Modern Psychological Studies

Volume 26 | Number 1 Article 4

January 2021

Anorexia Nervosa and the Family: A Look at Well-Siblings, Parents, and Family Dynamics through a Family Systems Perspective

Martha Avila-Zavala
Whittier College, marthaavila.zavala@gmail.com

Anorexia Nervosa and the Family: A Look at Well-Siblings, Parents, and Family Dynamics through a Family Systems Perspective

Author: Martha Avila-Zavala
1829 Woodland Ave.
E. Palo Alto, CA 94303

marthaavila.zavala@gmail.com
650.804.6907

School: Whittier College
13406 E. Philadelphia St.
Whittier, CA 90602

Project Advisor: Dr. Lorinda Camparo
Department of Psychology
Whittier College
7214 Painter Ave.
Whittier, CA 90602-1450

lcamparo@whittier.edu
562.907.4200 x4425

Abstract

Anorexia nervosa (AN) is one of the main, and one of the most common types of eating disorders among adolescent individuals, especially females. It is characterized by limited eating, increased amounts of physical activity, low self-esteem, and extreme criticism of oneself and one's body. An individual diagnosed with AN is greatly physically, mentally, and emotionally affected by it. However, an AN diagnosis also has a significant impact on the whole family. In recent years, the family has been incorporated into the treatment of an individual diagnosed with AN, which has shown to be effective in the recovery process and in reducing relapse incidences. Using a family systems framework, I reviewed a little over 20 scholarly peer reviewed articles to further investigate the impact of having a relative diagnosed with AN on the family as a whole. Having an individual with AN was found to have both adverse and positive effects stemming from shifts in family dynamics and relationships. Overall, parents and well-siblings experience physical and psychological distress as their new role of caregiver leads to increased internalizing behaviors, emotional difficulties and exhaustion, feelings of guilt, fear, and frustration. With their new role, well-siblings find themselves constantly conflicted and caught between their ill-sibling and their parents. Some of the positive effects of a diagnosis of AN in a family includes individual personal growth, increased family unity and solidarity, increased empathy, and increased knowledge of eating disorders.

Anorexia Nervosa and the Family: A Look at Well-Siblings, Parents, and Family Dynamics through a Family Systems Perspective

Thirty million individuals of all sexes, ages, races and ethnicities in the United States are affected by an eating disorder (National Association of Anorexia Nervosa and Associated Disorders, n.d.). The most common one being Anorexia Nervosa (AN). It is characterized by disturbances in an individual's eating behaviors and attitudes, which affects their emotional and physical health (National Association of Anorexia Nervosa and Associated Disorders, n.d.). This includes severe restrictions in their food intake and taking excessive measures to lose weight related to an intense fear of gaining weight (American Psychiatric Association, n.d.), low self-esteem, and extreme criticism of their self and physical appearance (American Psychiatric Association, n.d.; National Association of Anorexia Nervosa and Associated Disorders, n.d.). An official diagnosis of an individual occurs when they weigh 15% less than what would be considered healthy based on their height (American Psychiatric Association, n.d.).

During childhood, individuals learn a great deal about the world around them as well as how to react to or behave in it. Every interaction, both verbal and non-verbal, with other individuals in their early childhood heavily contributes to the development of a child's beliefs, including those related to eating and eating behaviors (Schultz & Danford, 2016). These eating beliefs and habits are composed of four concepts - food, nutrition, the body, and health (Schultz & Danford, 2016). Food refers to an individual's ability to distinguish between edible and inedible substances. Nutrition refers to what these foods will provide for them, the body refers to how the individual's body use these foods, and health relates to how these foods contribute to an individual's overall well-being. As the children continue to grow into their adolescence, their eating beliefs, habits, and attitudes are influenced by not only their immediate circle, such as

parents and siblings, but by their peers, advertising and media (Schultz & Danford, 2016). During this critical developmental period, in addition to individuals trying to find out who they are exactly, they are also undergoing natural biological changes in their body composition. These changes make individuals more susceptible to eating disorders as they try to conform to the socially praised and preferred body size. Females in particular are more vulnerable as their bodies move away from a little girl's body, which tends to be very thin, to a more mature female body, which tends to be curvier and further from the "thin ideal." These young individuals' perceptions of their physical appearance becomes distorted, pushing them to take extreme measures to obtain the "ideal" body size. The emotional and physical manifestations of AN can become so severe that they can become life-threatening if they are not treated in a prompt, effective, and efficient manner (National Association of Anorexia Nervosa and Associated Disorders, n.d.).

AN negatively affects an individual's physical and emotional well-being. However, when a diagnosis of AN is made, it not only affects the patient, it affects the rest of the family, as well. It does so by changing the already established dynamics of the family system. A family is the first social unit that an individual encounters and it establishes their foundations for the rest of their life. In general, family members are an individual's greatest support system, and they are the ones that greatly influence the decisions that each one takes. In recognition of their importance, the family has recently been incorporated into the recovery process of an AN patient. By having the family participate in the AN treatment, a patient tends to have fewer relapse incidences.

Although AN and its symptoms can manifest in anyone, it is most common among young women - about 1% of American women suffer from AN at least once throughout their lifetime

(National Association of Anorexia Nervosa and Associated Disorders, n.d.). There has been extensive research to understand how and why AN occurs, as well as the most effective ways to treat the patient. However, it is equally important to try to understand how AN affects each member of the family as well as the entire family as a whole. To further investigate AN, a literature review was conducted using a family systems approach to try to understand how the family member's diagnosis of AN impacts a family, particularly looking at the "well-sibling," the sibling not diagnosed with AN, and the role of parents and siblings as caregivers.

Family Systems Theory

The family systems theory looks at a family as a unit in which each member within the unit greatly influences other member's emotions, behaviors, and thought processes. It establishes that individuals cannot be understood in isolation, but rather as part of a system or unit, the family (Kerr, 2000). All family members are emotionally interdependent, which has "evolved to promote the cohesiveness and cooperation families require to protect, shelter, and feed their members" (Kerr, 2000). This is especially relevant during key developmental periods, through which a family's stability as a unit and its relationships are put to the test, and, its already established patterns are destabilized, forcing the family to restabilize into new habits and styles of interaction (Granic, Hollenstein, Dishion, & Patterson, 2003). A critical component to the family systems theory is that what happens to one individual, happens to all members of the family, as they all affect each other (Granic et al., 2003). The theory argues that since the family is the first and most important socialization agent of any individual, it is likely that most of the problems that individuals develop stem from their family interactions during the very sensitive developmental periods of childhood and adolescence (Granic et al., 2003; Kerr, 2000).

The relationships within a family are always changing as individuals or family circumstances are changing. The shift in family relationships causes its equilibrium to become off-balanced, which affects how each individual member as well as the family as a unit function (Granic et al., 2003). Through the family systems theory, one is able to decipher and explain what happens within a family unit during times of tension or stress, as well as how the family's reaction and adaptation of the particular circumstance affects the individuals, particularly those who are most vulnerable - children (Granic et al., 2003; Kerr, 2000). Within the family system, the sibling relationship is the second most important and impactful to the development of an individual, the first is the parent-child relationship (Callio & Gustafsson, 2016). These relationships are the primary socialization agents of all individuals; they help them learn about themselves and others, and they have great influence in each other's decisions (Callio & Gustafsson, 2016). Parents model how children should behave and react to the world around them. Under ideal conditions, parents give their children all the tools they need to successfully develop in all aspects - mentally/emotionally, physically, and socially (Callio & Gustafsson, 2016; Granic et al., 2003; Kerr, 2000). Sibling relationships provide opportunities to learn social skills and behaviors as well as giving them practice to effectively resolve conflicts that may arise (Wikle & Hoagland, 2019). An important characteristic of sibling relationships is that they may serve as role models, from which attitudes, skills, and behaviors may be adopted based on observance and interactions (Wikle & Hoagland, 2019). Although this modeling is most significant when the sibling is older, there are some findings that suggest that younger siblings can also influence the behavior and attitudes of the older sibling (Wikle & Hoagland, 2019).

The family system theory explains that the family structure and its dynamics have the ability to greatly influence an adolescent's emotional functioning and psychosocial development.

It suggests that family is one of the most crucial social agents in determining how an individual reacts to others under specific circumstances. A period during which family dynamics and relationships are most susceptible to change is during the adolescence of any family member (Granic et al., 2003). Not only is adolescence a period of dramatic developmental transitions as the physical body changes from a child into an adult, but it is also a period when individuals are "emotionally rigid or temperamentally difficult" (Granic et al., 2003, p. 607). Due to these naturally occurring changes, an increase in family conflicts are inevitable (Granic et al., 2003). Family conflicts come with a high amount of stress and tension for all individuals. They also cause relationships to reorganize so that family members' roles and responsibilities must change and be renegotiated to best suit the current needs of the family (Granic et al., 2003).

In all, understanding the role of the family in anorexia nervosa (AN) is essential. If one were to only look at one aspect of or one individual in a family system, one would not be getting the whole context, therefore obtaining inaccurate results or, at best, fragmented results. When a family member is diagnosed with AN or any other eating disorder, that disorder becomes part of the family as well. Additionally, adolescence is a one of the critical developmental periods when individuals, regardless of sex, age, ethnicity or race, are most susceptible to eating disorders, the most common ones being anorexia nervosa (AN), bulimia nervosa, and binge eating disorder (American Psychiatric Association, n.d.). The family systems theory can assist researchers and practitioners to understand why an individual develops an eating disorder as well as analyze how a diagnosis affects the family as a unit, either harming and/or benefiting the individual with the eating disorder.

"Well Siblings"

Well-siblings' Experience and Feelings

When a sibling has been diagnosed with AN, the sibling relationship changes (Areemit, Katzman, Pinhas, & Kaufman, 2010; Fjermestad, Rø, Espeland, Halvoresen, & Halvoresen, 2019; Jungbauer, Heibach, & Urban, 2016; van Langenberg et al., 2018; Withers et al., 2014). AN becomes extremely prevalent and pervasive within family life, causing great disruption in family relationships. Sibling relationships are particularly affected (Withers et al, 2014). It puts strain on the role of being a sibling, which leads the well-sibling to experience an increase in intense and conflicting emotions, all difficult to cope with (Withers et al, 2014). The one diagnosed becomes the "ill-sibling" while the other(s) becomes the "well-sibling(s)." With this new title or label, comes a different set of experiences and feelings for the sibling(s). During this transition period, the well-sibling displays six main traits: attempts to dissociate themselves from the ill-sibling, takes on responsibility as caretakers, becomes mature and independent, experiences increased feelings of guilt and fear, and experiences neglect by parents (Abrams, 2009; Areemit et al., 2010; Fjermestad et al, 2019; Jungbauer et al, 2016; van Langenber et al., 2018; Withers et al., 2014).

Within the family, the well-sibling becomes the more competent, independent, and responsible child (Abrams, 2009), a child that parents feel that they can leave on their own while they shift most of their focus to the ill-sibling (Callio & Gustafsson, 2016). Well-siblings are aware of this parental perspective, leading them to often feel uncomfortable expressing their own feelings and worries to their parents, opting to maintain their role as an "undemanding child" (Callio & Gustafsson, 2016). Some of the most common feelings that well-siblings experience include guilt, fear, frustration, and sadness. Guilt results from the well-sibling's thoughts that they might have been complicit in the onset of their sibling's AN or they blame themselves for not having done more to prevent the onset or doing more to help their ill-sibling recover

(Jungbauer et al, 2016). Their fear stems from their worry that the ill-sibling could get even more sick or never recover, both ending with the possibility of death (Fjermestad et al, 2019). Frustration and sadness go hand in hand. The well-sibling becomes frustrated with the ill-sibling's seeming unwillingness to change their behavior to get better, despite the behaviors often being out of the ill-sibling's control. The well-sibling's feeling of sadness arises as they see what was once their sibling being consumed by the AN (Fjermestad et al, 2019). They mourn the loss of a "normal" family life, a positive relationship with their sibling, and even their own sense of identity (Areemit et al., 2010). Because well-siblings do not want to worry their already emotionally charged parents, they feel uncomfortable and unable to express their own feelings, which negatively affects their mental and emotional health (Abrahms, 2009; Areemit et al., 2010; Bachner-Melman, 2005; Callio & Gustafsson, 2016; Jungbauer et al, 2016). At the time of their sibling's diagnosis, well-siblings reported that they experienced high levels of emotional difficulties, inattentiveness, shame due to the stigma of the disease, isolation and loneliness (van Langenberg et al., 2016), as well as anxiety and depression, all related to their increased internalizing behaviors (Withers et al., 2014).

Often, the well-sibling's relationship with food may also shift when their sibling is diagnosed with AN. Research has found conflicting results as to whether or not having a sibling with AN influences the well-sibling(s) to develop AN. On one hand, it has been found that they may experiment with AN behaviors, such as cutting back the amount of food they are consuming and paying more attention to their physical appearance while comparing it to their siblings' (Fjermestad et al, 2019). On the other hand, an AN diagnosis has been found to have a positive impact on well-sibling(s) as it has made them more aware of living well and in a healthy manner rather than being focused on weight and not letting weight or food take over their lives

(Fjermestad et al, 2019; Jungbauer et al, 2016). Therefore, having a sibling diagnosed with AN could either have a negative or positive effect on the well-sibling(s). How the well-sibling(s) are affected depends on the well-sibling(s) relationship with food and their own physical appearance as well as their family circumstances prior to the onset of their siblings' diagnosis with AN (Fjermestad et al, 2019).

As the family dynamics shift because of the stress and tension that the AN brings, the family experiences a significant increase in conflict within and among family members. These conflicts mostly arise from miscommunication among each other and personal frustrations (Areemit et al., 2010). The well-sibling is faced with competing demands within their family, as they are caught between their loyalties to their parents and/or their ill-sibling (Areemit et al., 2010). Well-siblings often find themselves reluctant to tell their parents of any hidden AN behaviors they observe because they want to be perceived as a trustworthy sibling and reliable child. Furthermore, they want to avoid conflict that may arise from their observation. However, they know that without telling their parents, they may be assisting their ill-sibling become more ill. On top of the distress already experienced due to having a family member with AN, the well-sibling experiences more distress as they try to balance the needs of their parents, the ill-sibling and their AN, as well as their own personal needs (Areemit et al., 2010). The family relationships become very disrupted as the well-sibling feels like they need to protect their parents from becoming more hurt and worried, but also understand that they need to do everything possible to help their ill-sibling recover. Often, the well-sibling need to take the role of facilitator, mediator, and caretaker, especially when the relationship between parents and ill-sibling is weak and filled with conflict (Jungbauer et al, 2016).

In addition to the well-sibling's "paradoxical mix of apparent adjustments and secret distress" taken in the form of attempting to dissociate from the ill-sibling, experiencing guilt and fear, experiencing some neglect by parents, and the increase in family conflict, the well-sibling's role within the family changes and their sibling relationship within the family system is altered (Abrams, 2009, p. 309). Since the ill-sibling is struggling with AN, the sibling relationship no longer involves only the siblings themselves, rather it is mostly a relationship between the well-sibling and the AN that has, in a way, overpowered the well-sibling's relationship with the ill-sibling (van Langenverg et al., 2018). Seeing the devastating effects of AN on their sibling, the well-sibling may find themselves with a special responsibility to their sibling, one that requires them to protect their ill-sibling, regardless of their age (Jungbauer et al., 2016). Although there is a sense of needing to protect their ill-sibling, the relationship between the siblings often worsens. The decline in the sibling relationships is related to the AN pushing the ill-sibling to manifest reclusive behavior, avoidance of contact and conversation, and emotional unavailability (Jungbauer et al., 2016).

Well-sibling as a "Control" for the Ill-sibling

Apart from a diagnosis of AN, there are several differences between the well- and ill-sibling. Several researchers have compared siblings, particularly sisters, in order to determine if there are behavioral predictors or identifying factors that puts one sibling at risk for AN. Siblings that were later diagnosed with AN displayed more internalizing problems such as social withdrawal (Adambegan et al., 2012), obsessive-compulsive traits, perfectionism, and some psychopathology, during their childhood when compared to the well-sibling (Degortes, Zanetti, Teconi, Santonstaso, & Favaro, 2014). Upon diagnosis of AN, it is often found that the ill-sibling

has also previously suffered from depression and anxiety, both of which add to the withdrawal from others, a sign and symptom of AN (Zohar, Lev Ari, & Bachner, 2016).

Although the sibling relationship is disrupted when one is diagnosed with AN, siblings still influence each other, both directly and indirectly, as well as for the better and worse. There are three main mechanisms through which siblings can influence each other: presence/coexistence, response to AN, direct and indirect influence (Honey, Clarke, Halse, Kohn, & Madden, 2006). A well-sibling's presence and coexistence could negatively affect the ill-sibling by acting as a trigger for incidents or distress, as well as acting as a point of comparison (Honey et al., 2006). The act of comparison, could be beneficial for the ill-sibling for it can help them realize the detrimental effects that AN is having on their own life and body, therefore serving as motivation to not let the AN control them (Honey et al., 2006). On the other hand, comparisons could be harmful as it could keep the ill-sibling from getting better if they are comparing themselves to someone who is naturally very thin (Honey et al., 2006). The response that siblings have when a diagnosis is made is also very influential for the ill-sibling (Honey et al., 2006; Zohar et al., 2016). If the ill-sibling feels their well-sibling's rejection and avoidance, they could either be pushed toward fighting the AN or further withdrawing into themselves (Honey et al., 2006). However, if there is a stronger positive influence on the ill-sibling, through support and encouragement for example, the ill-sibling is more likely to have an effective recovery with less likelihood of relapse (Zohar et al., 2016).

Indirect influence on the ill-sibling comes from the well-sibling's interactions with their parents. The well-sibling is able to direct how the parents respond to certain events, particularly when conflicts between the parents and ill-siblings arise (Honey et al., 2006). For example, if there is a conflict between the parents and the ill-sibling revolving around a mealtime, the well-

sibling's presence may prevent the parents from getting too frustrated with the ill-sibling or pushing the ill-sibling past what they are able to handle (Honey et al., 2006). Surprisingly, well-siblings have not been found to experience eating disturbances themselves, which is contrary to what most researchers would have predicted. Therefore, having a sibling with AN does not seem to be a risk factor for developing AN or another eating disorder, although some of AN or other eating disorder behaviors may be experimented with (Honey et al., 2006; Wunderlich, Gerlinghoff, & Backmund, 2004). Researchers suggest these findings may be due to "non-shared environmental factors," well-siblings' becoming aware of healthy living and developing a good relationship with food, and the well-sibling's desire to dissociate themselves from the ill-sibling and AN (Honey et al., 2006; Wunderlich et al., 2004).

Regardless of the circumstances of the family system, siblings indirectly influence each other through their impact on parents and their actions toward the other sibling and well-siblings directly influence ill-siblings through encouragement of the ill-sibling to get better (Honey et al., 2006). The magnitude of siblings' influence depends on a few factors, including their age and gender, their personalities, the number of siblings in the family, and the length of time with which the ill-sibling has suffered with AN (Honey et al., 2006).

Parents and Siblings as Caregivers

Their Experience

When someone in the family is diagnosed with an illness, most, if not all, of the family members shift their attention and efforts toward taking care of the ill individual to ensure that they recover as quickly and effectively possible. When an individual is diagnosed with AN, this is no different. The family system reorganizes itself around the ill-sibling and their AN, which affects individuals' roles within the family, relationships, and their personal social lives (Fox, Dean, & Whittlesea, 2017). All family members living with the individual with AN, typically

parents and siblings, become caregivers, which has a pervasive impact on their lives. (De La Rie, Van furth, De Koning, Noordenbos, & Donker, 2003; Dimitropoulos, Klopfer, Lazar, & Schacter, 2009; Fox et al., 2017; Highet, Thompson, & King, 2005; Honey & Halse, 2007).

The caregiving role affects the caregiver's relationships, sense of identity, as well as their physical, emotional and mental health (Fox et al., 2017). Caregivers experience a variety of negative emotions that mainly result from their uncertainty of the best way to help the ill-child or sibling (De La Rie et al., 2003; Fox et al., 2017). Some of the most common emotions include anxiety, anger, frustration, helplessness, sadness, guilt, and self-blame (De La Rie et al., 2003; Fox et al., 2017). These emotions become aggravated if the caregivers have difficulties psychologically separating their ill-child or sibling from the AN (Fox et al., 2017). As time passes and caregivers cannot see obvious signs of recovery, these emotions intensify, affecting their emotional and mental health (Fox et al., 2017).

In addition to emotional exhaustion, caregivers may experience physical exhaustion as they try to find different ways through which to help their ill-child throughout their days, on top of what their regular day-to-day responsibilities include, such as work or school (Fox et al., 2017). As the needs of the ill-child or sibling become all consuming, demanding, and unrelenting, the caregiver's sense of identity transforms mostly into that of being a caregiver (Highet et al., 2005). In the case of siblings becoming a caregiver, they may no longer see themselves as only a sibling, young and free; rather they identify themselves as one of the main caregivers who prioritizes, whether that be consciously or unconsciously, the overall well-being of their ill-sibling (Highet et al., 2005). In short, parents and siblings as caregivers feel a great sense of responsibility toward the individual with AN and shift their lives toward helping them overcome AN.

Parents are the primary caregivers of most families, even before the onset of AN. However, when their child is diagnosed with AN, their life severely shifts. In addition to trying to keep the household running, making sure there is food, bills are being paid, and everyone is attending to their regular duties, they also have the added pressure of seeming strong for everyone else within the family, even when inside, they are struggling (Dimitropoulos et al., 2009). Parents may put extreme blame on themselves for not being "good parents" and preventing their ill-child from being diagnosed with AN (Dimitropoulos et al., 2009). To not feel so inadequate as a parent and to protect the well-child, parents may withhold information from the well-sibling, including the seriousness of the AN on the ill-sibling or by preventing them from witnessing distressing events (Fox et al., 2017; Highet et al., 2005; Honey & Halse, 2007). Additionally, parents may feel that the community and family members outside of the nuclear family hold them responsible for their child's AN, leading them not only to experience more blame and guilt, but also shame and humiliation (Dimitropoulos et al., 2009; Fox et al., 2017; Highet et al., 2005). Fox et al (2017) found that "due to the lack of understanding, together with apprehension regarding others' reactions and shame associated with perceived stigmatization [of an individual diagnosed with AN], parents tended to limit their social networks" (Fox et al., 2017, p. 119). With a limited social network to rely on during the physically and emotionally difficult times, parents experience a negative impact on their mental health (Fox et al., 2017). Studies found that parents of an ill-child struggle with depression and other psychological distress, affecting their marital status, and work-home lifestyle, as well as further affecting the family system (Honey & Halse, 2007).

Although parents tend to withhold information from the well-sibling(s) regarding the ill-sibling's AN, they still tend to rely more on the well-sibling(s). This is because parents have a lot

on their plate with balancing home and work life, that they expect more help from well-sibling(s) forcing upon them the role as caregiver (Dimitropoulos et al., 2009; Fox et al., 2017; Highet et al., 2005). Some well-siblings may immediately and gracefully take on the role as caregiver, while other well-siblings may simply feel obligated to (Fox et al., 2017). Regardless of the circumstance through which well-siblings become caregivers, they may feel the need to intervene and lessen the burden on their parents by simultaneously looking after their ill-sibling and their parents (Dimitropoulos et al., 2009; Fox et al., 2017). As a caregiver, some of the most common activities that they engaged in to help their parents and ill-sibling included providing emotional support, becoming a mediator and encourager during mealtimes, and supplying transportation when needed and possible (Dimitropoulos et al., 2009).

Along with their new responsibilities came emotional and psychological distress for the well-sibling (Dimitropoulos et al., 2009; Fox et al., 2017; Highet et al., 2005). Studies showed that, similar to their parents, well-siblings who take on the caregiver role experience powerlessness, helplessness, anger, and self-blame (Dimitropoulos et al, 2009; Fox et al., 2017; Highet et al., 2005). Unfortunately, since well-siblings do not wish to further burden the parents, they do not tell parents how they are feeling and do not seek their support, preferring to keep everything to themselves (Dimitropoulos et al., 2009; Fox et al., 2017). However, by keeping things to themselves, well-siblings are more likely to also suffer from mental health problems, such as anxiety and depression that often goes untreated (Dimitropoulos et al., 2009). In addition to the negative emotions they experience and their reluctance to seek their parents' support, well-siblings as caregivers struggle with managing their sibling's AN by "negotiating what information to share with parents whilst remaining loyal to their sibling, managing the demands

and expectations of parents, and coping with conflict and frustration from inconsistent familial responses to the disorder" (Fox et al., 2017, p. 117).

Effect on Family Functioning

As previously established, having a close family member diagnosed with AN has a pervasive impact on the family system. Conflicts arise "from changes within the family system due to the demands of caring, whereby other family relationships were neglected, thereby reducing intimacy and increasing sentiment and friction"; everyone is on edge and with less patience (Fox et al., 2017, p. 121). It all puts strain on the caregivers which, then puts strain on relationships with significant others and among the family members, entering into a cycle of dysfunction in family dynamics and conflict for the family as a whole (Dimitropoulos et al., 2009; Highet et al., 2005).

Researchers have found that some of the main contributors to family dysfunction are the increased impact of the AN symptoms, family stigma, and lower social support (Dimitropoulos, Freeman, Bellai, & Olmsted, 2013). Family members have difficulties perceiving their ill-relative as separate from the AN, which causes the unaffected relatives to react emotionally toward the ill-relative and other family members (Fox et al., 2017; Highet et al., 2005). These emotional reactions are projected towards other aspects of their lives and/or family members, even when the real and sole cause is the AN as an illness (Highet et al., 2005). These emotional reactions and projections affect the family system as they increase conflicts and disrupt relationships (Fox et al., 2017; Halvoresen, Rø, & Heerdahl, 2013). The increased conflict results from the "burden and psychological distress in [each of the] unaffected family members includ[ing] maladaptive coping strategies, high expressed emotion, and unmet caregiver needs" (Dimitropoulos et al, 2013, p. 285) Often times, in order to avoid further adding to conflict and

confrontation, family members would consciously ignore AN behaviors, which did more harm for the ill-relative (Fox et al., 2017).

With the increase in conflicts and changes in the family system, the relationships among family members also change. Most individuals feel like they have lost trust in one another and that relationships tend to become more uneasy, less open, and less spontaneous (De La Rie et al, 2003). The parent-child relationship is one that is greatly affected by AN. As the parents shift their focus on their ill-child, they tend to expect the well-child to be independent in various ways. Although the parent-child relationship may not be as close as it was before the AN diagnosis, parents were found to sometimes try to make time and space for the well-child by talking to the well-child when they could and to acknowledge as well as address issues or events that were pertinent in the well-child's life (Honey & Halse, 2007). For the parent-ill-child relationship, the ill-child may perceive the relationship as more controlling and stressful due to the AN being the most prevailing subject between the parent and ill-child. Additionally, the children may feel that parents are being unjust, resenting that they are being held under different standards by the parents (Fox et al., 2017). The well-child may resent having to be independent and not receive as much attention from their parents, while the ill-child may resent that they are being watched at all times and wish for freedom (Fox et al., 2017).

Although inconclusive, it was also found that "despite the multiple adverse effects of AN [on family functioning, it...] may also have some positive effects on families, such as personal growth, enhanced family unity [and solidarity], increased knowledge and empathy" (Halvoresen et al., 2013, p. 25). Personal growth seems to stem from family members having to take on new roles and having to balance all their roles. In siblings particularly, personal growth may come from having to become more independent and mature, while balancing their school, home, and

personal life. Enhanced family unity and solidarity seems to arise in families that are able to work through their conflicts and in those in which family members were able to find meaning and other positive aspects in challenging or distressing times (Halvoresen et al., 2013). The unity and solidarity also results from family members all experiencing the same things, in regards to changes and emtions. Finally, increased knowledge and empathy may result from family members having to think and care about someone other than themselves. Further research in this area needs to be done in order to determine how these positive effects may outweigh the negatives and at what point.

Conclusions

Summary of Main Findings

AN does not only affect the individual diagnosed with it, but also their family members and other loved ones. Having a family member diagnosed with AN has a pervasive effect on all individuals within that family, altering members roles and affecting everyone's overall well-being and family dynamics. In addition to parents, siblings are family members that are greatly affected, yet rarely studied within the context of AN.

When a sibling is diagnosed with AN, the unaffected sibling(s) becomes the well-sibling(s) and with this new title, come a new set of experiences and expectations. These include distancing themselves from their ill-sibling, becoming more mature and independent, and experiencing an increased level of guilt and fear. Well-siblings distance themselves from their ill-sibling because their relationship with them becomes plagued with conflicts and mistrust. This mistrust stems from the well-sibling feeling guilty that they did not prevent their sibling from becoming ill and that the ill-sibling did not go to them for help before the AN got worse. Well-siblings are expected to be independent as their parents shift their attention toward the ill-sibling.

This leads the well-sibling to not only become more mature but to become an "undemanding child," preferring to keep their emotions and feelings to themselves rather than seek their parent's support. Additionally, well-siblings often experience conflicting demands leading them to become uncertain as to whose demands or needs to prioritize - their own, their parents', or their ill-sibling's needs. Despite all of this, the well-sibling is able to directly and indirectly influence the ill-sibling. Well-siblings indirectly influence their ill-sibling by interacting with their parent, possibly steering them toward one side of a decision that will later affect the ill-sibling. They can directly influence the ill-sibling by encouraging them to eat or distracting them from prevalent AN behaviors. When looking at some of the differences between siblings, it was found that there are certain behaviors that may be predictors of AN. Before the ill-sibling's diagnosis, they displayed an increase in internalizing behaviors or problems, including obsessive-compulsive traits, perfectionism, and social withdrawal. Additionally, they tend to have comorbid mental health problems such as anxiety and depression. On the other hand, well-siblings rarely display these behaviors.

Family members living with the individual diagnosed with AN, typically the parents and siblings, become caregivers. All aspects of the caregivers' lives become altered as their attention and efforts shift toward the well-being of the ill-relative. This results in a negative impact on the caregiver's sense of identity as well as their physical and mental health. Their identity now is dominated by their caregiving role rather than anything else, including some of the leisure activities they may have engaged in before the AN diagnosis. Their physical health is impacted because on top of all the responsibilities they already had outside the home and work, now caregivers must manage situations at home, leading to exhaustion. Additionally, caregivers experience a variety of strong emotions, including anger, anxiety, self-blame, and helplessness.

These emotions already have a negative impact on the caregiver, however, since caregivers do not feel like they can express what they are feeling and do not seek help, these feelings become aggravated, which negatively affects and worsens their mental health.

Broader Impact on the Family System

A family system includes all members of the family where each member has a role. Everyone's emotions, behaviors, and thoughts influence one another, therefore impacting the family as a whole as well as its dynamics. Anorexia nervosa affects everyone within the family system. When AN enters a family system, the system's proper functioning and dynamics are hindered. Relationships with each other become off-balance as everyone's emotions are heightened and intimacy is decreased, leading to increased sensitivity and friction. Individuals become more sensitive, and many opt for struggling alone so as to not cause more burden on each other. The sibling relationship is one that significantly changes when AN is diagnosed in one of the siblings. For example, siblings that were close and fully trusting before the onset of AN on the ill-sibling, become distant and skeptical of each other. This mostly results from the ill-sibling being consumed by AN and being unable to be emotionally there for someone else, which is an important foundation of a sibling relationship (Kerr, 2000).

Additionally, the family system reorganizes with the diagnosis of AN. Family members take on new roles and as a unit, the family tries to adapt to their current circumstances. Along with relationships being hindered, and the family attempting to adapt, an increase in conflict occurs, further adding to family dysfunction. The conflict more often than not, stems from everyone's heightened emotions and individuals' projections of their feelings toward someone else, despite AN being the sole blame.

On the other hand, AN could also have positive impacts on the family. It could lead to family solidarity due to all members' shared experience and understanding that at the end of the day, they are the ones that will forever have each others' backs. Individuals also experience an increased knowledge and empathy which results from having to take care of another individual. These new personal growths may eventually be very beneficial for the family as a whole, as now they will be better prepared to support each other through rough times and adapt more quickly.

Future Directions

Through this literature review it is hoped that there is a better understanding of the impact of AN, not only on the individual diagnosed with it, but on the whole family. Based on previous research, it can safely be said that a family system is greatly influenced by AN, but also that AN can be influenced by the family system. Although the research is vast, there are gaps that provide us with opportunities to further look into the effects of AN on the family and vice versa.

Currently there is one predominant method of obtaining data regarding AN and other eating disorders. Most of the research conducted thus far has been done through retrospective self-report. Although this is effective in getting participants to participate, it is not entirely reliable. Self-report gives participants - AN patients and relatives - some sense of freedom which may push them to not be completely honest with their experiences and feelings. Further research could attempt to obtain data through other methodologies, such as face-to-face and in-depth interviews or longitudinal studies. Different methodologies could also serve to confirm what has already been found, making those findings more dependable.

Those affected by AN, patients and relatives alike, are part of a sensitive group, one which researchers may find hard to study given their circumstances. Patients may seem to be recovering or have recovered well, however, AN is not something that can be cured, therefore,

researchers need to take extra precautions so as to not make the situation worse for the patient and their family or trigger a relapse. Additionally, researchers cannot exactly control their variables or conditions when conducting research in this field. They need to work with what they have, often resulting in relatively small sample sizes. Although these small sample sizes may be easier to work with as a researcher may be able to create stronger connections with participants, it also reduces the possibilities of obtaining results that can be generalized.

Along with small sample sizes, illness status has often been overlooked. Keeping in mind illness status is important as the symptoms of AN and how AN is affecting the patient and their family may vary depending on how long the individual has been living with AN. For example, research has found that there is greater conflict and family dysfunction toward the start of AN (Dimitropoulos et al., 2009; Fox et al., 2017; Halvoresen et al., 2013; van Langenberg et al., 2016). However, controlling for the illness status in research can be challenging because the possible subject pool is already limited, and adding another parameter to those who are eligible to participate may result in a very small sample size and inconclusive data.

Another limitation in current research that has not been explored are cultural influences on AN and the family system. Regardless of an individual's circumstances, culture has great influence on how an individual behaves and thinks. Additionally, culture dictates what the "ideal" body type is, which is important when studying eating disorders like AN. Yet, culture in the context of an eating disorder has seldom been explored. It would be beneficial to further examine culture and AN or another eating disorder because there may be differences in how individuals and families react to its diagnosis or throughout the recovery process. For example, in many Western cultures, like in the United States, the "ideal" body type of women is thin. However, this may not be true for other cultures. Additionally, culture may influence the

treatment process of an eating disorder. For example, in the Mexican and possibly other LatinX cultures, getting a form of therapy is looked down upon and struggling with an eating disorder is either not acknowledged or brushed off as someone trying to be healthier or "fit." Examining culture and AN further may provide more insight into effective prevention and/or treatment methods.

Although effects of AN on well-siblings has been explored, there are still aspects that need further research. Some of these aspects include the age or developmental stage of the well-sibling, siblings birth order, and sibling's gender. It is possible that the age or developmental stage of the well-sibling may yield different results because of their cognitive abilities or level of comprehension. A well-sibling in the toddler stage may not be able to understand what is going on with their ill-sibling or within the family, therefore may be affected differently than a well-sibling who is an adolescent or young adult and is able to fully understand the eating disorder and changes within the family. Although birth order has been somewhat explored (Abrams, 2009; Areemit et al., 2010; Honey & Halse, 2007; Withers et al., 2014), results are inconclusive. Some studies say that younger siblings may be more affected by their ill-siblings' diagnosis (Abrams et al., 2009), whereas others believe that older siblings are equally as affected (Areemit et al., 2010; Withers et al., 2014). Results have also been inconclusive in regard to whether AN has more negative or positive effects on the siblings, regardless of birth order. Additionally, the gender of the sibling might be an area of research as most of the research done has focused on sisters, as it is believed that they are more susceptible to eating disorders, however it could be that brothers have the same susceptibility.

Further research in AN and the family system could lead to further development of healthy coping strategies and support for family members with an ill-relative. Studies have found

several common ways in which families seem to cope, however, some may not be as effective as others (Dimitropoulos et al., 2013; Halvoresen et al., 2013). Over the past few years, family-based therapy has been the leading approach to treating AN (National Association of Anorexia Nervosa and Associated Disorders, n.d.; American Psychiatric Association, n.d.; van Langenberg et al., 2018; Callio & Gustafsson, 2016; Withers et al., 2014). Further research could help improve the quality of family-based therapy to make it more effective in reducing relapse in the patient. One possible approach could be incorporating family strengthening exercises, especially since the family system becomes greatly disrupted with AN. It might be beneficial to look into cognitive intervention or therapy for AN. Cognitive intervention has been used to treat patients with bulimia nervosa (Fox et al., 2017), and there could be aspects of it that are beneficial for AN patients as well.

References

Abrams, M. S. (2009). The well sibling: Challenges and possibilities. *American Journal of Psychotherapy*, *63*(4), 305–317.

Adambegan, M., Wagner, G., Nader, I. W., Fernandez-Aranda, F., Treasure, J., & Karwautz, A. (2012). Internalizing and externalizing behaviour problems in childhood contribute to the development of anorexia and bulimia nervosa-A study comparing sister pairs. *European Eating Disorders Review*, *20*(2), 116–120.

Areemit, R. S., Katzman, D. K., Pinhas, L., & Kaufman, M. E. (2010). The experience of siblings of adolescents with eating disorders. *Journal of Adolescent Health*, *46*(6), 569–576.

American Psychiatric Association (psychiatry.org) (2019) What are eating disorders?. Retrieved from https://www.psychiatry.org/patients-families/eating-disorders/what-are-eating-disorders

Benninghoven, D., Tetsch, N., & Jantschek, G. (2008). Patients with eating disorders and their siblings: An investigation of body image perceptions. *European Child & Adolescent Psychiatry*, *17*(2), 118–126.

Callio, C., & Gustafsson, S. A. (2016). Living with a sibling who suffers from an eating disorder: A pilot interview study. *Journal of Multidisciplinary Healthcare*, *9*, 615–622.

Degortes, D., Zanetti, T., Tenconi, E., Santonastaso, P., & Favaro, A. (2014). Childhood obsessive–compulsive traits in anorexia nervosa patients, their unaffected sisters and healthy controls: A retrospective study. *European Eating Disorders Review*, *22*(4), 237–242.

De LA Rie, S., Van furth, E., De Koning, A., Noordenbos, G., & Donker, M. H. (2005). The quality of life of family caregivers of eating disorder patients. *Eating Disorders, 13*(4), 345–351.

Dimitropoulos, G., Freeman, V. E., Bellai, K., & Olmsted, M. (2013). Inpatients with severe anorexia nervosa and their siblings: Non-shared experiences and family functioning. *European Eating Disorders Review, 21*(4), 284–293.

Dimitropoulos, G., Klopfer, K., Lazar, L., & Schacter, R. (2009). Caring for a sibling with anorexia nervosa: A qualitative study. *European Eating Disorders Review, 17*(5), 350–365.

Fjermestad, K. W., Rø, A. E., Espeland, K. E., Halvorsen, M. S., & Halvorsen, I. M. (2019). "Do I exist in this world, really, or is it just her?" Youths' perspectives of living with a sibling with anorexia nervosa. *Eating Disorders: The Journal of Treatment & Prevention*. Retrieved from https://doi.org/10.1080/10640266.2019.1573046

Fox, J. R., Dean, M., & Whittlesea, A. (2017). The experience of caring for or living with an individual with an eating disorder: A meta-synthesis of qualitative studies. *Clinical Psychology & Psychotherapy, 24*(1), 103–125.

Granic I., Hollenstein, T., Dishion, T.K., & Patterson, G.R. (2003). Longitudinal analysis of flexibility and reorganization in early adolescence: A dynamics systems of family interactions. *Developmental Psychology, 39*, 606-617.

Halvorsen, I., Rø, Ø., & Heyerdahl, S. (2013). Nine-year follow-up of girls with anorexia nervosa and their siblings: Retrospective perceptions of parental bonding and the influence of illness on their everyday life. *European Eating Disorders Review, 21*(1), 20–27.

Highet, N., Thompson, M., & King, R. (2005). The experience of living with a person with an eating disorder: The impact on the carers. *Eating Disorders*, *13*(4), 327–344.

Honey, A., Clarke, S., Halse, C., Kohn, M., & Madden, S. (2006). The influence of siblings on the experience of anorexia nervosa for adolescent girls. *European Eating Disorders Review*, *14*(5), 315–322. Retrieved from https://doi.org/10.1002/erv.713

Honey, A., & Halse, C. (2007). Looking after well siblings of adolescent girls with anorexia: An important parental role. *Child: Care, Health and Development*, *33*(1), 52–58.

Jungbauer, J., Heibach, J., & Urban, K. (2016). Experiences, burdens, and support needs in siblings of girls and women with anorexia nervosa: Results from a qualitative interview study. *Clinical Social Work Journal*, *44*(1), 78–86.

Kerr, M. E. (2000). One family's story: A primer on Bowen theory. *The Bowen Center for the Study of the Family*. Retrieved from http://www.thebowencenter.org.

National Association of Anorexia Nervosa and Associated Disorders (anad.org) (2020) Eating disorder statistics. Retrieved on January 3, 2020. https://anad.org/education-and-awareness/about-eating-disorders/eating-disorders-statistics/

Schultz, C. M., & Danford, C. M. (2016). Children's knowledge of eating: An integrative review of the literature. *Appetite*, *107*, 534–548. Retrieved from https://doi.org/10.1016/j.appet.2016.08.120

van Langenberg, T., Duncan, R. E., Allen, J. S., Sawyer, S. M., Le Grange, D., & Hughes, E. K. (2018). "They don't really get heard": A qualitative study of sibling involvement across two forms of family-based treatment for adolescent anorexia nervosa. *Eating Disorders*, *26*(4), 373–387.

van Langenberg, T., Sawyer, S. M., Le Grange, D., & Hughes, E. K. (2016). Psychosocial well-being of siblings of adolescents with anorexia nervosa. *European Eating Disorders Review*, (6), 438. Retrieved from https://doi.org/10.1002/erv.2469

Wikle, J. S., & Hoagland, A. (2019). Adolescent interactions with family and emotions during interactions: Variation by family structure. *Journal of Family Psychology*. Advance online publication. Retrieved from http://dx.doi.org/10.1037/fam0000625

Withers, A., Mullan, B., Madden, S., Kohn, M., Clarke, S., Thornton, C., … & Touyz, S. (2014). Anorexia nervosa in the family: A sibling's perspective. *Advances in Eating Disorders*, *2*(1), 53–64.

Zohar, A. H., Lev Ari, L., & Bachner, M. R. (2016). My sister myself: A controlled study of the relationship between women with a lifetime diagnosis of anorexia nervosa and their sisters. *European Eating Disorders Review*, *24*(6), 466–473.