation of self and chronic anxiety through the course of counseling. The introduction of the counselor as this significant other that is able to manage the intensity of transference, while maintaining a strong therapeutic alliance with the client, also allows for counselors to employ a variety of techniques and approaches to increase the client's level of differentiation of self and not only a Natural Systems approach.

The use of multiple techniques and approaches to counseling is consistent with the literature on therapeutic alliance. Lambert and Bergin (1994) identified the therapeutic alliance as one of the common factors that made a significant contribution to counseling outcomes. The therapeutic alliance has been considered one of the most significant common factors impacting the outcome of treatment (Stevens, Hynan, & Allen, 2000). Counselor attributes that have been identified as contributing to the therapeutic alliance include honesty, flexibility, conveying respect, trustworthiness, warmth, openness, and being genuinely interested in the client (Baldwin, Wampold, & Impel, 2007; Norcross & Wampold, 2011). Messer and Wampold (2002) also identify that specific therapeutic approaches account for less variance in comparison to the therapeutic alliance in a meta-analysis of the literature. This is consistent with the assertion that the therapeutic techniques being employed do not have a significant impact on increasing differentiation of self as suggested by Bowen (1978) and Titelman (1998).

Differentiation of Self and the Solid Self

Knauth et al. (2006) identifies differentiation of self as the cornerstone of Bowen's eight interlocking concepts. Differentiation of self was also identified by Skowron and Friedlander (1998) as the personality variable that is most critical to mature development and the attainment of psychological health. According to Kerr and Bowen (1988), differentiation of self is defined as the capacity of the family system and its members to maintain thoughtfulness while experiencing strong emotions, managing emotional activity, and experiencing intimacy and autonomy in relationships. Kerr and Bowen (1988) also describe individuals who are more differentiated as being better able to regulate emotions, think clearly under stress, be less emotionally reactive, and remain

connected in relationships, while maintaining a clear sense of self both in and out of these relationships.

An individual who has reached a sufficient level of differentiation is considered to have developed, what Bowen (1978) termed, a solid-self. Those who have low levels of differentiation and remain fused or emotionally cut-off with their families of origin are considered to have developed a pseudo-self. The solid-self, or well differentiated self, according to Bowen, is characterized as having clearly defined beliefs, principles, opinions and values that are developed through intellectual reasoning. Emotional maturity, greater interpersonal competence, and lower psychological distress are characteristics of individuals with higher levels of differentiation as an enhanced level of differentiation allows an individual to modulate emotional arousal experienced during challenging interpersonal experiences (Skowron, Stanley, & Shapiro, 2008).

Fusion, Emotional Cutoff, and the Pseudo-Self

In contrast to the solid-self, the pseudo-self is defined as making choices based on emotional pressure from others (Bowen, 1978). The pseudo-self displays inconsistent decision making and an inability to define personal values that are separate from others. Individuals with low levels of differentiation seek the approval of others to momentarily reduce anxiety. The pseudo-self is expressed through either fusion or emotional cut-off

Fusion, according to Bowen (1978), represents a blurring of boundaries between the individual and others or the trading of autonomy for security in relationships. Bowen further discusses the consequences of fusion as difficulty in decision making, increased emotional reactivity, reduced tolerance for differences in others, and greater role constraint in relationships. Fused individuals are overinvolved with significant others in

decision making, opinion formation, and taking on the values of others without thoughtful examination. Emotional cutoff has been defined as the opposite of fusion from a Bowenian perspective. Instead of moving towards fusion, these individuals distance themselves either physically or emotionally from others in times of stress (Skowron, Holmes, & Sabatelli, 2003). Emotional cutoff is characterized by the less differentiated individual projecting a façade of independence despite lacking true autonomy (Skowron & Schmitt, 2003).

Kerr and Bowen (1988) describe less differentiated individuals as experiencing anxiety in response to emotional closeness with important others while those who gravitate towards fusion experience separation anxiety when important others act independently. In either case, less differentiated individuals engage in interpersonal distance regulation to manage anxiety and they remain preoccupied with feeling accepted or rejected in their most important relationships (Kerr, 1992). Originally, Bowen (1978) suggested that gender should have no impact on the expression of differentiation. Skowron and Friedlander (1998) however, found that females were more likely than males to engage in fusion, but there was difference in the tendency towards emotional cut-off. They found that less differentiated females tend to express emotional reactivity associated with fusion, however there was no significant difference among gender for emotional cut-off. These results were also suggested to be taken with caution as there were several limitations that reduced the validity of these results, which included an uneven group of male to female participants and the group of men had a higher level of education than the women. The researchers called for future studies to further investigate these preliminary findings using more equal grouping by gender.

Differentiation of Self and Developmental Theory

Bowen (1978) worked primarily with adults in therapy, as he did not believe that adolescents were able to resist family pressure to undo the progress made during treatment. He believed that adolescents lacked the emotional and cognitive maturity to resist these pressures from the family of origin. However, adolescence provides the basis for the extent an individual is differentiated from their family of origin when entering adulthood. This defines the basis in which a young adult first experiences the world away from the family of origin, and is considered an essential period in the developmental literature.

Erikson's theory of psychosocial development. During the adolescent stage of psychosocial development (ages 12 to 18), adolescents attempt to form their own sense of personal identity that is separate from their family of origin, which can have a continued influence into adulthood. Erik Erikson's (1964) description of the adolescent stage of development identifies the crisis of identity development versus role confusion in which adolescents attempt to develop roles, goals, and values that provide them with a sense of meaning and direction in life. According to Erikson (1964), failure to successfully complete this stage of development results in role confusion that does not allow for successful formation of a personal identity. While this model fails to adequately take into account the role of the family in adolescent development, there are parallels between Erikson's description of identity development and Bowen's theory of differentiation. For example, Jenkins, Buboltz, Schwartz, and Johnson (2005) examined the relationship between differentiation of self and Erikson's stages of psychosocial development and found that an individual's level of differentiation of self is highly predictive of

psychosocial development in young adults. They specifically identify a clearly developed sense of self and the ability to adhere to personal convictions and values as central to healthy psychosocial development.

However, from Bowen's (1978) point of view, this level of psychosocial development would be a reflection of the level of differentiation of self in the family of origin, as he believed that some families do not provide an environment that promotes adolescents' movement toward differentiation of self. While, at first glance, this may appear to run counter to Erikson's model, the idea of identity development at this stage is consistent throughout the literature. In the literature, adolescence is considered the point in which many people begin to launch from their families of origin (Carter & McGoldrick, 1999). Seiffe-Krenke (2006) explains that launching successfully from the family of origin results in an increase in preparedness to navigate the adult world. Successfully launching from the family of origin requires the development of a firm identity as identified by Erikson (1964), and is consistent with a higher level of differentiation of self according to Bowen (1978).

Marcia (1966) extended the theory of psychosocial development by introducing four stages of ego identity status. These statuses were developed to further build upon the process of identity development, characterized by Erikson (1964) as occurring in late adolescence, when the adolescent is leaving the home and needs to begin to establish a reciprocal relationship with society, while also maintaining a sense of self. This time period corresponds with Bowen's theory that an individual can begin to change their level of differentiation of self at the age of twenty five. Marcia's identity statuses represent a process that may occur several times throughout the course of an individual's

life in response to a crisis of identity. It is out of these identity crises that a new sense of self is born through further identity development.

The four statuses of ego identity, as proposed by Marcia (1966), include identity achieved, identity diffused, moratorium, and foreclosure. Marcia (1980) later identified that identity development did not end with the identity achieved status as this was a process that could reoccur due to identity crises throughout the lifespan. Marcia (1966) defines this crisis period as a period of engagement in which the individual engages in choosing among meaningful alternatives. The individual revisits the various statuses through this ongoing process of identity development.

The identity achieved status closely resembles that of Bowen's solid self. The identity achieved status indicates that the person has made a commitment to an occupation and ideology following the experience of a crisis period. The commitment to an occupation has been made through considering several choices and making a decision based on the individual's terms and not those of others. This commitment to an occupation can be seen as being representative of a higher level of differentiation of self as the commitment is made by the individual and not in response to or defiance of the wants of others. The commitment to ideology has resulted from a reevaluation of past beliefs and achieved a resolution. The identity achieved individual is also described by Marcia (1966) as being able to manage sudden shifts in the environment and unexpected responsibilities that may arise. In terms of Bowen's theory, this ability to manage sudden shifts in the environment would reflect a low level of emotional reactivity characteristic of a higher level of differentiation of self.

The status of identity diffusion represents the polar opposite of the identity achieved status. Individuals in this status may or may not have experienced a crisis period and exhibits a lack of commitment. This lack of commitment is seen in either a lack of interest in developing an ideology or sampling from various ideologies (Marcia, 1966). The status of identity diffusion also results in a change in self-concept based on feedback received by others (Marcia, 1980). This flexibility in identity is also present in those with lower levels of differentiation of self and is characteristic of the pseudo-self.

Marcia (1966) describes the moratorium status as one in which the individual is in crisis. Commitments in this status are vague and the individual appears to struggle with making commitments. Marcia's moratorium status is characterized by a struggle to attempt to compromise between the demands of society, the family of origin, and the individual's own desires. This struggle bears a close resemblance to the struggle of an individual with a low level of differentiation of self. Individuals in the moratorium status struggle with being able to separate their own identity from the world around them. Bowen's description of low levels of differentiation of self also includes this taking on of others values and ideals in place of their own.

While those in moratorium are struggling to find their own identity, Marcia's final status (foreclosure) most closely resembles what Bowen and Kerr (1988) would identify as the pseudo-self. An individual in foreclosure has not experienced a crisis, but expresses a commitment to the values and identity established by others. It is this commitment to the identity defined by others that most resembles Bowen's (1978) description of the pseudo-self. While in the foreclosure status, just as in the pseudo-self, the individual's values are the same as the family of origin. There is little difference

between the goals of the individual in the foreclosure status and those of the parents. These identity statuses developed by Marcia (1966) coincide with the description of Bowen's (1978) differentiation of self. The process described by Marcia's ego-identity status resembles the process of increasing levels of differentiation of self. The journey from foreclosure to identity achieved status shows a movement from a self that is defined by others, as in Bowen's pseudo-self, to that of commitment to an identity developed through identification of personal values and ideals similar to that of Bowen's solid self.

Loevinger's ego development theory. Bowen's theory of differentiation of self has also been referenced as complimenting Loevinger's theory of ego development (Meadows, 1982). Loevinger's (1966) theory was an outgrowth from Erikson's (1964) theory of psychosocial development and attempted to further define stages of development across the lifespan. Loevinger (1966) originally proposed seven stages of ego development to which she added two stages (Loevinger, 1976). The nine stages of Loevinger's (1966) theory of ego development are the presocial, symbiotic, impulsive, self-protective, conformist, transition from conformist to conscientious (self-aware level), conscientious, transition from conscientious to autonomous (individualistic level), autonomous and integrated. While these stages are chronological in their attainment, Loevinger (1966) noted that even adults can express the characteristics of earlier stages of development. The stages of Loevinger's (1966) theory of ego development that best exemplify the need for differentiation of self to promote ego development begin with the conformist stage and continue to the last stage of this model, the integrated stage. The conformist stage is highlighted by the individual beginning to identify his/her own welfare with that of the group, obeying the rules, and identification with a particular

group. The transition from conformist to conscientious stage is marked by an increase in self-awareness and an appreciation of multiple possibilities in situations. This growing awareness of an inner life separate from the group and ability to allow for exceptions from the norm allow for progression to this stage and the beginnings of the conscientious stage. The conscientious stage includes the long term, self-evaluated goals and ideals, self-criticism, and a sense of responsibility. The conscientious stage is where rules become internalized and based on the person's personal values instead of being based on the group or fear of punishment. The person in the conscientious stage begins to see the world in shades of grey instead of black and white. The transition from the conscientious to autonomous stage is characterized by a heightened sense of individuality and concern for emotional independence. This struggle for independence becomes related to emotions as it is that at this stage one can identify the possibility of being emotionally dependent even if they are physically independent. Once fully transitioned to the autonomous stage, the ability to cope with inner conflict emerges. There is not necessarily more conflict present at this stage, but an increased ability to acknowledge this conflict and deal with it in place of avoidance or projecting it on others. Reality becomes more complex and multifaceted than the dichotomous thinking present in the conformist stage. The recognition of the need of others for personal autonomy and the limitations to autonomy. The final stage of Loevinger (1976) model, the integrated stage, is identified as one of the hardest stages to describe and has been compared to Maslow's self-actualization (Kirshner, 1988). Reduced emotional reactivity, development of a logical response to others, and tolerance for other opinions without sacrificing one's own views or regressing to the values of the group best characterize this stage.

Meadows (1982) explored the role of differentiation of self in promoting higher levels of ego development in the later stages of Loevinger's model. The conformist stage was identified as being most comparable to that of the development of the pseudo-self. Just as exhibiting low levels of differentiation of self results in not being able to form values and opinions for one's self the conformist stage also signifies a need to adopt the personal values and morals of others. Kirshner (1988) describes Loevinger's stages of ego development in three groups of stages, pre-conformist, conformist, and post-conformist. These represent a movement from needs and immediate gratification (pre-conformist), to immersion of acceptance of others (conformist), to awareness of individual differences and separateness (post-conformist). This view of the stages of ego development mirrors that of Bowen's (1978) description of increasing levels of differentiation of self. Looking at this description from Bowen's (1978) perspective the conformist stages would exemplify the pseudo-self, while the post-conformist stages would be representative of movement toward a solid-self. Meadows (1982) identified increasing levels of differentiation of self as the key to further ego development. At higher levels of differentiation the individual can begin to develop an internalized sense of morality that is not dependent on the views or approval of others. The highest levels of differentiation, which equates to the autonomous and integrated stages in Loevinger's framework, are reached by very few, and can also be equated to Maslow's self-actualization (Loevinger, 1966).

The higher stages of Loevinger's (1966) theory share many characteristics of Bowen's description of the solid self. In these stages, Loevinger describes a movement toward integration in a similar fashion to Bowen's (1978) theory of differentiation. In

both theories the highest levels of development are described as involving reduced emotional reactivity, development of a logical response to others' and tolerance for other opinions without sacrificing one's own views or regressing to the values of the group. Both theories also recognize the rarity of an individual being able to reach the pinnacle of development or differentiation.

Kegan's adult development theory. Kegan (1982, 1994) outlined six stages of development, or orders of consciousness, that parallel the development described in Bowen's (1978) theory. The final three stages of Kegan's (1982, 1994) model, interpersonal or third order meaning making, institutional or 4th order meaning making, and inter-individual or 5th order meaning making stages, share the most in common with the higher levels of Bowen's (1978) construct of differentiation of self, while the earlier orders of consciousness described by Kegan (1982, 1994) are reflective of Bowen's description of lower levels of differentiation of self.

The incorporative balance and impulsive balance are the first two stages of Kegan's (1982) developmental theory and encompass birth to age seven. After age seven the individual begins to transition to the imperial stage. During the impulsive stage, Kegan's theory begins to resemble that of Bowen. Kegan's (1982) impulsive stage includes many of the characteristics of Bowen's (1978) pseudo-self. An example is the individual's reliance on others for feelings of self-worth and defining of personal values. This would however, be seen as developmentally appropriate from both theoretical lens due to Kegan (1982) defining this as a stage of childhood and Bowen (1978) identifying this as a normal progression, as he did not see an individual as being to differentiate from their family of origin until the age of 25.

It is at this time that Kegan describes a need for the parents to be able to provide adequate support and challenge in order for the child to progress to the next order of consciousness (Erikson, 2006). The role of the parents in this stage is similar to Bowen's description of how an individual's level of differentiation is defined by that of his or her parents through the multigenerational transmission process (Bowen, 1978). A parent who has not progressed past the interpersonal stage (3rd order meaning making) will not be able to provide the challenge and support need to provide adequate boundaries for the child, thereby limiting the child's ability to progress through latter stages of Kegan's model (Erikson, 2006). A parental unit that has not surpassed the interpersonal stage of Kegan's model shares characteristics with emotionally cutoff and fused families of origin described by Bowen (1978). These parents are unable to sufficiently set interpersonal boundaries and overcome parental yearnings for connection that reduce his or her ability to set clear boundaries between themselves and the child (Erikson, 2006), and perpetuates a lack of differentiation in the child.

The next stage in Kegan's (1982) theory can be seen as the first steps toward differentiation of self during the preadolescent stage of development. In the imperial stage, the individual begins to recognize the perspectives of others and that others also have needs. It is at this stage that the individual also begins to realize that egocentric behaviors are not acceptable to others (Kegan, 1982). Adolescence is highlighted by the transition from the imperial stage to the interpersonal stage. It is when expectations of the outside world on adolescents do not match their developmental level (i.e, the adolescent is not at the interpersonal stage) that there is often conflict with authority figures reflected in incarceration, substance abuse, employment problems, difficulties in

school, or emergence of psychiatric symptoms (Erikson, 2006). This result is similar to the findings presented by Knauth, Skowron, and Escobar (2006), who observed that adolescents with lower levels of differentiation of self were more likely to engage in high risk behaviors, such as, substance abuse and poor academic achievement, and the results of Knauth and Skowron (2004) who found that psychiatric symptoms in adolescents were related to lower levels of differentiation of self as compared to peers with higher levels of differentiation of self.

Kegan's interpersonal balance stage (3rd order meaning making) can be reflected in Erikson's (2006) assertion that such individuals are subject to or embedded in relationships, rules, and roles, but able to balance competing needs. These individuals have moved from the imperial balance in that they are good and productive citizens, are trustworthy and employable, take others into account, have the capacity for insight and consciousness, think before acting, exercise common sense, consider the long-term consequences of their choices, have friends, and develop a meaningful life based on clear ideals. These individuals are fully socialized, that is, they have internalized the values of society or their surroundings (Kegan, 1982). Individuals that have achieved interpersonal balance operate on the basis of the values, ideals, and beliefs with which they were raised (Kegan, 1994). This description of the interpersonal stage or 3rd order meaning making is reflective of an individual with a moderate level of differentiation. While individuals at this stage are able to perceive the perspective and needs of others, they are still not highly differentiated as the values, ideals, and beliefs are still those of their family of origin. Kegan (1994) describes the limitations to the interpersonal stage (3rd order meaning making) as being defined by relationships and others, needing to maintain even unhealthy

relationships, a high level of fusion and lack of intimacy, and following inner urges in an intuitive, unexamined, and sometimes reactive way. According to Kegan (1994), individuals at this stage are their relationships due to the defining of oneself by their relationship to others. Kegan's description is a close comparison to the description of Bowen and Kerr's (1988) description of the pseudo-self. In Bowen's theory, the differentiated individual bases his or her thinking and functioning on self-determined values, ideals, and beliefs that are independent of his or her family of origin.

Research indicates that between 20% and 30% of adults reach the stage of institutional balance or 4th order meaning making (Bar-Yam, 1991; Discon, 1986; Roy, 1993) meaning that most people operate from the interpersonal order of consciousness. This is another parallel with Bowen's (1978) theory as Bowen asserted that most individuals would not reach the higher levels of differentiation of self. Kegan (1982) describes the institutional balance stage (4th order meaning making) as achieving identity, a sense of self, self-dependence, and self-ownership. While this stage is representative of a step toward differentiation of self as there is the beginning definition of self, as opposed to the idea of self being imposed by others, the institutional stage of balance still describes the individual as deriving meaning from the institutions or organizations that the individual is affiliated with, such as peer groups, social class, gender or race (Kegan, 1982). This stage is also characterized by what Bowen (1978) would characterize as a level of emotional cutoff. There are the boundaries that have been set to protect the self from being compromised, however these boundaries have become rigid and keep others distant. The balance then becomes more focused on the self and not in being able to hold relationships and self equally.

In Kegan's (1982) interpersonal balance stage or 5th order meaning making, the individual is able to maintain their sense of self while also engaging in intimate relationships. Kegan (1982) defines intimacy as having a self to share as opposed to the previous stage's intimate relationship with one's self. Kegan (1982) also describes the yearnings to both be a separate distinct self and to be part of a community or relationship with others. These two yearnings have been described by Bowen (1978) as the togetherness force and the individuality force that are experienced by all human beings in the conflict between being part of a relationship, yet maintaining one's sense of self.

Just as Bowen (1978) identified the solid self as being able to maintain such a balance, Kegan (1982) identifies the interpersonal balance stage (4th order meaning making) as being able to engage in intimate relationships and not become lost or defined by those relationships. Kegan's (1994) description of self-authoring becomes less co-constructed at this stage than in previous stages. Those operating at the institutional stage, where self-authorship becomes possible are not able to take into account the views of others without fear of losing his or her sense of self however, those at the inter-individual stage become capable of engaging in a form of self-authorship that allows them to co-construct their reality while maintaining a solid self. Bowen (1978) would identify those at this stage as being highly differentiated as they are able to maintain intimacy, while also maintaining independence. Just as in Loevinger's (1966) theory, Kegan (1994) describes the highest stage of this model, the inter-individual stage (5th order meaning making), as being difficult to obtain with few progressing to this stage of meaning making.

Research on Effectiveness of Bowen's Natural Systems Theory

Bowen's natural systems theory is currently one of the most influential family theories used by counselors today. It is thus surprising that there is little literature that validates the effectiveness of a Bowenian approach in a clinical setting when compared to other theoretical approaches (Miller et al. 2004). One noted exception is Szapocznik et al. (1983) who examined a clinical population through the use of a Bowenian approach to counseling in comparison with another family therapy model. Michael Kerr, Bowen's successor as director of the Georgetown Family Center, provided a possible explanation for this lack of empirical evidence in his description of family therapy researcher's reluctance to challenge individualistic paradigms in research (Fraser et al., 2010).

Szapocznik et al. (1983) compared the relative effectiveness of conjoint family therapy (CFT) to one-person family therapy (OPFT) over a twelve session course of treatment. The authors defined CFT as therapy with the entire family present for most of the session, while OPFT was defined as therapy with only one member of the family present for most of the sessions. The group receiving OPFT in this study was treated using a Bowenian approach to family therapy while the CFT group was treated using Brief Strategic Family Therapy. The authors postulated that OPFT would achieve the therapeutic goals of structural family change and reduced symptom expression as effectively as CFT. The study was conducted with thirty-seven Hispanic families that were willing to receive either treatment approach. Through random assignment, nineteen of these families received OPFT, while the remaining eighteen families were assigned to the CFT group. Three clinical outcome measures were provided at intake, termination, and follow-up, the measures used at these intervals were the Psychiatric Status Schedule,

the Behavior Problems Checklist, and the Structural Family Tasks Ratings to measure outcomes of each form of treatment used in the study.

The results confirmed Szapocznik et al.'s (1983) hypothesis that one-person family therapy from a Bowenian approach is as effective as conjoint family therapy. The study also found that the reduction of symptoms and increase in family structure were maintained at follow-up. The experimental design of the study allowed for scientific evaluation of the efficacy of a Bowenian approach to treatment. However, the study was limited in its ability to generalize due to the exclusion of non-Hispanic families as participants in the study. Another limitation in the study was that it did not control for non-specific effects that could have influenced change in the families. The study also did not use a comparison group using a therapeutic model based on individual counseling theory to compare the effectiveness with either conjoint or one-person family therapy. This omission of this control group allows for the alternative hypothesis that changes in the families were due to a higher frequency of therapeutic contact in one-person family therapy than in the conjoint family therapy group due to the difficulty of retaining the entire family in therapy during the study.

Research on Differentiation of Self

Differentiation of self has been empirically researched over the years and is found to be a reliable and valid theoretical construct (Knauth, Skowron, & Escobar, 2006). Most often validation of the construct is found when comparing levels of differentiation with either symptom expression or the degree of problematic behaviors. This has been done through comparison between measures of differentiation with reliable measures of symptomology or behavior assessment. This theoretical construct has been empirically

validated among a general population of adults and to a lesser degree adolescents (e.g., Jankowski & Hooper, 2012; Knauth, et al., 2006; Knauth & Skowron, 2004; Skowron & Friedlander, 1998). While the majority of the current literature focuses on adult and general populations, there is currently a small segment of literature that explores the validation of this theoretical construct with a clinical population of both adults and adolescents.

There are several studies that have examined the validity Bowen's theoretical construct of differentiation of self despite the limited data regarding a clinical population. Skowron and Friedlander (1998) explored the validity of differentiation of self while developing an instrument to measure differentiation. The instrument created through this study was the Differentiation of Self Inventory (DSI). Skowron and Friedlander's (1998) study formed the basis for validation of Bowen's construct of differentiation of self using the DSI and consisted of three separate studies wherein the first and second study were used to develop the test. The third study then tested the hypotheses based on Bowen's work that (a) an inverse relationship would be found between symptomology and DSI subscales, thus validating Bowen's assertion that highly differentiated individuals experience fewer mental health symptoms and (b) that significant positive relationships between marital satisfaction and DSI subscale scores would support Bowen's theory that individuals with higher levels of differentiation of self have more satisfying marriages. The study used the DSI, Dyadic Adjustment Scale (DAS), and the Hopkin's Symptom Checklist's General Severity Index (GSI). A total of 127 adults associated with a northeastern state university, as faculty, family or friends of faculty, or graduate students, participated in the study.

The results of this study conducted by Skowron and Friedlander (1998) found that gender showed a significant relationship with emotional reactivity as $F(1,113) = 7.05, p = .01$, with women reporting more emotional reactivity than men. This result contradicted Bowen's (1978) hypothesis as the study demonstrated an inverse relationship between level of differentiation and emotional reactivity as those with higher scores of differentiation presented with lower levels of emotional reactivity. However, there were limitations to this study as the groups of men and women were not equal and the men in this study had a higher level of education than the women. This difference in education level could potentially have skewed the results. Skowron and Friedlander (1998) acknowledge that further research is needed to identify the role of gender as a moderator in the level of differentiation of self. This study also found that younger participants showed significantly greater difficulty with fusion $t(1,104) = 3.08, p = .003, r = .45$. The study provided further support of Bowen's assertion that a higher level of differentiation of self results in an increased ability to manage chronic anxiety leading to fewer mental health symptoms. An inverse relationship was found between higher scores of differentiation of self and the GSI indicating that higher levels of differentiation correspond to significantly lower levels of symptomatic distress $F(4,104) = 18.73, p = .0001$. However, one of the limitations of this study was that all participants in the study were connected with the university, which could imply a higher level of education than that of the general population. The Differentiation of Self Inventory (DSI) was revised by Skowron and Schmitt (2003) resulting in the Differentiation of Self Inventory-Revised (DSI-R). The Differentiation of Self Inventory-Revised (DSI-R) further validated the

construct of differentiation of self, while also improving upon the validity and reliability of the DSI.

The study by Knauth and Skowron (2004) examined if adolescents' level of differentiation of self mediated the relationship between chronic anxiety and symptom development. The participants in this study were 363 adolescents from a public high school in a mid-Atlantic state. Knauth and Skowron (2004) defined adolescents for the purpose of the study as ages 14 to 19 years of age. The participants were further identified as able to both read and write in English, however the proficiency of this ability was not specified. The DSI was used to measure differentiation of self, while the State Trait Anxiety Inventory was used to measure acute anxiety, and the Symptom Pattern Scale was used to measure psychological, psycho-somatic, and physical expressions of psychological distress.

The findings from this study support the hypothesis that Bowen's construct of differentiation of self is a valid construct for an adolescent population and that differentiation of self mediates the relationship between chronic anxiety and symptom expression. Construct validity of the DSI with an adolescent population was determined through factor analysis. A six factor model was used as it accounted for 30% of variance and also included all 46 items of the DSI. Items with a loading of .40 were interpreted in the factor analysis. These items loaded across the six factors with a loading of .40 or higher, indicating significance. Six items loaded on factor 1 (eigenvalue = 3.38, alpha = .71), seven items on factor 2 (eigenvalue = 3.06, alpha = .61), two items loaded on factor 3 (eigenvalue = 1.04, alpha = .66), two items on factor 4 (eigenvalue = 1.15, alpha = .71), five items loaded on factor 5 (eigenvalue = 2.27, alpha = .70), and 3 items on factor 6

(eigenvalue = 1.68, alpha = .63). This analysis yielded support for the instrument as a valid and reliable means to measure differentiation of self among this population on half of the subscales. The alpha values of the subscales below the .70 threshold for Cronbach's alpha indicate that additional psychometric evaluation with this population would be warranted despite the overall alpha of .84 for this instrument. The researchers noted that the changing of language in some of the items may have accounted for the deviation in Cronbach's alpha scores compared to the standard DSI. This also further validated that Bowen's concept of differentiation of self extends to adolescents.

Knauth and Skowron (2004) also found that differentiation of self mediated the relationship between chronic anxiety and the development of symptoms in adolescents. The study used three regression models to analyze the data. A univariate regression of Symptom Pattern Scale and State Trait Anxiety was found to be significant $\{F[1,355] = 184.62, p < .001, R^2 = .34\}$, indicating that lower chronic anxiety was associated with fewer reported symptoms. Multiple regression was then used on the State Trait Anxiety Inventory and DSI scores and was also found to be significant $\{F[1,355] = 174.73, p < .0001, R^2 = .33\}$, showing that greater chronic anxiety was significantly associated with lower levels of differentiation of self. Knauth and Skowron (2004) also found through a test of additional variance that mediation by differentiation of self predicted symptoms in their sample $\{\Delta F[1,354] = 10.36, p = .001, \Delta R^2 = -.02\}$. These analyses provide evidence for the mediating effect of differentiation of self on the relationship between chronic anxiety and symptoms, wherein chronic anxiety predicts lower differentiation of self, which in turn predicts greater symptoms. This again supported Bowen's (1978) theory

that higher levels of differentiation of self are a protective factor in symptom development and extended this theory to include adolescents.

Knauth, Skowron, and Escobar (2006) explored the effect of differentiation of self on adolescent high risk behavior, which was defined as high risk sexual behavior, alcohol or drug use, and low academic engagement. The study employed an ex post-facto cross sectional design to test the applicability of Bowen's theory of differentiation of self to adolescent high risk behavior. Specifically, the researchers hypothesized that adolescents with lower levels of differentiation of self, as identified through the use of the DSI, would exhibit higher rates of high risk behaviors than adolescents with higher levels of differentiation of self.

Knauth et al. (2006) surveyed 161 inner city high school students aged 14 to 19 years old. The participants completed the DSI, State Trait Anxiety Inventory, Social Problem Solving for Adolescents, Drug Involvement Scale for Adolescents, and the Sexual Behavior Instrument. While no significant relationships were found for age, possibly due to the limited age range surveyed, or ethnicity, there was a significant relationship found between gender, differentiation of self, and chronic anxiety. Males ($M = 3.78$; $SD = 0.55$; $t = 3.0$, $df = 159$, $p = .004$) scored significantly higher on levels of differentiation of self than female participants. Females ($M = 41.0$; $SD = 9.0$; $t = -2.3$, $df = 158$, $p = .02$) scored significantly higher on chronic anxiety than the males participants. Further analysis of the data showed a positive relationship between chronic anxiety and alcohol ($p < .01$), other drug use ($p < .05$), and an inverse relationship with academic engagement ($p < .05$). Academic engagement was also inversely related to high risk sexual behavior ($p < .05$) indicating that adolescents that were less academically engaged

were more likely to be engaged in high risk sexual behaviors. The study also found that chronic anxiety was a negative predictor of social problem solving ($F(2,156) = 14.173, p \leq .001, R^2 = .15$), while adding differentiation of self to the equation did not add to the total variance explained. This supported the authors' hypothesis that chronic anxiety mediates the relationship between differentiation of self and social problem solving in adolescents. The results of this study support the validity of Bowen's theoretical model. The significant relationships between differentiation of self, chronic anxiety, and social problems solving showed that adolescents with high levels of differentiation of self are better able to manage anxiety and in turn display a higher degree of ability to solve social problems. This study was limited by its use of self-report and convenience sampling. The study also did not provide any evidence that would negate Bowen's (1978) assertion that an adolescent's level of differentiation of self is dependent on the level of differentiation present in the adolescent's family of origin. Therefore, this study serves to validate the construct of differentiation of self in an adolescent population and not whether or not the level of differentiation of self could be changed through counseling in an adolescent population.

Skowron, Stanley, and Shapiro (2009) investigated Bowen's assertion that differentiation of self leads to higher levels of psychological well-being and interpersonal competence. The study used a short-term longitudinal design as opposed to the cross-sectional designs in previous studies of differentiation of self. While Skowron et al. (2009) used this approach to test over time relationships with differentiation of self and psychological and interpersonal well-being among a population of college age students, this study will use a similar design to identify potential changes in differentiation of self,

and test the effects of demographic moderators on differentiation of self, in an adult clinical population.

Skowron et al. (2009) found that when DSI sub-scores were added into the analysis of psychological distress from Time 1 to Time 2 there was a significant prediction of psychological distress in Time 2 [$\Delta F(4,127) = 7.48, \Delta R = .07, p < .0001$]. The researchers' found that lower emotional reactivity, better ability to make I statements, and lower emotional fusion and cutoff from others as measured in Time 1 predicted lower systemic distress at Time 2. These results provided further evidence for Bowen's (1978) theoretical assertion that greater levels of differentiation of self lead to reduced psychological distress. While this study was limited by the use of a convenience sample of college age students, it provided support for the assertion that differentiation of self is a protective factor in reducing psychiatric symptoms and worthy of further exploration.

Bartle-Haring, Glade, and Vira (2005) examined the role of differentiation of self in the reduction of psychiatric symptoms in a clinical population. They looked at the impact of initial levels of differentiation of self on how quickly symptoms were reduced throughout the course of treatment. The researchers found that participants who began the study with higher levels of differentiation of self had significantly reduced symptoms and a fewer amount of symptoms than those that began treatment with lower levels of differentiation of self. One of the limitations of this study was the use of clients at a college counseling clinic. It is possible that clients seeking services at a college counseling clinic may have a higher beginning level of differentiation than those seeking counseling services at other service providers. The impact of higher levels of education

on level of differentiation of self was also identified as a limitation in the study conducted by Skowron and Frielander (1998). Nonetheless, these results have significant implications for the current study as it supports the validity of Bowen's construct of differentiation of self in a clinical population.

Demographic Variables

Sibling position, family type, gender, age, and educational level represent the demographic variables examined as part of this study. These particular demographic variables were chosen due to their importance in the literature on not only Bowen's (1978) theory, but also the body of literature related to change through the counseling process.

Gender. Bowen (1978) originally hypothesized that gender would not have an impact on an individual's expression differentiation of self. Males and females, from Bowen's perspective, would express lower levels of differentiation of self at a similar rate through either fusion or emotional cutoff. However, later research by Skowron and Friedlander (1998) indicated that females were more likely to express emotional reactivity through fusion than males. This study did, however, support that there was no difference between males and females in expression of low level of differentiation of self through emotional cutoff. The authors caution that due to limitations in their study there exists a need for further research into the impact of gender on differentiation of self.

Peleg (2008) specifically looked at the difference in DSI-R subscale scores on marital satisfaction for both males and females. The findings in this study indicated that higher scores of differentiation on the Emotional Reactivity, Emotional Cutoff, and "I" Position subscales were associated with greater marital satisfaction for male participants,

while females with higher levels of differentiation of self, indicated by high scores on the Emotional Reactivity subscale, were found to experience increased marital satisfaction.

While these studies do not specifically address the questions posed in the current study, they do indicate the potential differences in the expression of differentiation of self by gender and the differences in expression of differentiation by gender. This association between gender and differentiation of self in the current literature lends support to the validation of exploring gender in the current study.

Age. Bowen (1978) suggested that the formation of an individual's level of differentiation of self was developed in the family emotional system through childhood and adolescence and remained similar throughout the lifespan unless efforts were taken by the individual to increase levels of differentiation. Bowen did not feel that an individual could effectively begin to change their level of differentiation until the age of 25 due to the continued impact of the family or origin on their ability to express interpersonal development through a change in differentiation of self. Skowron, Holmes, and Sabatelli (2003) however, contradicted this assumption of Bowen's theory. This study provided evidence that older participants of the study possessed lower levels emotional reactivity and higher levels of differentiation of self than the younger participants. One criticism of this study was that the age range of the participants was from young to middle adulthood and did not include older adulthood (Kim-Appel, Appel, Newman, & Parr, 2007). Further studies also suggested that age has a significant impact on differentiation of self (Skowron, 2000; Skowron & Friedlander, 1998). However, these studies were also contradicted by Skowron, Wester, and Azen (2004). In this study it was found that demographic variables play no role in differentiation of self. These

conflicting results indicate a need for further exploration of the role of age in differentiation of self and related DSI-R subscales. While the assertion that differentiation of self is static across the lifespan is logical, there is a current lack of data in the literature supporting this claim (Kim-Appel et al., 2007), and justifies the inclusion of this demographic variable in the current study.

Family type. Bowen (1978) theorized that parents pass on their level of differentiation of self through a process of multigenerational transmission. According to Bowen, children and young adults begin with similar levels of differentiation according to those found in the family of origin. For the purpose of this study two family types will be explored as demographic variables, intact and blended/divorced families of origin. Allen, Stoltenberg, and Rosko (1990) found that family cohesion, family support, and the tendency to present one's family in a socially acceptable way were significantly higher for participants from intact families than from divorced/blended families. This study by Allen et al. (1990) also found that participants from divorced families tend to seek separation from their family of origin consistent with Bowen's construct of emotional cutoff. Johnson, Thorngren, and Smith (2001) found that participants who experienced divorce in their family origin has significantly lower levels of differentiation of self, as measured with the DSI. Johnson et al. (2001) also found that participants from family of origin where divorce has occurred experience increased emotional reactivity and higher levels of emotional cutoff. These results supported previous research conducted by Johnson and Nelson (1998) and Johnson et al. (1995) that divorce in family of origin would lead to higher levels of emotional cutoff and lower level of differentiation of self.

Education level. Bowen (1978) hypothesized that educational level, in addition to other demographic variables, should have no influence on an individual's level of differentiation. However, as seen in previous studies that examined these other demographic variables, Bowen's assertion were not validated (Skowron & Friedlander 1998, Peleg 2008, & Skowron, 2000). Skowron and Dendy (2004) found that education level was not significantly correlated with differentiation of self among a general population. While these studies have supported Bowen's claim, these studies do not represent a clinical sample of adults. These studies primarily consisted of participants either currently enrolled in college or having obtained a college degree (Skowron & Friedlander 1998, Peleg 2008, and Skowron, 2000). Other studies that have intentionally sought a more diverse sample in regards to education have found significance in educational level as it relates to mental health treatment. One such study by Leaf, Livingston-Bruce, Tischler, and Holzer (1987) found that attitudes toward treatment were significantly more negative among participants with no post-secondary education versus participants with a post-secondary education. This sample in the study conducted by Leaf et al. (1987) consisted of participants of various education levels and was focused how demographic variables influenced participation in treatment. The contradiction found in the literature on the influence of education level warrants further investigation of the role of educational level in progress in treatment and differentiation of self.

Sibling position. Sibling position is one of Bowen's (1978) eight interlocking constructs that are central to his theory. Sibling position, also referred to as birth order, was described by Gilbert (2006) as influencing the roles that an individual has in their family of origin and therefore, their level of differentiation. Bowen (1978) believed that

an individual's sibling position resulted in fixed personality characteristics and that sibling position is a means to assess differentiation. Capuzzi and Stauffer (2015) suggested that birth order is an important factor influencing an individual's triangulation and the impact of the multigenerational transmission process, ultimately determining an individual's level of differentiation. Bowen's construct of sibling position was derived from Toman's (1976) personality theory which predicts that the family constellation impacts emotional development and personality.

While there have been no studies exploring Bowen's concept of sibling position (Capuzzi & Stauffer, 2015), the two studies that have examined Toman's theory on sibling position have failed to find support (Miller, et al, 2004). There has been some indirect research that does support Bowen's construct of sibling position based on research that supports that birth order, particularly for first born children, impact personality characteristics (Eckstein, 2000; Watkins, 1992). Also, related to Bowen's construct of sibling position and more extensively studied, is the work of Alfred Adler in describing the impact of birth order on personality development.

Adler described birth order's impact on development as follows: 1) Children of the same family are not born into the same environment. The second child is born into a different psychological situation than the first. 2) It is not the actual order of the birth, but the psychological situation which is important. If the eldest is feeble-minded, the second may assume the role of a first-born. 3) Marked difference in age between siblings tends to reduce competition between them. 4) Birth order is not an absolute determinant, only an influence. The reaction of the parents to the child is at least as important (Adler, 1964). This description of birth order shares many similarities to that of Bowen's theory.

In this description, the impact of the family's level of differentiation, as seen in the reaction of the parents, has an influence over the development of the child's personality. Adler, however, makes a distinction between the chronological order of birth, ordinal position, versus the five basic positions that Adler theorized had recognizable characteristics later in life. These positions are first born, second, middle, youngest and only. (Shulman & Mosak, 1977)

Shulman and Mosak (1977) identify the differences in personality traits as defined by ordinal positions; however they also noted limitations of Adler's ordinal position as it relates to research. The limitations that they discuss related to ordinal position are that it does not fully account for a wide variety of family size, specifically those of families with greater than four children. They also note that due to this limitation researchers have begun to use the term birth order and refer to oldest, youngest, middle, and only children. Kammeyer (1967) identifies that birth order often is found to have an impact on various dependent variables being studied, but provides caution in reporting effects of birth order without an intentional approach to its study. Kammeyer (1967) makes the assertion that many studies include birth order after it is found to have a significant effect resulting in little theoretical understanding of why it is significant. This study follows the approach described by Shulman and Mosak (1977), to classify sibling position in order to provide more clarity and account for the many different family sizes encountered in this study, while also heading the caution of Kammeyer (1967) by basing the exploration of birth order on Bowen's (1978) theory.

CHAPTER 3: METHODS

Overview of Methodology

This quantitative study followed a similar design to Skowron and Shapiro's (2009) short-term longitudinal predictive design in order to identify changes in the levels of differentiation of an adult population that may occur during the course of counseling, and examine whether demographic variables effect potential changes in the levels of differentiation. Participants' levels of differentiation of self were measured approximately three months apart. This time frame is consistent with the design used by Skowron and Shapiro (2009). It also allows for an increased ability to minimize participant drop-out as opposed to a longer duration between data collection points where there is greater potential for the participants to discontinue counseling services. The site being used for data collection identified an average duration for counseling services as being 3.2 months from intake to discharge, therefore three months was used the second data collection point in order to attempt to have as many participants available for the second data collection.

At each data collection point, participants completed the self-report inventory, the Differentiation of Self Inventory Revised (DSI-R). During the first data collection point (Time 1), a demographic questionnaire was completed by the participants to provide information needed to explore the impact of demographic variables on differentiation of self and the impact of these demographic variables on change in differentiation of self through counseling.

Instruments

Differentiation of Self Inventory Revised (DSI-R)

The primary instrument that will be used in the study will be the Differentiation of Self Inventory Revised (DSI-R) developed by Skowron and Schmitt (2003). The DSI was originally developed using a sample of 313 adults with a mean age of 36.8. The norm group for the DSI was taken from employees at a university that responded to a request for participants and consisted of faculty, administrative, and maintenance staff members and their families.

Skowron and Schmitt (2003) revised the DSI in order to increase reliability on the Fusion with Others subscale. The DSI-R had a sample of 225 adults and the Fusion with Others subscale was increased to 12 items which raised the total number of items on the DSI-R to 46. Internal consistency reliabilities were calculated using Cronbach's alpha which resulted in a DSI-R full scale of .92.

The subscales have also been shown to have high reliability using Cronbach's alpha (FO=.86, ER= .89, IP=.81, and EC=.84) in the DSI-R. The scoring for each subscale includes reverse scoring. Higher scores on each of the subscales represent a higher level of differentiation of self. It would be expected that participants with higher scores on the subscale of Emotional Cutoff would have lower scores on Fusion with Others and those with higher scores on Fusion with Others would have lower scores on Emotional Cutoff based on Bowen's (1978) theory that lower levels of differentiation of self result in either Emotional Cutoff or Fusion with Others. Participants with high scores on the subscale of Emotional Reactivity exhibit the less emotional reactivity indicating a higher level of differentiation. A higher score on the "I" Position subscale

indicates an increased ability to take an “I” Position indicating a higher level of differentiation. The full scale score of the DSI-R is a result of the sum of the subscales. The DSI-R has been selected as the instrument that will be used for this study. The development of the DSI and the DSI-R has led to increased empirical support for Bowen’s concept of differentiation of self. The validity of this construct had been derived from adult populations until Knauth and Skowron’s (2004) study investigating the psychometrics of the DSI-R with an adolescent population.

Jankowski and Hooper (2012) confirmed the psychometrics of the DSI-R through a confirmatory factor analysis using an additional 749 participants. A longitudinal study conducted by Skowron, Stanley, and Shapiro (2009) was the first to use the DSI-R over time in concert with several other inventories. The results of the study indicated that the DSI-R maintained consistency over time and correlated with more thoroughly tested measurements, such as the Parentification Questionnaire and the Brief Symptom Inventory.

Research Procedures

After receiving consent and assent from the subject, a paper version of the DSI-R and demographics questionnaire was administered to the subjects at the community mental health center where they received counseling services. Counseling services that were provided were limited to individual outpatient counseling services. Individuals participating in other levels of care or treatment modalities were not eligible for the study. The community mental health center staff, that provided the counseling services between data collection points, were given a brief overview of the study being conducted and the instruments being used to collect the data at their weekly clinical staff meeting.

Each of the participating community mental health center staff that provided the counseling services ranged from Masters to Ph.D. level clinicians either with a license or in the process of seeking licensure in the state of Pennsylvania. There were four male and 6 female clinicians that provided the counseling services for the participants that completed time one and time two data collections. The ten total clinicians that had participants at both data collection points consisted of five Licensed Professional Counselors, two Licensed Social Workers, and three clinical psychology Ph.D. level staff members. The community mental health agency does not have a standard approach that clinicians must follow resulting in various approaches to counseling being used among the clinicians during the three month provision of counseling services.

Participants were instructed on how to complete the inventories, where they were able to complete the inventories within ten to thirty minutes. Participants that needed additional time to complete the instrument were given permission to do so following their session however, only one participant did so. The subjects then completed the DSI again following three months of treatment following the same procedure.

Purposive sampling procedures were used for this study. The sample consisted of volunteer participants aged 18 and older, with no upper limit for age, who are receiving counseling services at the participating agency. Participants with previous episodes of counseling services were not to be excluded from the study. The total sample size at first data collection was 43 from a community mental health center in northwestern Pennsylvania. The study sought to recruit 100 participants and the impact of this difference is reflected in the limitations of this study. The recruitment of participants was hampered by the closure of the second participating agency prior to data collection. The

mental health center was selected because of their accessibility to the researcher. This facility has been identified as providing services to a large segment of the identified sample population and have administrators and direct care staff who were willing to collaborate in the study. The age range of the participants is consistent with that used in previous studies using the DSI-R.

Following IRB protocol approval, recruitment began in the community mental health centers. Potential participants were presented with a request for research participation via the intake process when they began services or through direct care and/or administrative staff at their mental health service provider. Consent forms were also provided at this time. Participants signed these consent forms prior to the administration of the instrument. Once consent forms were signed each participant received a paper version of each instrument to complete with a pre-assigned ID number at the top of the form. Community mental health center staff added the clients' names to the ID number in a database maintained by the researcher to ensure confidentiality and allow for ID numbers to remain consistent in the second data collection. The researcher was only provided the ID number. Two gift cards valued at \$25 were raffled off at the end of the study for any interested client meeting the criteria for the study. Two winners were randomly picked via ID number for each gift card using an online random number generator (www.random.org).

Once the data were collected, they were entered into SPSS for statistical analysis. Outliers were controlled for through either transformation of the data or elimination of these outliers from further statistical analysis according to the procedures described by Field (2013). Two outliers were excluded based on their extremely high educational

levels. The eliminated participants each held a Master's degree and represented a significant departure from the rest of the participants. In order to answer the research questions concerning the identification changes in differentiation of self and the DSI-R subscales as a function of demographic variables, various statistical analyses were used. These included t-tests, ANOVA, and MANOVA. The assumption of homogeneity of variance was addressed using Levene's test for each t-test. Levene's test was not significant ($p \geq .05$) for all of the t-tests performed in the study indicating that the assumption of homogeneity of variance was not violated. Data was transformed in the t-tests using the compute function in SPSS to find the adjusted values for each variable to compensate for the low sample size and maintain the assumption of normality. Due to the low response rate at time 2 of data collection data transformation and post-hoc tests were used to control for Type I error and provide the ability to use a small sample size in the analysis of the data as described in Field (2013). The use of data transformation and post-hoc testing allowed for the data to be analyzed without further recruitment of participants. In the ANOVAs conducted in this study the assumption of sphericity was maintained, despite the low sample size, through the use of the Bonferroni multiple comparison test in order to maintain the statistical power of the tests and controlling for Type I error. In the MANOVA the assumptions of multivariate normality and homogeneity of covariance matrices were tested using the univariate tests of normality similar to the ones used to test the ANOVA for normality and Box's test respectively.

The Effect Size, Cohen's d Calculator for T Test tool on the Easy Calculator website was used to compute the effect size in the data analysis. This website uses the formula provided in Field (2013) to compute d and r . In research question 5, the cocor

website was used to compare effect sizes. Diedenhofen and Musch (2014) developed this website to address a gap in current statistical software for statistical comparisons.

This study attempted to address a lack of research examining potential changes Bowen's concept of differentiation of self as a function of demographic variables in a clinical population and change in level of differentiation of self following 3 months of counseling. The DSI-R has been shown to be a valid and reliable measure for differentiation of self across various populations.

Human Participants and Ethical Practices

Individuals were provided a flyer announcing the opportunity to participate in a research study upon arrival for their scheduled counseling session at their service provider. Those individuals interested in participating in the study were provided with consent releases and a description of the study including protection of confidentiality and participants' rights. Participants were informed that there were no greater risks than those presented in everyday life and that should they experience any distress from their participation agency staff including their assigned therapist was available to assist them. They were also informed that their name will be linked to a unique ID number and kept separately in a password protected data base from the surveys. Participants were also informed of the need for this database in order to link their initial survey to the second survey as only ID numbers will appear on the collected surveys. Participants' responses to the surveys will only appear in summaries with other participant responses and all data will be deleted following the 5 years required to maintain original records.

The participants were informed that there is no obligation to participate in the study and that they are free to end their participation in the study at any time without

consequence. If a participant decided to drop out of the study any completed forms were destroyed immediately in compliance with HIPPA regulations. Incomplete surveys and accompanying demographic forms were also disposed of in this manner. A chance to win a \$25 gift card was listed on flyers to promote participation in the study, but that the participants' chance to win is not contingent on their participation in the study.

CHAPTER 4: RESULTS

The purpose of this study is to explore the potential changes in differentiation of self as a function of demographic variables such as age, birth order, family of origin type, education level, and gender. This study also examined if counseling impacts levels of differentiation of self in an adult population, and if these changes in differentiation of self change as a function of demographic variables, including age, family of origin type, birth order, education level, and gender. The study also examined the impact of counseling and demographic variables on subscale scores on the Differentiation of Self Inventory-Revised (DSI-R). This study will extend the literature in identifying whether counseling impacts differentiation of self, and whether changes in differentiation of self vary as a function of these demographic variables.

Analysis of the Data

Descriptive Analysis of Sample

At the conclusion of data collection 61 participants completed a consent to treatment form and submitted a survey. Of these 61 participants, 18 surveys were eliminated from the study due to not entering responses on the DSI-R and incomplete demographic questionnaires. A single survey was eliminated due to a missing signature on the consent form. This resulted in the final sample of 42 participants at the initial collection of data. These participants had completed both the demographic questionnaire and the DSI-R with a signed consent to participate in the study. All participants were of appropriate age for the study, as there were no participants or surveys completed by anyone under the age of 18. All participants were attending their first session at a rural Northwestern Pennsylvania community mental health center. Initially, another

community mental health center had agreed to participate in the study however, this community mental health center ceased to operate prior to data collection.

Demographic variables at time one. The study examined several demographic variables and their relationship to differentiation of self scores. These demographic variables were derived from the demographic questionnaire provided at Time 1 of data collection. Males consisted of 54.8% of the sample ($n = 23$) with females accounting for 45.2% ($n = 19$) of the sample at Time 1 of data collection. Age was also collected as a demographic variable with the youngest participant being 18 years old and the oldest participant of 56 years of age. The sample had a mean age of 33.71 ($M = 37.1, SD = 10.34$).

Table 1

Descriptive Statistics Age in Years

	N	Minimum	Maximum	Mean	Std. Deviation
Age in years	42	18	56	33.71	10.336
Valid N	42				

The demographic variable of age was further separated into three categories (18 to 25 years old, 26 to 45 years old, and 46 to 65 years old) for further analysis. The three categories were selected based on the previous research on differentiation of self and Bowen's (1978) assertion that anyone under the age of 25 years old would not be able to change their level of differentiation. This assertion made by Bowen set the upper limit for the first age category at 18 to 25 years old. The third age category, 46 to 65 years old was determined by the exploration of differentiation of self in an older adult population as conducted by Kim-Appel et al. (2007). The setting of the upper and lower age categories then left the remainder of the participants to be grouped in the 26 to 45 year

old category. These three categories of age allowed for comparison of the assertions made in the literature on the impact of age on levels of differentiation of self. Table 2 shows the distribution of participants by age category.

Table 2

Age of Participants by Category

	Frequency	Percent	Valid Percent	Cumulative Percent
18 to 25	16	38.1	38.1	38.1
26 to 45	20	47.6	47.6	85.7
45 to 65	6	14.3	14.3	100.0
Total	42	100.0	100.0	

As shown in Table 2, 47.6% of participants ($n = 20$) were between the age of 26 to 45 years old with 38.1% ($n = 16$) identifying as age 18 to 25. These two groups accounted for 85.7% of the study participants with those ages 46 to 65 consisting of 14.3% (6) of the sample.

Educational Level was divided into 2 categories for analysis (High School and Above High School). Those in the category identified as High School have obtained a high school diploma or equivalent degree and represented 61.9% of the sample ($n = 26$), while those in the Above High School category represented 38.1% of the sample ($n = 16$). Those in the Above High School category had attended some form of schooling beyond the high school diploma or equivalent. This group was collapsed following the initial data collection as there were too few participants in the previous categories that specified the type of education beyond the high school diploma level.

Birth Order was also divided into 3 distinct categories as this study was not designed to address the variety of family sizes represented in the study. The three

categories (first born/only child, middle, and last born) were derived from the literature on birth order studies (Capuzzi and Stauffer, 2015; Gilbert, 2006; Eckstein, 2000; Watkins, 1992; Shulman and Mosak, 1977; Kammeyer 1967). Those participants that were identified as the Middle category identified themselves as any place in the birth order that was not first born, last born, or an only child. The variety and range of responses would not allow for further breakdown of this group in this study. The Middle category account for 16.7% ($n = 7$) of participants, while those identifying as First Born/Only accounted for 35.7% ($n = 15$) and those identifying as the Last Born had the highest representation in the study at 47.6% ($n = 20$).

The demographic variable of Family of Origin was also collapsed due to the range of responses to family type on the demographic questionnaire. This variable was made into 2 groups (intact and blended/divorced). These groups were derived from the literature and provide for analysis between a two biological parent family of origin and those that do not consist of two biological parents. In this study, 40.5% of participants ($n = 17$) identified as being from an intact family of origin while 59.5% ($n = 25$) identified as being in the blended/divorced category.

DSI-R time one scores. The descriptive function in SPSS was used to identify trends in DSI-R scores and demographic variables. Each demographic variable was analyzed using this procedure to identify descriptive statistics related to each variable in order to provide an overview of the sample. Each demographic variable was tested for significance, in the context of this study, through the statistical analysis of the research questions. The Time 1 scores for total differentiation of self ranged from a low score of 99 to the highest score of 260 ($M = 170.31$, $SD = 38.99$). Males in the study presented

with an initial full score of differentiation of self of $M = 176.30$, $SD = 39.84$ and female participants $M = 163.05$, $SD = 37.71$. Time 1 scores for Education Level showed that those identifying as having a high school diploma or equivalent had a mean score of $M = 175.00$, $SD = 35.65$ while those identified as having some form of postsecondary education had an initial mean score of $M = 162.69$, $SD = 44.01$. Those identifying their family of origin as Intact had a mean DSI score at Time 1 of $M = 168.24$, $SD = 36.15$ and those identifying as Blended/Divorced had a mean score of $M = 171.72$, $SD = 41.49$. Participants identifying as a first or only child had a mean full DSI-R score at time one of $M = 180.27$, $SD = 45.35$ as compared with Last Born ($M = 165.60$, $SD = 35.80$) and Middle ($M = 162.43$, $SD = 33.73$).

DSI-R time two scores. The sample size at Time 2 ($N = 19$) of data collection experienced high dropout when compared to Time 1 ($N = 42$) resulting in the need to compute adjusted scores or conduct post-hoc tests, such as the Bonferroni multiple comparison test for the statistical procedures used to analyze the following research questions and hypotheses in order to reduce the likelihood of Type I error. The methods for transformation of data and post-hoc testing followed the procedures in Field (2013) to address low sample size and allow for the interpretation of the results of the study to remain valid, if limited. Due to the high rate of attrition a chi-squares test for differences was conducted to check for possible attrition bias. There was no significant association between those that dropped out of the study and those that remained on each of the demographic variables in the study as chi-squares for the participants that stayed in the study ($X^2(23) = 20.00$, $p = .29$) and those that did not ($X^2(34) = 38.00$, $p = .29$). A paired sample t-test was also performed to examine potential differences between those

that remained in the study and those that did not. The results of this paired samples t-test were did not show a significant difference $M_{\Delta} = 13.76$, 95% CI [-38.213, 19.582] as $t(18) = -.677$, $p = .507$. This lack of significance in both the chi-square and t-tests indicates that attrition bias was not a factor in the study.

Research question 1 and hypothesis. Are outpatient counseling services associated with a change in differentiation of self in an adult clinical population?

H₁: Outpatient counseling services are associated with a significant change in differentiation of self in an adult clinical population.

A paired-samples T test was used to identify if there was a significant difference in mean scores of differentiation of self from data collection Time 1 to data collection Time 2. Outpatient counseling services were provided to the participants in the 3 months prior to collection of Time 2 differentiation of self data. Due to the low rate of response at Time 2 of data collection, the data were transformed using the methods for data transformation in a paired-samples t-test in Field (2013). The transformation of the data was conducted to ensure that the assumption of normality in the paired-sample T test would not be violated due to the small sample size. This was done using the compute function in SPSS to find the adjusted values for each of the variables. The effect size was calculated using The Effect Size, Cohen's d Calculator for T Test tool on the Easy Calculator website.

On average, individuals reported higher levels of differentiation of self following 3 months of outpatient counseling services as ($M = 179.73$, $SE = 2.01$) than at their time of beginning services ($M = 164.79$, $SE = 2.01$). This difference, $M_{\Delta} = 14.95$, 95% CI

[6.50, 23.39], was significant $t(18) = -3.72, p = .002$, and represented a medium effect size, $d = 0.66$ as shown in Table 3 and Table 4.

Table 3

Paired Samples Test pre and post DSI-R results

	Paired Differences				
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference	
				Lower	Upper
Change Scores	14.94737	17.53243	4.02221	6.49701	-23.39773

Table 4

Paired Samples Test pre and post DSI-R results

	T	Df	Sig. (2-tailed)
Change Scores	-3.716	18	.002

Research question 2 and hypothesis. Does differentiation of self in an adult clinical population vary as a function of demographic variables, including age, gender, family type (e.g., intact vs. blended/divorced families), birth order, and educational level? H₂: Demographic variable of gender, family type (e.g., intact vs. blended/divorced families), birth order, and educational level are significant predictors of differentiation of self in an adult clinical population at data collection Time 1.

Age was analyzed using correlations due to the differences in the demographic variables while the other demographic variables were analyzed using MANOVA. Age ($r = -.007, p = .964$) was found to have no significant relationship with the Time 1 score of differentiation of self as measured by the DSI-R. H₂ is rejected for this subset of

demographic variables. These data suggest age is not a significant predictor of differentiation of self in an adult clinical population.

As shown in Table 5, the remaining demographic variables of gender, education level, family of origin, and birth order also resulted in rejecting H₂. Using Pillai's trace, there was no significant effect on differentiation of self by Gender $V = .006$, $F(1, 7) = .042$, $p = .84$, Education Level $V = 1.83$, $F(1, 7) = 1.57$, $p = .25$, Family of Origin $V = .25$, $F(1, 7) = 2.37$, $p = .17$, Birth Order $V = .05$, $F(1, 7) = .19$, $p = .83$. Separate univariate ANOVAs on the outcome variables confirmed non-significant effects on differentiation of self.

Table 5

MANOVA of Gender, Education, Family of Origin, and Birth Order

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Gender	Pillai's Trace	.006	.042 ^a	1.000	7.00	.843	.006	.042	.054
Education	Pillai's Trace	.183	1.567 ^a	1.000	7.00	.251	.183	1.567	.192
Family	Pillai's Trace	.253	2.373 ^a	1.000	7.00	.167	.253	2.373	.266
BirthOrder	Pillai's Trace	.051	.187 ^a	2.000	7.00	.834	.051	.373	.069

a. Exact Statistic

b. Computed using alpha = .05

Research question 3 and hypothesis. Do changes in differentiation of self in an adult clinical population vary as a function of demographic variables, including age, gender, family type (e.g., intact vs. blended/divorced families), birth order, and educational level?

H₃: Changes in differentiation of self in an adult clinical population vary as a function of demographic variables, including age, gender, family type (e.g., intact vs. blended/divorced families), birth order, and educational level.

Initially a MANOVA was attempted to analyze the data for research question 3, however, the low sample size of the study did not allow for analysis in SPSS. As an alternative, ANOVAs were performed for the demographic variables of age and birth order and t-tests were performed for the demographic variables of gender, family type, and educational level.

A one-way ANOVA was performed for the demographic variables of age and birth order to determine if there was a significant effect on the change in score from Time 1 to Time 2 of data collection using the difference between Time 1 and Time 2 scores. Effect size was calculated using the formula for effect size in a one-way ANOVA found in Field (2013) and effect size for the independent samples t-tests were calculated using The Effect Size, Cohen's d Calculator for T Test tool on the Easy Calculator website.

As shown in Table 6.1, there was a significant effect of age on changes in differentiation of self, $F(2,16) = 8.06, p = .004, \omega = .43$. The effect size ($\omega = .43$) represented a small to medium effect size. Post-hoc comparisons were made using the Bonferroni multiple comparison test as, according to Field (2013), this post-hoc test is most appropriate to use when there is a small sample size. The Bonferroni correction

indicated that the mean score for the category of 18 to 25 years old ($M = 24.33$, $SD = 6.28$) was significantly different than the 46 to 65 years old category ($M = -18.50$, $SD = 6.36$) with $p = .003$. The category of 26 to 45 ($M = 15.91$, $SD = 15.87$) years old category was also significantly different from the 46 to 65 years old category, as $p = .011$. There was no significant difference ($p = .672$) between the 18 to 25 years old category and the 26 to 45 years old category. Table 6.2 shows that there was no significant effect of birth order on changes in differentiation of self, $F(2,16) = .671$, $p = .53$, $\omega = .04$. Post hoc comparisons using the Bonferroni correction confirmed the non-significance of the results as all significance values exceeded .05 threshold.

Table 6.1

Demographic Data: ANOVA for Age

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2776.205	2	1388.102	8.056	.004
Within Groups	2756.742	16	172.296		
Total	5532.947	18			

Table 6.2

Demographic Data: ANOVA for Birth Order

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	428.447	2	214.224	.671	.525
Within Groups	5104.500	16	319.031		
Total	5532.947	18			

The remaining demographic variables were analyzed using independent t-tests to determine if change scores varied significantly as a function of gender, family type, or education level. As shown in Table 6.3, females ($M = 9.56$, $SE = 6.80$) were more likely

than males ($M = 19.80, SE = 4.36$) to demonstrate changes in differentiation of self, however this difference was not statistically significant $M_{\Delta} = 10.24, 95\% CI[-6.44, 26.93]$, was not significant $t(17) = 1.30, p = .212$; however, it did represent a medium sized effect, $d = 0.63$ suggesting that a larger sample with greater power may have detected a significant effect.

Table 6.3

Demographic Data: Independent samples test for gender

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	t	Df	Sig. (2- tailed)
Change Score	Equal variances assumed	1.641	1.295	17	.212
	Equal variances not assumed		1.269	13.866	.225

As shown in Table 6.4, participants from intact family types ($M = 7.83, SE = 7.81$) experienced a greater increase $M_{\Delta} = 10.40, 95\% CI[-28.41, 7.61]$, in differentiation of self than participants from blended/divorced family types ($M = 18.23, SE = 4.57$) and this difference represented a medium effect size ($d = 0.59$), suggesting that a larger sample with greater power may have detected a significant effect, but was not statistically significant $t(17) = -1.22, p = .24$.

Table 6.4

Demographic Data: Independent samples test for family type

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	T	df	Sig. (2- tailed)
Change Score	Equal variances assumed	.339	.568	-1.218	17	.240
	Equal variances not assumed			-1.149	8.589	.282

As shown in Table 6.5, participants with high school diplomas/GEDs ($M = 8.10$, $SE = 5.69$) experienced a greater increase -14.46 , 95% CI $[-30.30, 1.40]$ in differentiation of self than participants with an above high school education ($M = 22.56$, $SE = 4.75$) and this difference represented a large effect size ($d = 0.94$) suggesting that a larger sample with greater power may have detected a significant effect, but was not statistically significant $t(17) = -1.93$, $p = .071$.

Table 6.5

Demographic Data: Independent Samples test for Education Level

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	T	df	Sig. (2- tailed)
Change Scores	Equal variances assumed	1.411	.251	-1.925	17	.071
	Equal variances not assumed			-1.949	16.759	.068

The demographic variable of age was the only demographic variable found to have a significant impact on the difference between Time 1 and Time 2 scores. The age categories of 18 to 25 years old and 26 to 45 years old were found to be significantly different from the 46 to 65 years old category, but were not found to be significantly different from each other. Therefore, it can be said that the data show that change scores of differentiation of self between Time 1 and Time 2 were significantly different for participants between the ages of 18 and 45, but not for participants aged 46 to 65. Participants between the ages of 18 and 25 showed the greatest difference in scores between Time 1 and Time 2 data collection contradicting Bowen's (1978) assertion that this age group is not able to change levels of differentiation. Change scores for differentiation of self from Time 1 to Time 2 did not vary significantly as a function of gender, birth order, or educational level.

Research question 4 and hypothesis. Are demographic variables of age, gender, family (e.g., intact vs. blended/divorced families), birth order, and educational level significant predictors of Emotional Reactivity, "I" Position, Emotional Cutoff, and Fusion with Others among an adult clinical population?

H4: The demographic variables of age, gender, family (e.g., intact vs. blended/divorced families), birth order, and educational will act as predictors to levels of Emotional Reactivity, "I" Position, Emotional Cutoff, and Fusion with Others among an adult clinical population

A MANOVA was used to analyze the effects of demographic variables of age, gender, family (e.g., intact vs. blended/divorced families), birth order, and educational level on the subscales of the DSI-R (Emotional Reactivity, "I" Position, Emotional

Cutoff, and Fusion with Others). The demographic variables of age, gender, education level, family of origin, and birth order also resulted in rejecting H_2 . Using Pillai's trace, there was no significant effect on differentiation of self by Gender $V = .84$, $F(1, 4) = 1.33$, $p = .57$, Education Level $V = .50$, $F(1, 4) = .246$, $p = .89$, Family of Origin $V = .73$, $F(1, 4) = .67$, $p = .71$, Birth Order $V = 1.16$, $F(1, 4) = .69$, $p = .70$. Separate univariate ANOVAs on the outcome variables confirmed non-significant effects on differentiation of self.

Research question 5 and hypothesis. Does participation in counseling have a differential impact on Fusion with Others, Emotional Cutoff, "I" Position, and Emotional Reactivity among an adult clinical population?

H_5 : Participation in counseling has a significant differential impact on DSI-R subscales.

A paired-samples T-test was performed to assess the differential impact of counseling on each of DSI-R's four subscales. As with the data in research question 1, the data were again transformed using the methods found in Field (2013). This was done to adjust for the small sample size in the Time 2 data collection and maintain the assumption of normality. The effect size was calculated using The Effect Size, Cohen's d Calculator for T Test tool on the Easy Calculator website.

On average, individuals reported improved scores on the Emotional Reactivity subscale of the DSI-R following 3 months of outpatient counseling services as ($M = 42.21$, $SE = .69$) than at their time of beginning services ($M = 37.27$, $SE = .69$). This difference, $M_\Delta = 4.95$, 95% CI [2.04, 7.86], was significant $t(18) = -3.57$, $p = .002$, and represented a medium effect size, $d = 0.64$ as shown in Table 7.

Table 7

Emotional Reactivity Paired Samples Test

	Paired Differences			T	df
	Mean	Std. Deviation	Std. Error Mean		
Adjusted Change Score	4.94737	6.04128	1.38596	-3.570	18

On average, individuals reported higher scores on the I Position subscale of the DSI-R following 3 months of outpatient counseling services as ($M = 43.32$, $SE = .79$) than at their time of beginning services ($M = 37.68$, $SE = .79$). This difference, $M_{\Delta} = 5.63$, 95% CI [2.31, 8.95], was significant $t(18) = 3.57$, $p = .002$, and represented a medium effect size, $d = 0.64$ as shown in Table 8. The effect sizes between Emotional Reactivity and I Position subscales were found to be significantly different using Hotelling's T $t(16) = .000$, ($p = 1.00$). This calculation was performed using the cocor website.

Table 8

I Position Paired Samples Test

	Paired Differences			T	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Adjusted Change Score	5.63158	6.88162	1.57875	3.567	18	.002

There was no significant difference in Emotional Cutoff scores from Time 1 to Time 2 data collection. The mean scores for Emotional Cutoff at Time 1 ($M = 46.94$, $SE = .63$) were not found to have a significant difference from the mean scores of Emotional Cutoff ($M = 48.99$, $SE = .63$) at Time 2. Therefore, counseling did not create a significant difference in mean scores of Emotional Cutoff following 3 months of

counseling $M_{\Delta} = 2.05$, 95% CI [0.58, 4.69], was not significant $t(18) = -1.64$, $p = .119$, and represented a low effect size, $d = 0.36$.

There was also no significant difference in Fusion with Others scores from Time 1 to Time 2 data collection. The mean scores for Fusion with Others at Time 1 ($M = 42.89$, $SE = .85$) were not found to have a significant difference from the mean scores of Fusion with Others ($M = 45.21$, $SE = .85$) at Time 2. Therefore, counseling did not create a significant difference in mean scores of Fusion with Others following 3 months of counseling, $M_{\Delta} = 2.32$, 95% CI [1.26, 5.89], was not significant $t(18) = -1.36$, $p = .190$, and represented a low effect size, $d = 0.31$.

The results of the data analysis have upheld the research hypothesis for research questions 1 and 5, while rejecting the hypothesis for research questions 2 and 4. The analysis of the data found that participation in counseling has a significant effect on improving overall DSI-R scores for adults in a clinical population over the course of 3 months of counseling services. The results of this data analysis also indicate that participating in counseling significantly improved the DSI-R subscales of Emotional Reactivity and “I” Position, while also finding no significance in the participation in counseling for the 3 month interval between data collection points for the DSI-R subscales of Emotional Cutoff and Fusion with Others. Therefore, research hypothesis 5 is upheld for the DSI-R subscales of Emotional Reactivity and “I” Position and rejected for the DSI-R subscales of Emotional Cutoff and Fusion with Others. The analysis of the data also did not support the hypothesis that differentiation of self varied as a function of demographic variables, nor do the individual subscales that comprise the DSI-R.

CHAPTER 5: CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study is to explore the potential changes in differentiation of self vary as a function of demographic variables such as age, family of origin type, birth order, education level, and gender. This study will also examine if counseling impacts levels of differentiation of self in an adult population, and if differentiation of self changes as a function of demographic variables, including age, family of origin type, birth order, education level, and gender. The study will also examine the impact of counseling and demographic variables on subscale scores on the Differentiation of Self Inventory Revised (DSI-R). This study has attempted to extend the literature in identifying whether counseling impacts differentiation of self, and whether differentiation of self varies as a function of demographic variables.

Conclusions

The significant difference between Time 1 and Time 2 scores of differentiation of self provides evidence that engaging in counseling services may assist in increasing an individual's level of differentiation of self. However, given the results of research question 3, these results may be limited to those ages 18 to 45 and may not apply to those above the age of 46. While this study had several limitations, this finding provides evidence that supports Bowen's suggestion that participation in counseling services could increase differentiation of self. This result indicates that engaging in the process of counseling may challenge an individual to explore areas associated with the development of a solid self. Titelman (1998) stated that the therapeutic alliance, not the approach used in treatment, was integral to the increase of differentiation of self through the counseling process. The results of this study add to the literature by identifying a significant increase

in differentiation within a clinical population. Bartle-Haring, Glade, and Vira (2005) had previously explored the role of differentiation in a clinical population, however, their results focused on the reduction of psychiatric symptoms in individuals with varying levels of differentiation of self and not on change in level of differentiation. Bartle-Haring et al. (2005) found that clients with higher levels of differentiation of self were more likely to exhibit a reduction of psychiatric symptoms as a result of their participation in counseling as opposed to those with lower levels of differentiation of self. Other studies have also identified the relationship between higher levels of differentiation of self and lower psychiatric symptoms and emotional problems (Szapocznik et al. 1983; Knauth & Skowron, 2004; Knauth et al. 2006; Skowron, Stanley, & Shapiro, 2009). Therefore, it is possible that the increase in differentiation of self through the counseling process may act as a protective factor from relapse of psychiatric symptoms or emotional problems.

The significant increase in differentiation of self during the study was also remarkable given the relatively short time between data collection points. Bowen (1978) viewed increasing a person's level of differentiation as a long-term process, however the significance found following only three months of outpatient counseling would appear to counter that theory. These results provide some incentive to counselors that counseling does not have to be a lengthy process in order to facilitate growth and development in clients. It is possible that a more intentional focus on increasing a client's level of differentiation through the counseling process would provide for a further increase in levels of differentiation of self. This intentional focus could either be through a specific Bowen approach or as Titelman (1998) suggested, through an increased focus on the

therapeutic alliance. The counselors participating in the study used a variety of theoretical orientations and approaches to counseling as this variable was not controlled for due to the small number of counselors participating in the study. A larger sample of counselors would allow for the collection of counselor data to examine if the use of a specific approach or if the level of therapeutic alliance had a significant impact on level of differentiation of self through the process of counseling.

An alternative interpretation of this increase in differentiation of self through the process of counseling would be that a Bowenian or other specific approach may not be necessary as various forms of therapy may result in considerable increases in differentiation of self. Instead it may be more productive to look at a common factors model to explain the increase in differentiation of self and the two subscales found to increase significantly throughout the course of treatment. Lambert and Bergin (1994) defined the common factors as those elements or dimensions of treatment not specific to any one therapeutic technique. Lambert and Bergin (1994) identified several common factors of successful outcomes to counseling. These include client factors, counseling relationship, hope/placebo, and modeling/technique. The therapeutic alliance has been considered the most significant of the common factors impacting the outcome in treatment (Stevens, Hynan, & Allen, 2000). Counselor attributes that have been identified as contributing to the therapeutic alliance include honesty, flexibility, conveying respect, trustworthiness, warmth, openness, and being genuinely interested in the client (Baldwin, Wampold, & Impel, 2007; Norcross & Wampold, 2011). Messer and Wampold (2002) conducted a meta-analysis of the literature exploring the impact of common factors, specifically the therapeutic alliance, on counseling as compared to

specific approaches to counseling. Messer and Wampold (2002) found that therapeutic alliance had a medium effect size, Cohen's *d* of .54 compared to a very low effect size of .12 for specific counseling approaches on client outcomes. Messer and Wampold (2002) also identify that specific therapeutic approaches account for less variance in comparison to the therapeutic alliance in a meta-analysis of the literature. Therefore, the specific approaches used by the clinicians in the study may have been less important to the increase in differentiation of self than their ability to develop a strong therapeutic alliance.

A strong therapeutic alliance may allow for clients to fully express themselves in session and consider alternatives provided by the counselor that promote an increase in differentiation of self. According to Bowen (1978), the process of increasing differentiation of self requires self-exploration and being able to take a systemic view of one's own place in their emotional system. A strong therapeutic relationship may allow clients to become more comfortable to engage in this process of self-exploration and open to a new perspective on their place in the emotional system. If a counselor is able to quickly develop a strong therapeutic relationship, then it is possible that the relatively short period of time when significant change occurred in this study would be related to the development of this relationship.

This idea of a stable third party that is able to form a therapeutic alliance being able to assist in the increase in an individual's level of differentiation of self may have implications beyond counseling. Bowen (1978) did not specify that this stable third party needed to be a clinician, only that they needed to have a sufficient level of differentiation to bring stability to the triangle. This opens the possibility of other supportive helpers or

mentors being able to act as this stable third in the triangle. Coaches, teachers, parents, and other influential people in a transitional age (18-25 years old) individuals lives could be trained to emphasize the characteristics that make up the therapeutic alliance. This invested third party may then be able to provide the support needed to initiate a change in differentiation that prevents the development of psychiatric symptoms through this increase in differentiation. This would then result in a reduced need for counseling services or a decreased severity of the presenting problems at the beginning of treatment.

The significance found in the DSI-R subscales of Emotional Reactivity and I-Positions is consistent with the previous literature. This indicates that the process of counseling, regardless of theoretical orientation allows clients to manage their emotional responses more effectively, even after only three months of counseling services. Bowen (1978) identified the need for a third person who is able to maintain low emotional reactivity to reduce tension within the relationship triangles of the client. The counselor would be this third person that provides stability to the client's triangle and reduces stress resulting in the increased scores on the Emotional Reactivity subscale. One of the primary foci of Bowen's (1978) theory is to have individuals be able to reduce their emotional reactivity and increase their ability to use logical thought processes in order to reduce emotional and psychological distress. The results indicate support for the theory that the counselor's engagement as the non-stressed individual providing stability and reducing tension in the client's triangle has the potential to increase their ability to use logical thought processes in place of responding impulsively based on emotional reactivity. The counselor that engages in this de-triangulation process would possibly need to be at a higher level of differentiation of self than the client in order to fill this role

as the non-stressed individual in the triangle. This perspective on the role of the counselor in increasing differentiation of self and lowering chronic anxiety has implications for counselor education. Counselor education programs would benefit from incorporating student development with a focus on increasing levels of differentiation of self in order for students to exit programs with an ability to be in the role of the non-stressed individual in the counseling relationship in order to reduce emotional reactivity of the clients they serve. It follows that an ability to reduce emotional reactivity would also show an increase in an ability to use “I” position statements in place of emotional reactivity.

Emotional Cutoff and Fusion with Others were not found to have significant mean differences in this study. This may also signify that, consistent with Bowen’s view of counseling needing to be a long-term process, a significant difference in these subscales may require a longer period of counseling services. These findings suggest the possibility that in order for the constructs represented in the DSI-R by the Emotional Cutoff and Fusion with Others subscales to change Emotional Reactivity and “I” Position subscales must be addressed first. This order of change suggests that there is a process occurring in which the reduction of emotional reactivity through the counseling process leads to a better ability to take an “I” position. Then through the ability to respond more logically versus emotionally by taking an “I” position an individual is able to begin addressing emotional cutoff or fusion with others. Further examination of change in DSI-R scores following a longer duration of treatment may show that the EC and FO subscales do decrease significantly, but only after the foundational changes in ER and IP have been made.

The medium effect size found for the effects of counseling on differentiation of self ($d = .66$), Emotional Reactivity ($d = .64$), and “I” Position ($d = .64$) provides further evidence that participation in counseling has the potential to increase level of differentiation in a clinical population and supports the need for further study of this phenomenon. It is difficult to compare effect sizes to other literature as some of the previous studies have not reported effect size. In the study by Skowron et al. (2009), no report of effect size was made due to a high level of covariance. Sapocznik et al. (1983) did not include the effect size in the results of their study. Bartle-Haring et al. (2005) also did not report an effect size in their study, but did include in their discussion that due to the low sample size it would be difficult to generalize their results. The effect size found in the current study extends the literature as it provides further support to the results and is one of the few studies to include effect size when examining differentiation of self among a clinical population.

In a meta-analysis of the effect sizes of various psychotherapy approaches Wampold et al. (1997) found that regardless of the therapeutic approach the true effect size of the studies examined in the meta-analysis were .20 indicating a low effect size. This finding of a low effect size for treatment was also found in several other meta-analyses. Johnson and Friberg (2015) conducted a meta-analysis on the effects of cognitive behavioral therapy to treat depression from 1977 to 2015. The results of this meta-analysis indicated that effect sizes decreased over the time period studied from a large effect size to a small effect size. Baskin et al. (2010) found a similar low effect size when conducting a meta-analysis of psychotherapy in youth. This meta-analysis yielded an effect size of $d = .26$. Weize, McCarty, and Valeri (2006) also found that

psychotherapy for depression in their meta-analysis produced a low effect size of $d = .36$. Comparatively the effect sizes in this study were much larger. This difference in effect sizes is surprising and potentially indicates that with a larger sample size there may have been a more significant effect for the results that indicated a medium to large effect size, but were not statistically significant. However, Jacobson and Traux (1991) suggest that effect size in relation to treatment efficacy is misleading as it does not fully capture the differences in treatment response that are of clinical importance and that the statistical significance does not imply clinical significance.

The findings that differentiation of self did not vary as a function of age, gender, birth order, educational level, and family type, age, gender, birth order, educational level and family type did not predict changes in the DSI-R subscales, and changes of differentiation of self did not vary as a function of gender, birth order, educational level, and family type are consistent with a majority of the current literature on the impact of demographic variables on differentiation of self and the related DSI-R subscales. Gender was originally hypothesized by Bowen (1978) as not having an impact on differentiation of self, however further research has resulted in mixed results. Skowron and Friedlander (1998) indicated that females were more likely to express fusion than males, but that emotional cutoff would be expressed equally across gender. The results of this study are consistent with Bowen's earlier assertion of no difference in expression of differentiation of self between males and females. The results of this study also contradict the findings of Johnson, Thorngren, and Smith (2001) who found that participants who experienced divorce in their family origin has significantly lower levels of differentiation of self, as measured with the DSI, as family of origin type was not found to have a significant

impact on differentiation of self or the related subscales. Age has also been contested as to its impact on differentiation of self in the current literature. Some studies suggest that age does have a significant impact on an individual's level of differentiation of self (Skowron, 2000; Skowron & Friedlander, 1998) while others have found no significance (Skowron, Wester, & Azen, 2004). The findings of this study agree with those presented by Skowron et al. (2004) as there was no significant impact of age on differentiation of self or the DSI-R subscales at time one of data collection. The lack of significance found in the current study may be due to the low observed power of the study and differences in sample size and make-up. Many of the studies that benefited from higher observed power and participants came from a population of college students or general population (Skowron, 2000; Skowron & Friedlander, 1998; Skowron et al. 2004; Johnson, Thorngren, and Smith, 2001) compared to the current study's use of a community mental health center for obtaining the sample. One potential difference between the current study and those using a sample of college students is that the age and educational levels for the clinical population were more diverse, while the college age students were all within the same age group and educational level. The relative mental health of the two populations may have contributed to difference in sample size and observed power. Those seeking service at a community mental health center would have higher rates of mental health needs than those at a college campus. This may have resulted in lower participation in the community mental health center as the symptoms that led these individuals to the community mental health center may have impaired their motivation or ability to participate or remain in the study. The college students were on campus and

made it significantly easier to participate resulting in a larger sample size. These studies also used one time data collection thus, eliminating the potential for drop-out.

However, significance was found as the difference in differentiation of self scores from Time 1 to Time 2 varied as a function of age. This finding contradicts the criticism of the research on differentiation of self posed by Kim-Appel et al. (2007). Kim-Appel et al. (2007) criticized the literature on differentiation of self for not focusing on older adults levels of differentiation of self. The results of this study suggest that counseling benefitted individuals between the age of 18 and 45 and at best not helped those in the 46 to 65 year old age group. One interpretation of this finding could be that younger individuals (under the age of 46) are able to change their levels of differentiation of self in a shorter amount of time than older adults. Another interpretation of these findings could also be that younger adults are more open to the counseling process and therefore, are potentially more likely to change as part of the counseling process. Leaf et al. (1987) found that older adults were less likely to believe that counseling services would be helpful and were less inclined to seek out mental health services with many indicating fear or distrust of mental health providers as barrier to treatment. Bowen (1978) believed that individuals in late adolescence and early adulthood could not take steps to increase their levels of differentiation of self. However, the results of this study suggested that those in the age group that would comprise late adolescence and early adulthood (18-25) experienced a significant increase in their level of differentiation of self through the counseling process, while those in the oldest age group (46-65 years old) at best did not benefit from counseling services. This contradiction of Bowen's theory may be rooted in the developmental process occurring at these ages. Adolescence and early adulthood are

often characterized as meeting Marcia's (1966) definition of an identity crisis. The provision of counseling services to assist in moving past these crises may help to move then to the identity achieved status. This movement to the identity achieved status would also result in an increase in differentiation of self as being at the identity achieved status shares many similarities with Bowen's description of differentiated individuals. The decrease in scores for those participants in the 46 to 65 age group is also contradictory to Bowen's (1978) theory. However, this lack of change or decrease in DSI-R score could be related to this age group's stage of identity development. If those in the 46 to 65 age group, are foreclosed in their identity development as described by Marcia's (1966), then there would be no identity crisis to motivate the change in the characteristics that are measured by the DSI-R. This age group is also reflective of Erikson's (1964) stage of generativity vs stagnation. The tasks in this stage are missing the identity crisis present in Erikson's final stage and are past the stage of intimacy vs isolation. Therefore, having moved past the stage of intimacy vs isolation and/or not yet reaching the crisis present in ego integrity vs despair these participants may be coming to counseling services for reasons that are beyond the measurement of the DSI-R. It is possible that, consistent with generativity vs stagnation, these participants are coming to counseling to address feelings of stagnation which may not be captured by the DSI-R.

Bowen's (1978) theory when taken in this context begins to take the form of a systemic view of the underlying processes that occur through identity development. The process of increasing one's level of differentiation of self is consistent with the developmental theories described in Chapter 2. The results of this study also show that the age group of 18 to 25 years old showed the greatest change in level of differentiation

of self. The change observed in this age group is developmentally consistent with the identity crisis of Marcia (1966) and Erikson's stage of identity vs role confusion in late adolescence and early adulthood. Bowen's theory could then be viewed as the systemic explanation for the movement through these developmental stages. An individual's success or failure of meeting Erikson's tasks could be linked to the ability to further differentiate. The development of the solid self as described by Bowen mirrors that of Erikson's developmental task of identity vs role confusion. If a person is not sufficiently differentiated, then it would be difficult to successfully meet the task of developing their own identity. This parallel also exists between differentiation of self and the developmental task of intimacy vs isolation. A more differentiated individual is better able to function in an intimate relationship than a less differentiated individual. Erikson (1966) discussed the revisiting of failed tasks in order to be able to successfully navigate the tasks of psychosocial development. Bowen's theory of differentiation of self could then be looked at as the method for increasing a person's ability to meet succeed in meeting these tasks, while also taking into account the systemic factors that may be limiting this ability to achieve higher levels of identity development.

This study also supports Bowen's (1978) hypothesis that educational level would have no influence over an individual's level of differentiation of self and in doing so contradicts the findings of several other studies (Skowron & Friedlander 1998, Peleg 2008, & Skowron, 2000). Skowron and Dendy (2004) found that education level was not significantly correlated with differentiation of self. Given the mixed results found throughout the literature, the results of non-significance in this study support some of the previous research while contradicting others. This contradiction can then be viewed as

highlighting a need for increased research into this particular demographic variable and its relationship with differentiation of self. The lack of significance related to educational level as an independent variable may be accounted for by the low sample size and observed power of this study.

In addition to the educational level of the participants in this study, level of cognitive complexity or stage of identity development may be worth considering. It may be possible that those participants whom exhibited the highest levels of change between Time 1 and Time 2 measures of differentiation of self may have entered treatment in one of the transition stages as described by Loevinger (1966) or were in the process of transitioning between Kegan's (1988, 1994) orders of meaning making. If a participant entered counseling at this stage of transition, the process of receiving counseling services may have helped them to move forward in either ego development or order of meaning making. This shift would have then promoted a higher level of differentiation of self as the increase in cognitive complexity would have allowed for the ability to manage chronic anxiety with reduced emotional reactivity as shown in the evaluation of the DSI-R subscales. Therefore, as cognitive complexity increases higher levels of differentiation of self becomes possible and the addition of counseling services, may help to expedite this process.

The non-significance of Sibling Position (birth order) is not surprising as previous research had indicated that there is little support for Toman's theory from which Bowen derived the construct of sibling position (Miller, et al, 2004). While these results on the impact of demographic variables on differentiation of self and its related DSI-R subscales should be taken with caution due to the limitations of this study, it is telling that there is a

consistent lack of consistency in the findings regarding most of these demographic variables. This study is consistent with the current literature in that it does contradict some studies while also supporting others. These results across this literature suggest that there might be a need to address the research procedures and hypothesis behind the use of demographic variables as a predictor of differentiation of self. Previous studies that have found significance in educational levels impact on differentiation of self such as, Skowron and Friedlander (1998) and Skowron (2000) have had sample sizes ($N = 313$ and $N = 118$, respectively) that were far larger than sample in this study. Peleg (2008) had a similar sample size ($N = 40$) compared to the current study and found significance. Skowron and Dendy (2004) found that educational level was non-significant in an adult population with $N = 225$. It is also possible that the difference in the nature of the sample contributed to the findings of non-significance as compared to previous studies. The studies conducted by Skowron and Friedlander (1998), Skowron (2000) and Skowron and Dendy (2004) comprised of participants that were either enrolled in college, had obtained a minimum of a college degree, or were immediate family of faculty at a university. In comparison this study consisted of participants that either had a minimum of a high school education or had some form of post-secondary education with the upper limit being a bachelor's degree or equivalent. These previous studies also had a higher observed power than the current study. The low observed power of the current study decreases the likelihood of finding significance in education level and the other demographic variables included in the study.

Study Limitations

There are several limitations to this study that may have had an impact on the results and generalizability of the study. The first of these limitations is the lack of a control group. This lack of a control group did not allow for comparison with a non-treatment group, which would allowed for comparison between those who received treatment and those that did not. The inclusion of the control group would have provided the ability to explore if the changes in differentiation of self were due to the treatment being provided or were a function of time. Future research should look to incorporate the addition of a control group to the study in order to have an improved design that allows comparison between a non-treatment group and a group that received the treatment. However, this may be difficult as a non-treatment group would have to be withheld services in the context of this study. Another significant limitation in the study is the low number of participants. This low response rate makes the findings of the study difficult to generalize. While some of the findings may be promising, increasing the sample size will allow for more varied and powerful statistical analysis to be conducted. The dropout rate experienced in the study contributed to this low sample size, primarily in the second round of data collection. This high dropout rate may be indicative of using a clinical population and collecting data only through the mental health center. Those that no longer received services at the data collection site may have gone on to continue counseling elsewhere and could still have contributed to the sample had there been a mechanism in place to collect data despite the ending of services. The dropout rate experienced in this study may be due to the use of a rural community mental health center as the data collection location. As with many rural community mental health centers,

transportation and affordability of services are a barrier to continuation of treatment.

These factors may have contributed to the high dropout rate of this study and would be recommended to control for in future studies.

Limitations were also evident in the demographic variables. The measurement of birth order as a demographic variable was limited by the inability to account for multiple family sizes. While this has been noted in the literature regarding the use of birth order in other studies, accounting for the different variations in family size could have the potential to lead to further exploration of this variable. This study attempted to categorize participants based on their general placement in birth order (firstborn/only child, middle, and last born), however the multiple family sizes that were indicated by participants on the demographics questionnaire raises the questions that merit attention, such as, is there a difference between being the 2nd child of 3 from the 2nd child of 7 when looking at differentiation of self. This study was unable to determine if there is a quantifiable difference in the level of differentiation of self among these different family sizes.

The current study also did not account for variation in the approaches used by the counselors through the course of treatment. There could be a particular approach that is used at the data collection site that lends itself to being more effective on increasing levels of differentiation of self or that counselors using a particular theoretical approach to counseling were more likely to have clients that would stay engaged in treatment. If there was a greater sample size being used, counseling approach is a variable that would be useful to explore in relation to change in differentiation of self. This study also is limited by the data collection site being used. It does not allow for the various other

settings that outpatient mental health services may be received. The use of a community mental health center for the purposes of this study was convenient and practice. The inclusion of other potential sites for outpatient counseling services, such as private practice offices or college campuses, in addition to community mental health centers would provide a more varied sample size. The study also used self-report measurements of differentiation of self and therefore could be a potential limitation to the data collected.

Recommendations for Future Research

Despite the limitations of the current study, there are several areas that can be recommended for future research based on the knowledge gained from this study. It is recommended that future research attempt to expand upon the significance found in research question 1, indicating that there is a significant difference in time 1 and time 2 data collection for differentiation of self through the course of counseling. A larger sample size is recommended for greater power to detect significant results as well as to further explore the generalizability of the results to the population. It is also recommended that a waiting list group be added to control for the effects of time on the change in differentiation of self. This use of an experimental design would be able to control for factors external to the counseling process in order to determine if counseling does significantly change the level of differentiation of self over the course of treatment. It is also recommended that further research be conducted to find more descriptive ways to capture the variable of birth order that account for the wide variation in family size. This variation has the possibility to expand the current knowledge of how an individual's place in their family of origin contributes to their expression of differentiation of self or other personality traits. Further research should also be conducted to expand the scope of

this study through identifying the therapeutic approach of and level of therapeutic relationship with the counselor. By controlling for therapeutic approach, there can be further guidance for clinicians in deciding counseling techniques that would assist in raising a client's level of differentiation of self. The use of therapeutic alliance would provide evidence either supporting or disproving Titelman's (1998) assertion that the therapeutic alliance is the key factor to increasing a client's level of differentiation of self.

The construct of differentiation of self has many similarities to other theories of individual development as noted in Chapter 2. Further research into the similarities and differences of these models of development would help to enrich our ability to describe and understand the processes that occur in the not only the development of problems, socially, psychologically, or emotionally, but also in the prevention of these problems through the development of preventative services that would assist individuals in achieving developmental milestones that would prevent these problems from occurring.

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