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The Role of Social Comparisons in Perceived Parental Competence, Mental Health, and Relationship Satisfaction

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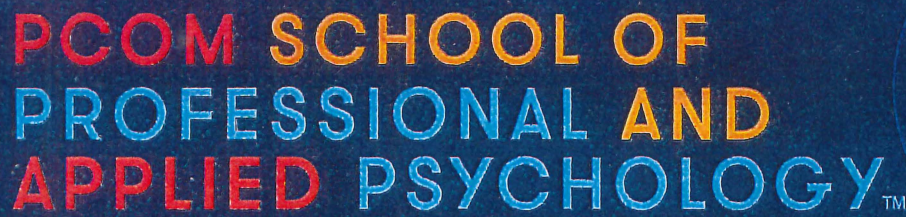
THE ROLE OF SOCIAL COMPARISONS IN PERCEIVED PARENTAL
COMPETENCE, MENTAL HEALTH, AND RELATIONSHIP SATISFACTION

By Sarah T. Caverly

Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Psychology

October 2019

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acceptable in both scholarship and literary quality.

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Abstract

The theory of social comparison suggests that all individuals are naturally driven to evaluate and compare their opinions and abilities with those of similar others to varying degrees. Social comparison behavior is associated with negative outcomes impacting mental health and relationship satisfaction, with the prevalence of social-media use providing an increased opportunity to engage in social comparisons. Most of the research on the impact of this behavior has been conducted with young-adult populations, overlooking other populations, such as parents. The limited research in this area suggests that parents, particularly mothers, who engage in social comparisons experience increased depression, are less satisfied in their parenting relationships, and have lower perceived parental competence. In addition, parents may be more susceptible to engaging in social comparisons because research suggests that times of stress and change, such as becoming a parent, increase social comparison behavior. The current study examines how engaging in social comparisons impacts mental health, relationship satisfaction, and perceived parental competence within a parent population. Of the participants, 184 met the inclusion criteria and completed a survey. Results indicate that parents who reported a higher frequency of engaging in social comparisons reported less parental competence, higher symptoms of social and generalized anxiety, and higher levels of depression. Upward and downward social comparisons are associated with generalized and social anxiety, and depression. No statistically significant results were found for frequency or direction of social comparisons impacting relationship satisfaction. Clinical implications of the findings and future directions are discussed.

Keywords: parents, social comparison, mental health, relationship satisfaction

Chapter 1: Introduction

Statement of the Problem

According to the theory of social comparison, individuals are driven to evaluate their own opinions and abilities. In the absence of objective means to assess their own opinions and abilities, individuals compare themselves to similar others (Festinger, 1954). These comparisons may include assessing such characteristics as rank, social standing, and social attractiveness (Allen & Gilbert, 1995). Expansions of social comparison theory suggest that these evaluations may be not only nondirectional comparisons of one's opinions, abilities, accomplishments, situations, or problems with someone similar, but also upward or downward comparisons (Allen & Gilbert, 1995; Festinger, 1954; Gibbons & Buunk, 1999).

Numerous studies have been conducted to examine the effects of nondirectional, upward, and downward social comparisons on a variety of factors. This research suggests that engaging in social comparisons is associated with negative impacts to individuals' mental health, including depression, anxiety, self-esteem, self-perception, and body image (Butzer & Kuiper, 2006; Feinstein et al., 2013; Haferkamp & Kramer, 2011). Findings with young adult populations suggest that nondirectional and upward social comparisons are associated with symptoms of depression and anxiety (Butzer & Kuiper, 2006). Additionally, research suggests that engaging in social comparisons may affect relationship satisfaction (Buunk & Ybema, 2003). An examination of the role of social comparison and relationship satisfaction revealed that married or co-habiting men and women who experience uncertainty in their relationships may be more likely to compare their situations with those of others (Himsel & Goldberg, 2003). Individuals who

compare their relationships to those of others may evaluate their own relationships more negatively, resulting in lower ratings of relationship satisfaction (Buunk & Ybema, 2003; Morry & Sucharyna, 2016).

While substantial research outlines the negative impact of engaging in social comparisons, most of these studies have been conducted with young-adult populations. As a result, other demographics of those who may be affected by social comparisons are potentially being overlooked. One group with a dearth of research in this area is parents. While some research focuses on parents and social comparisons, these studies have primarily looked at mothers rather than fathers (Blanchard, Blalock, & DeVellis, 1999; Chae, 2015; Coyne, McDaniel, & Stockdale, 2016). The limited research available suggests that first-time mothers who engage in social comparisons may seek out more parenting and child-rearing information to evaluate themselves as mothers compared to those who engage in the behavior less frequently (Chae, 2015). Mothers who engage in social comparisons are found to have higher levels of role overload and maternal depression, lower levels of perceived parental competence and feelings of support, and less positive co-parenting relationships (Coyne et al., 2016). Furthermore, research indicates that times of stress, novelty, or change may increase the frequency of engaging in social comparisons (Gibbons & Buunk, 1999). Parenting is often viewed as a time of change as a result of transitioning roles and responsibilities (Deave, Johnson, & Ingram, 2008) and is associated with various stressors (Hibel, Mercado, & Trumbell, 2012; Seah & Morawska, 2015; Sepa, Frodi, & Ludvigsson, 2004; Sinai & Tikotzky, 2012). As a result of this transition and possible stress, parents may be more likely to engage in social comparisons compared to other groups. Understanding the impact of social comparisons

on parent populations is needed because this group may be particularly susceptible to experiencing its negative outcomes.

Purpose of the Study

Much of the research on social comparisons focuses on its negative impact on mental health and relationships. These studies have primarily examined young-adult populations, with limited studies on parent populations, particularly studies that include fathers. Furthermore, this population may be more likely to engage in social comparisons because times of stress and change, such as becoming a parent, are associated with more frequent social comparisons. Therefore, the purpose of the current study was to examine the effects of engaging in social comparisons with a parent population that includes both mothers and fathers. In particular, this study looked at the impact of engaging in social comparisons on perceived parental competence, mental health, and relationship satisfaction. The results of this study may add to the limited research on parents and social comparisons and provide a better understanding of the potential impact of this behavior on both mothers and fathers. This information may also be useful in guiding interventions specific to this population.

Research Question

How does engaging in social comparisons impact perceived parental competence, mental health, and relationship satisfaction?

Hypotheses

- 1) Parents who report higher levels of social comparisons will report lower levels of perceived parental competence and higher levels of depression and anxiety as

compared to parents with low levels of social comparisons. This hypothesis is based on the study by Coyne et al. (2016), which found that higher levels of social comparisons by mothers on social-networking sites are associated with higher levels of depression and lower levels of parental competence.

- 2) Negative perceptions of parental competence and poor mental health (i.e., anxiety, depression) will predict poor relationship satisfaction. This hypothesis is based on the study by Coyne et al. (2016), which found that greater frequency of social comparisons was associated with lower levels of parental competence, higher levels of depression, lower feelings of support, and less positive co-parenting relationships.
- 3) Frequent social comparisons will be associated with lower relationship satisfaction. This hypothesis is based on the mixed research in this area. While some studies indicate the direction (i.e., upward, downward) of the social comparison predicts the level of relationship satisfaction (Buunk et al., 2001; Buunk & Ybema, 2003), LeBeau and Buckingham (2008) found that the tendency to engage in relationship social comparisons resulted in increased relationship insecurity and decreased perceived relationship quality.
- 4) Those who are satisfied in their relationships will report more downward social comparisons than those who are not satisfied in their relationships. Those who are not satisfied in their relationships will report more upward social comparisons than those who are satisfied in their relationships. This hypothesis is based on studies by Buunk and Ybema (2003) and Morry and Sucharyna (2016), which

found that engaging in upward social comparisons leads to more negative evaluations and interpretations of relationships.

- 5) An exploratory analysis will be run to determine if a relationship exists between upward and downward social comparisons and mental health (i.e., depression, anxiety). This hypothesis is based on the mixed research in this area. Some research indicates that individuals who are more depressed may make more frequent upward social comparisons (Butzer & Kuiper, 2006; Wood & Lockwood, 1999), while other studies suggest that depressed individuals may make more downward social comparisons (Aspinwald & Taylor, 1993; Steers et al., 2014).

Chapter 2: Review of the Literature

Social Comparisons

Theory

The theory of social comparison posits that individuals are naturally driven to evaluate their own opinions and abilities. Individuals typically are motivated to evaluate only opinions and abilities they value as important. In the absence of objective means, individuals assess their opinions and abilities through comparison with others (Festinger, 1954). This process is typically automatic and unintentional (Gibbons & Buunk, 1999). Given a range of possible comparisons, individuals compare themselves to others with similar opinions and abilities, resulting in the perception that they have accurately evaluated their own opinions and abilities. In contrast, individuals usually do not evaluate their opinions and abilities in comparison to those who are extremely dissimilar to themselves. If an individual with very different opinions and abilities is the only person available for comparison, individuals are not able to make a definitive evaluation of their own opinions and abilities (Festinger, 1954).

While the original theory of social comparison focuses on the general evaluation of one's opinions and abilities in comparison to those of others, researchers have expanded this theory to include upward and downward comparisons and social comparison orientation (SCO; Allen & Gilbert, 1995; Gibbons & Buunk, 1999; Taylor & Lobel, 1989). When individuals engage in upward comparisons, they are evaluating themselves in comparison to a more fortunate individual. Conversely, when individuals engage in downward comparisons, they are comparing themselves to a less fortunate

individual (Taylor & Lobel, 1989). Although most researchers suggest that all individuals engage in social comparisons at least occasionally, the extent of this behavior varies among individuals and is known as SCO (Gibbons & Buunk, 1999). While self-evaluation of one's opinions and abilities is derived from the original theory of social comparison, more recent research has expanded this self-evaluation to include such aspects as rank, social standing, relative similarity to others, social attractiveness, acceptance by others, accomplishments, traits, possessions, feelings, and features of significant others (Allen & Gilbert, 1995; Gibbons & Buunk, 1999). Furthermore, individuals may use social comparisons for other functions, such as for a coping mechanism, for a way to deal with negative affect, and for self-enhancement (White, Langer, Yariv, & Welch, 2006).

Comparisons Facilitated by Social Media

Social comparison theory suggests that all individuals engage in social comparisons some of the time to evaluate their own opinions, abilities, and various other characteristics. The increased prevalence of social-media use may make engagement in social comparisons more likely. As social-networking sites provide the opportunity for individuals to be presented with information and to learn about others, frequent comparisons of themselves to other individuals may result (Lee, 2014). For example, social-media sites, such as Facebook, consist of billions of active users and are an important part of the social lives of many individuals (Chow & Wan, 2017). Positive associations have been found between Facebook use and social comparisons, with the frequency of Facebook use leading to more social comparisons. Finding comparison targets on such sites as Facebook also may be easier because most individuals have

friends who share similar backgrounds (Jang, Park, & Song, 2016). Even passive social networking (e.g., primarily viewing profiles rather than posting information) has been found to be positively associated with upward social comparisons (Wang, Wang, Gaskin, & Hawk, 2017). Furthermore, individuals who make social comparisons on social-networking sites, such as Facebook, have an increased likelihood of engaging in social comparison behavior outside of social media (i.e., in the real world; Feinstein et al., 2013).

Outcomes Associated with Engagement in Social Comparisons

Mental health.

The increased likelihood of engaging in social comparisons through social media use may have numerous negative effects on mental health. Engagement in social comparisons is associated with impacts to self-concept and self-esteem (de Vries & Kuhne, 2015; Vogel et al., 2015), depression (Butzer & Kuiper, 2006; Feinstein et al., 2013), and anxiety (Butzer & Kuiper, 2006; Mitchell & Schmidt, 2014).

Self-concept and self-esteem.

Engaging in social comparisons, particularly through social-media use, is found to affect self-concept and self-esteem (Butzer & Kuiper, 2006; Cramer, Song, & Drent, 2016; de Vries & Kuhne, 2015; Jang et al., 2016; Lee, 2014; Liu et al., 2017; Vogel, Rose, Okdie, Eckles, & Franz, 2015; Vogel, Rose, Roberts, & Eckles, 2014; Wang et al., 2017). The use of social-networking sites, such as Facebook, may result in negative social comparisons, leading to damaging self-perceptions (de Vries & Kuhne, 2015). Social-networking sites allow others to present themselves as doing better than others, as

most people typically share positive aspects of themselves online. Therefore, negative social comparisons may be easier for individuals to make. In a study of young adults in the emerging adulthood phase (i.e., aged 18-25 years), frequent social-networking use (e.g., Facebook) was associated with negative social comparisons and negative self-perceptions of social competence and physical attractiveness, especially for young adults who indicated they were more unhappy (de Vries & Kuhne, 2015). Furthermore, frequent social comparison behavior on Facebook is associated with worse self-perceptions, lower self-esteem, and greater negative affect (Vogel et al., 2015). In one study, undergraduate students viewed Facebook profiles of similar individuals (i.e., in age, gender, high school) they identified as casual friends or acquaintances. Individuals higher in SCO reported lower trait self-perceptions (i.e., successful, attractive, intelligent), lower state self-esteem (e.g. success vs. failure), and more negative affect (i.e., upset, depressed) compared to those who engaged in less frequent social comparisons on Facebook. These findings are similar to those of an earlier study by Vogel et al. (2014), which found that frequent Facebook users reported lower trait and state self-esteem, although trait self-esteem was mediated by upward comparisons. Additionally, individuals engaging in upward social comparisons were found to experience low self-evaluations and poor well-being in an international sample of Chinese students (Wang et al., 2017). Individuals who reported low self-esteem and less positive affect indicated that they were more likely to make comparisons for the purpose of self-evaluations and self-improvements compared to those with higher self-esteem (Cramer et al., 2016). In summary, frequent engagement in social comparisons negatively impacts self-perceptions and self-esteem, resulting in

individuals feeling worse about themselves in such areas as physical attractiveness, intelligence, and competence.

Depression.

In addition to negatively impacting self-perceptions and self-esteem, engaging in social comparisons may result in individuals having an increased likelihood of experiencing symptoms of depression (Butzer & Kuiper, 2006; Feinstein et al., 2013; Liu et al., 2017; Pantic et al., 2012; Steers, Wickham, & Acitelli, 2014; Wang et al., 2017). The research regarding the direction of social comparisons and depressive symptoms is mixed. Some research indicates that individuals who are more depressed may make more frequent upward social comparisons, thereby maintaining and increasing negative self-views, while other studies suggest that depressed individuals may make more downward social comparisons, thereby decreasing negative affect and increasing self-esteem (Aspinwald & Taylor, 1993; Butzer & Kuiper, 2006; Wood & Lockwood, 1999). Steers et al. (2014) found that downward social comparisons are associated with depressive symptoms and suggested that individuals with lower self-esteem engage in downward social comparisons to feel better about themselves, but they actually feel worse. Their research indicates that the frequency of social comparisons, rather than the direction, is related to depressive symptoms. Moreover, comparing oneself to others and making negative self-evaluations (e.g. negative social comparisons) can place individuals at risk for rumination and depressive symptoms (Feinstein et al., 2013). A sample of undergraduate students was asked to indicate their frequency of social comparison on Facebook and in general. The students were assessed for rumination and depressive symptoms. Findings suggested a relationship between Facebook social comparisons and

general social comparisons, both of which were associated with rumination and depressive symptoms. Specifically, making negative social comparisons via Facebook predicted increases in rumination, which was associated with increases in symptoms of depression as well. A relationship between depression and social networking sites was also found for an adolescent population (Pantic et al., 2012), and college students (Steers et al., 2014), with time spent on social-networking sites, such as Facebook, being associated with increases in depression scores. These studies suggest that social-media use provides the opportunity for individuals to engage in frequent social comparisons, thereby possibly leading to an increase in depressive symptoms.

Anxiety.

Engagement in social comparisons not only impacts self-perceptions and mood (e.g. depression), but also may result in individuals feeling more anxious (Butzer & Kuiper, 2006; Mitchell & Schmidt, 2014). In one study, undergraduate students were asked to indicate the frequency and direction of their social comparisons and to complete measures regarding their self-concept clarity (e.g., perceived personal attributes), intolerance of uncertainty, anxiety, and depression (Butzer & Kuiper, 2006). Individuals who reported higher intolerance of uncertainty were associated with making more nondirectional, upward, and downward social comparisons. Additionally, individuals who engaged in more frequent nondirectional and upward social comparisons reported higher levels of anxiety and depression. Furthermore, a relationship has been found between social comparisons and social anxiety (Mitchell & Schmidt, 2014). In a study of more than 100 freshman undergraduates, participants were asked to read a pretend profile of either a high- or average-achieving student's account of his or her adjustment to

college life. Individuals who reported higher levels of social anxiety indicated more negative appraisals of their personality compared to the personality of the student in the profile. In addition, male participants who reported greater social anxiety indicated more negative self-appraisals of their signs of anxiety when comparing themselves to the high-achieving student profile. Engagement in frequent social comparisons is associated with high levels of anxiety and poor self-evaluations, both of which can negatively impact the well-being and functioning of individuals.

Additional impacts of social comparisons.

Although most of the research on social comparisons focuses on its impact on individuals' self-perceptions and mental health (i.e., depression, anxiety), some research indicates its effect in several other areas such as destructive emotions and behaviors, body image, and occupational satisfaction (Haferkamp & Kramer, 2011; Polivy, 2017; White et al., 2006). For example, engaging in frequent social comparisons is related to various emotions and behaviors that can be damaging, such as feelings of envy, guilt, regret, and defensiveness; engagement in lying and blaming of others; and in-group bias (White et al., 2006). Additionally, engaging in social comparisons impacts body image and eating behavior (Haferkamp & Kramer, 2011; Polivy, 2017). After viewing attractive and less attractive profiles on social-networking sites, individuals who viewed the more attractive profiles reported increases in negative body image (Haferkamp & Kramer, 2011). Individuals may also compare the food they are eating to the food others are eating, leading to conclusions regarding the amount of food they should eat (e.g., a "normal" amount or overeating), their feelings about the type of food they ate, and their level of satisfaction with themselves and food (Polivy, 2017). Finally, engaging in social

comparisons may affect feelings regarding one's occupation, resulting in decreased job satisfaction and greater perceived differences between one's current job status and one's ideal job status (Haferkamp & Kramer, 2011; White et al., 2006). Overall, the results of all of this research indicate that engagement in social comparisons can negatively impact individuals' well-being in a variety of areas, resulting in more negative self-perceptions, lower self-esteem, increased symptoms of depression and anxiety, destructive emotions and behaviors, negative body image, and decreased job satisfaction.

Relationships.

In addition to its effect on mental health, engagement in social comparisons impacts relationships in various ways. Research suggests that social comparisons affect couples' moods (Buunk, 2006; Buunk & Ybema, 2003) and relationship satisfaction (Buunk et al., 2001; Morry & Sucharyna, 2016). An association has also been found between mental health and relationship satisfaction (Porter & Keefe, 2017; Rehman, Evraire, Karimiha, & Goodnight, 2015).

Changes in couples' moods.

Engaging in social comparisons is associated with changes in couples' moods (Buunk, 2006; Buunk, Oldersman, & de Dreu, 2001; Buunk & Ybema, 2003; Morry & Sucharyna, 2016). When making social comparisons regarding their relationships, couples may experience positive or negative changes in their moods. This change in mood can be the result of individuals' SCOs, direction of comparison (i.e. upward, downward), and perception of the amount of effort necessary to give to the relationship. In one study, married and co-habiting participants listened to a story in which a

"married" target discussed his or her relationship (Buunk, 2006). The story described someone with a happy marriage in which the couple put either a high or low amount of effort into the relationship. Participants' affect and identification with the target relationship were assessed. Individuals higher in SCO had more positive affect and identification with the high-effort couples' relationship and reported more negative affect and less identification with the low-effort couple. Therefore, when individuals compared their relationships to a happily married couple that put a low amount of effort into their relationship, the individuals demonstrated more negative affect. Additionally, married women who made downward relationship social comparisons experienced a more negative mood (Buunk & Ybema, 2003). Individuals who made downward relationship social comparisons to a low-effort couple also indicated they identified less with that couple.

Engaging in relationship social comparisons is also found to impact the mood of those in dating relationships, although this behavior was found to be consistent with making more upward social comparisons (Morry & Sucharyna, 2016). Undergraduates in dating relationships were asked to compare their relationships to a friend's relationship. The friend's relationship was better than theirs (upward), worse than theirs (downward), or similar to theirs (lateral). Individuals who made upward comparisons reported less positive affect compared to those who made lateral comparisons. Despite the research suggesting that in some instances relationship social comparison can lead to positive affect, most of the research suggests that married, co-habiting, and dating individuals who compare their relationships to those of others have an increased likelihood of experiencing a negative mood.

Relationship satisfaction.

In addition to an impact on their moods, married, co-habiting, and dating couples who engage in social comparisons may also experience changes in their relationship satisfaction. In a series of experiments, researchers examined whether couples in different stages of their relationships (i.e., undergraduates dating or co-habiting; nonstudent sample of married, cohabitating, and dating couples) made downward social comparisons that resulted in a better perceived quality of their relationships (Buunk et al., 2001). To measure downward social comparison, individuals were asked to list the reasons they and their partners were better than other partners. Results from the experiments with each group of couples indicated that individuals who engaged in downward social comparisons reported greater relationship satisfaction. Additionally, making downward social comparisons was associated with less relationship discontent for those individuals higher in SCO. These findings suggest that engagement in downward social comparisons may increase relationship satisfaction, because couples can use those comparisons to feel better about the problems in their relationships through comparison to others who they perceive as doing worse.

While this research suggests that engagement in downward comparisons may result in increased relationship satisfaction, other research indicates the direction of comparison is inconsequential because individuals are exposed to both upward and downward relationship comparisons on a daily basis (LeBeau & Buckingham, 2008). As a result, the frequency of comparisons rather than the direction is significant, with the tendency to engage in relationship social comparisons resulting in increased relationship insecurity and decreased perceived relationship quality. Various undergraduate couples

(i.e. dating, cohabitating, engaged, and married) were asked about their relationships in order to examine the associations between the tendencies to engage in relationship social comparisons, relationship insecurity, and perceived relationship quality. Results from the study indicate that relationship social comparison is associated with low self-esteem; relationship insecurity; lower relationship satisfaction, commitment, and intimacy; and higher perceived quality of relationship alternatives. Additionally, these findings suggest that a greater likelihood to engage in relationship social comparison is associated with decreased relationship satisfaction and increased relationship insecurity over time, with results remaining stable at a 4 to 6 week follow-up. Overall, these findings suggest that the tendency to engage in relationship social comparison leads to less favorable evaluations of the relationship.

Other studies have found similar results in examining the impact of engagement in social comparisons on the evaluation of one's relationship (Buunk & Ybema, 2003; Morry & Sucharyna, 2016). Married women who engaged in upward social comparisons were found to evaluate their own relationships more negatively than individuals who did not engage in upward social comparisons (Buunk & Ybema, 2003). Furthermore, individuals in dating relationships were found to make more negative interpretations of their relationships following upward social comparisons compared to when making lateral social comparisons (Morry & Sucharyna, 2016). More negative relationship interpretations were also associated with lower ratings of satisfaction and commitment and higher ratings of exit and neglect behaviors. However, no difference was found in negative relationship interpretations when comparing upward and downward social comparisons. As no difference was found between upward and downward social

comparisons, this suggests that as LeBeau and Buckingham (2008) pointed out, the tendency to make relationship social comparisons rather than the direction of the comparisons may negatively impact relationship satisfaction.

Relationship satisfaction and mental health.

While engagement in social comparisons has been found to impact relationship satisfaction, an association also exists between depression, anxiety, and relationship satisfaction (Porter & Keefe, 2017; Rehman et al., 2015). In a study of 70 couples, researchers examined the effects of depression and state anxiety in the relationship satisfaction of married couples over time (Rehman et al., 2015). Individuals who reported greater depressive symptoms indicated less relationship satisfaction, a report that remained constant at a 6 month to 1 year follow-up. Additionally, those with partners who reported greater depressive symptoms also indicated they were less satisfied with their relationships. In terms of anxiety, individuals who reported greater anxiety symptoms indicated a decrease in relationship satisfaction over time. Furthermore, wives with husbands who initially indicated greater anxiety symptoms reported decreased relationship satisfaction. The association between anxiety and relationship satisfaction has also been examined among those in dating relationships (Porter & Keefe, 2017). In a study of more than 300 undergraduate couples who were in a relationship for at least 3 months, researchers looked at the relationship between social anxiety and perceived, observed, and expressed criticism during individuals' interactions with their intimate partners. For female participants, social anxiety was associated with being more critical of their partners. Additionally, female participants who reported social anxiety indicated they felt more upset when criticized by their partners. These findings suggest that

individuals who report dissatisfaction in their relationships may also be experiencing symptoms of depression and anxiety. Although social comparisons were not examined in these studies, given the relationship between social comparisons, mental health, and relationship satisfaction, individuals may be feeling worse about themselves and their relationships as a result of comparison with others.

Parents

Outcomes Associated with Engagement in Social Comparisons for Parents

While research regarding the impacts of social comparisons on various factors, such as mental health and relationship satisfaction, is expansive, limited research has been conducted in this area with a parent population. Furthermore, the limited research that is available primarily focuses on mothers engaging in social comparisons (Blanchard et al., 1999; Chae, 2015; Coyne et al., 2016). Research that includes fathers engaging in social comparisons seems to have been examined only with parents whose children had been diagnosed with epilepsy (Mendes, Crespo, & Austin, 2017). Similar to young-adult populations, parents who engage in social comparisons are impacted in the areas of mental health and relationships (Blanchard et al., 1999; Coyne et al., 2016). Additionally, engaging in social comparisons for parents impacts parental competence, views on motherhood and their children, and the well-being of their children (Chae, 2015; Coyne et al., 2016; Gentina, Decoopman, & Ruvio, 2013; Mendes et al., 2017).

Mothers who engage in social comparisons are associated with increased levels of anxiety and depression (Blanchard et al., 1999; Coyne et al., 2016). In an early study, researchers examined whether new mothers of premature infants differed from new

mothers of full-term infants in their use of social comparisons (i.e., frequency, direction) or their psychological adjustment and if their psychological well-being was associated with the frequency and direction of social comparisons (Blanchard et al., 1999). Social comparisons were categorized in several ways. First, new mothers' statements regarding their infant children were rated and placed into an upward, downward, or lateral comparison category. Then, mothers' preferences for making a certain type of social comparison were assessed, including asking mothers to rate characteristics of the average baby compared to their own children. Psychological adjustment was measured in the areas of depression, life satisfaction, general well-being, and anxiety (i.e., state and trait). Findings showed that significantly more mothers of premature infants made at least one comparison and made more downward comparisons compared to mothers of full-term infants. Mothers of premature infants who made downward comparisons viewed their children as doing better than the average premature infant, a view associated with increased psychological well-being. However, mothers of premature infants reported more state anxiety and indicated higher levels of anxiety compared to mothers of full-term infants. Although no significant differences were found in the areas of depression, life satisfaction, and general psychological well-being, mothers of full-term infants indicated better adjustment overall on the measures compared to mothers of premature infants. Therefore, these findings suggest that frequency of social comparisons is associated with negative impacts to mental health for mothers of premature infants. These results are consistent with findings from Steers et al. (2014), which suggest that the frequency, rather than the direction, of social comparisons impacts mental health.

In a more recent study examining the impact of social comparisons with mothers, researchers looked at the role of social comparisons for mothers who used social-networking sites (Coyne et al., 2016). As previously noted, social-networking sites have millions of subscribers, allowing individuals easy access to numerous comparison targets. As social-networking sites provide the opportunity for individuals to present idealized or best versions of themselves, engaging in social comparisons on these sites may lead to more negative outcomes. In particular, mothers may feel as though they need to be the "perfect parent" in comparison to posts of others on social media. This comparison can range from peers to celebrities who may promote the concept of ideal motherhood (e.g., complete devotion to one's children; Chae, 2015). In a study of more than 700 mothers, researchers looked at the effects of social comparisons on social-networking sites in several contexts, including mental health (Coyne et al., 2016). Comparisons were assessed via a Likert-scale response to a statement (i.e., "I compare myself to other parents that I have seen on social networking sites"). Results indicated that higher levels of social comparisons on social-networking sites were associated with higher levels of maternal depression. Additionally, parental competence, parental role overload, and relationship perceptions and outcomes were studied. Higher levels of social comparisons on social-networking sites were also related to higher levels of parental role overload and lower levels of parental competence. Although no significant findings were found in the area of relationship satisfaction, greater frequency of social comparisons was associated with lower feelings of support and less positive co-parenting relationships.

A few additional studies have examined parents and social comparisons, finding that social comparisons affect views on motherhood and children and on child well-being

(Chae, 2015; Gentina et al., 2013; Mendes et al., 2017). As previously noted, social media may provide the opportunity for parents to engage in social comparisons because of the availability of millions of comparison targets. However, as individuals often present only the best versions of themselves on social media, individuals may be comparing themselves with idealized rather than accurate targets. As a result, contemporary motherhood may be conceptualized as ideal motherhood or intensive mothering, meaning that mothers are viewed as the primary caregivers, are complete only by having a child, and are putting all their time and energy into mothering (Chae, 2015). In a study of Korean mothers, this concept was examined in terms of exposure to celebrity mothers online because they may promote this idea of ideal or intensive motherhood. Researchers examined if viewing information regarding celebrity mothers and childrearing information was associated with support of the intensive mothering concept, SCO, and competition among mothers. Findings suggest that viewing information from celebrity mothers, formal childrearing information online, and interpersonal communication with other mothers are associated with SCO. Additionally, exposure to information from celebrity mothers is associated with support of the concept of intensive mothering and competitiveness with other mothers. Moreover, engagement in social comparisons may impact how parents view their children and their children's well-being (Gentina et al., 2013; Mendes et al., 2017). In addition to comparing themselves to celebrity mothers and peers, mothers may also compare themselves to their adolescent daughters (Gentina et al., 2013). This comparison may result in an influence on mothers' behaviors, such as their clothing consumption practices. Mothers who compare themselves to their daughters may change their clothing brands, stores, and

styles. Furthermore, in one of the only studies that includes both mothers and fathers, parents whose children were diagnosed with epilepsy were asked about their SCO, perceptions of family life challenges, and perceptions of their children's daily lives, while their children were asked about their health-related quality of life and perceived stigma (Mendes et al., 2017). Findings suggested that parents of children diagnosed with epilepsy who were more likely to engage in social comparisons had children who reported more perceived stigma and worse health-related quality of life. Therefore, frequency of social comparisons for parents seems to be associated with more negative outcomes for these children.

Parental Stress

While research on parents and social comparisons is limited, an association has been found between increased frequency of social comparisons and times of stress and change (Gibbons & Buunk, 1999). As becoming a parent is a new, changing role that can be very stressful, parents may be more likely to engage in social comparisons as a result. According to Abidin (1992), parental stress results from evaluations made by the parent regarding his or her commitment to the new parenting role.

Parental stress and mental health.

Parental stress can impact mental health, resulting in negative feelings, depression, and anxiety (Don, Chong, Biehle, Gordon, & Mickelson, 2014; Hildingsson & Thomas, 2014; Johansson, Svensson, Stenstrom, & Massoudi, 2017; Seah & Morawska, 2015). In a longitudinal study, mothers and their male partners were asked about their prenatal feelings and their parental stress during pregnancy, early after the

birth, and 1 year following the birth of their children (Hildingsson & Thomas, 2014). Parental stress for both parents was associated with negative prenatal feelings about the pregnancy, upcoming birth, and the first few weeks with the new baby. Furthermore, mothers reported increased parental stress in the areas of role restriction, social isolation, and spouse relationship compared to men. Mothers with other children also reported higher levels of stress.

Additionally, parental stress may lead to negative feelings such as depression and feelings of incompetence (Johansson et al., 2017). Parents were assessed for depressive symptoms, feelings of incompetence, and relationship problems with their spouses 25 months after the birth of their children. More than 16% of the children had at least one parent who reported symptoms of depression. Furthermore, parents who endorsed symptoms of depression also experienced greater feelings of incompetence. In another study, paternal and maternal stress was evaluated during the first 6 months of having a child (Seah & Morawska, 2015). Parents were asked to complete self-report measures to examine postnatal depressive symptoms, parental stress, efficacy, responsiveness, attachment, and family and social support. While no significant differences were found between mothers and fathers regarding level of parental stress, 23.4% of mothers and 12.2% of fathers scored in the clinical range on a measure of parental stress. Furthermore, mothers reported higher levels of postnatal depression, responsiveness, and attachment compared to fathers.

In addition to depression, the transition to parenthood may result in feelings of increased anxiety (Don et al., 2014). In a longitudinal study of more than 200 first-time parents, researchers examined changes in anxiety among a low-risk population (e.g.,

upper socioeconomic status). New parents were assessed on levels of anxiety during the third trimester and at 1, 4, and 9 months following the birth of their children.

Additionally, participants completed measures of depression, expected parenting efficacy, perceived emotional spousal support, and relationship satisfaction during the third trimester. Most parents in the study reported some anxiety prior to the birth of their children, which then declined following the children's birth. However, a smaller subgroup of parents reported moderate levels of anxiety prior to the birth of their children, and the levels remained stable in the subsequent months following the birth of their children. Results suggest that members of this subgroup were also more likely to report higher depression, lower expected parenting efficacy, and lower relationship satisfaction during pregnancy compared to the other parents in the study. Overall, the results of these studies indicate that parents, especially first-time parents, may experience stress as a result of the transition to parenthood, leading to symptoms of depression and anxiety.

Parental stress and relationships.

In addition to impacting mental health, parental stress is also associated with relationship problems (Deave, Johnson, & Ingram, 2008; Hildingsson & Thomas, 2014; Johansson et al., 2017). Older women and women not living with their partners who were assessed 1 year after the birth of their children reported increased levels of stress related to problems with their spouses (Hildingsson & Thomas, 2014). Parents who endorsed symptoms of depression 25 months after the birth of their children reported relationship problems with their spouses (Johansson et al., 2017). Furthermore, first-time mothers and their partners who were interviewed during the last trimester and 3 to 4 months

postpartum indicated that they were surprised about the changes in their relationships after becoming parents (Deave et al., 2008). Specifically, parents reported additional stressors on their relationships as the result of the new demands associated with having a child.

Parental stress also impacts perceptions of social and family supports (Deave, et al., 2008; Seah & Morawska, 2015; Sepa & Ludvigsson, 2004). In one study, first-time mothers reported feeling well supported in general and noted that supports included their partners, their parents, friends and colleagues, health professionals, and pre and post-natal support groups. First-time fathers listed only their partners, colleagues, and health professionals as supports (Deave, et al., 2008). However, in another study of new parents, predictors of parental stress included a lack of supports (Sepa & Ludvigsson, 2004). In this study, more than 16,000 new parents were assessed at their children's birth and 1 year later regarding their parental stress, social support, and confidence/security. Mothers who reported higher stress were associated with less social support and confidence/security. Additionally, new parents who were evaluated 6 months after the birth of their children reported impacts to family and social support (Seah & Morawska, 2015). Fathers reported lower levels of family support, while mothers reported lower levels of social support. Therefore, the transition to parenthood and the increased stress that may accompany this new role can negatively impact parents' relationships with their partners, families, and other members of their support systems.

Additional factors associated with parental stress.

In addition to its impact on mental health and relationships, parental stress is found to affect other factors, including sleep (Sepa & Ludvigsson, 2004; Sinai &

Tikotzky, 2012) and views on children (McMahon & Meins, 2011). Parental stress may also contribute to physiological symptoms (Hibel et al., 2012).

Sleep.

Parental stress is associated with changes in infant and parent sleeping patterns (Sepa & Ludvigsson, 2004; Sinai & Tikotzky, 2012). Mothers and fathers of infants between the ages of 4 and 5 months were asked about their parental stress and infant and parent sleeping patterns (Sinai & Tikotzky, 2012). Half of the mothers in the sample were on maternity leave, while the other half had returned to work. Parents completed daily sleep logs and a measure of parental stress. Parental stress was associated with perceptions of problematic infant sleep. Furthermore, poor infant and maternal sleep patterns were related to parental stress, but only for mothers on maternity leave. Additionally, poor child sleeping patterns was found to be a predictor of parenting stress in new parents of 6 month old children (Sepa & Ludvigsson, 2004). These findings suggest that parents of young children who are stressed are not only dealing with poorer mental health and relationship problems, but also may be experiencing sleep disturbances.

Views on children.

While parental stress is associated with numerous factors that can impact parents' moods, relationships, and sleep, it may also affect parents' views of interactions with their children (McMahon & Meins, 2011). In a study of mothers with 4 year-old children, researchers examined whether individual differences in mothers' mental representations of their children were associated with parental stress and observed parenting behavior.

Mothers who used more positive mental-state descriptors (i.e., imaginative, interested, intelligent) for their children reported less parental stress and were rated as less hostile during child interactions. Additionally, mothers who reported lower scores on a measure of emotional availability indicated higher levels of parental stress. Therefore, mothers who report higher levels of parental stress may interact more negatively with their children.

Physiological effects.

In addition to the relationship between parental stress and various other factors, parents may also experience physiological symptoms caused by stress (Hibel et al., 2012). In a recent study, working parents of young children were examined as a result of the unique stressors associated with having to take care of their children while also getting themselves ready for work in the morning. Researchers measured the cortisol awakening response in a sample of working mothers with a child between the ages of 2 and 4 years. The cortisol awakening response refers to the normative rise in cortisol levels occurring during the 30 minutes after one wakes up and is thought to help prepare individuals for the demands of the day. Cortisol samples were collected at awakening and 30 minutes later on 4 consecutive days, including 2 working and 2 non-working days. Mothers with higher reported parental stress had higher average morning cortisol levels on work days compared to non-work days. Additionally, mothers with high job strain and high parental stress had significantly higher cortisol increases on work days compared to non-work days. These findings suggest that parental stress and work may impact parents physiologically as well as mentally. These studies suggest that becoming a parent can be a time of great stress and change, impacting various mental, emotional, and physical

aspects of one's life. As a result, parents may be more likely to engage in social comparisons compared to other populations because times of stress and change increase the likelihood of engaging in social comparisons. Furthermore, given the negative outcomes associated with parental stress, parents may be at a higher risk for experiencing the negative outcomes associated with social comparisons compared to other populations because they are already under some level of duress.

Information for New Parents

Stress and the transition to the role of parent may increase the likelihood of parents engaging in social comparisons. Additionally, some research suggests that individuals have limited information regarding the transition to parenthood, perhaps leading them to seek out comparison-related information (Deave, et al. 2008). First-time mothers and their partners who were asked about the transition to parenthood and parenting skills indicated that they had little information about the transition to parenthood, particularly its impact on their relationships. Additionally, new mothers may seek out more parenting and child-rearing information to evaluate themselves as mothers (Chae, 2015). Mothers who were more likely to engage in social comparisons were associated with viewing information from celebrity mothers, viewing formal childrearing information online, and having interpersonal communication with other mothers. These findings suggest that because parents have limited information regarding the transition to parenthood, they may be more likely to use online and social-media forums because they provide easy and quick access to a plethora of information regarding parenting. In a study examining parental use of the Internet to identify information regarding children, health, and family life, researchers found that many parents used the Internet for both

information and social support (Plantin & Daneback, 2009). In particular, new mothers, parents in their thirties, and parents who identified themselves as middle class most often used the Internet to search for health and parenting information. Furthermore, additional research suggests that parents are increasingly using the Internet for information about health and childrearing (Rothbaum, Martland, & Janssen, 2008). In a study of more than 100 parents, those high in socioeconomic status used the Internet more frequently compared to parents in other socioeconomic groups. Additionally, new parents may use social-media on a frequent basis (Bartholomew, Schoppe-Sullivan, Glassman, Kamp Dush, & Sullivan, 2012). A sample of more than 300 parents was interviewed 9 months after the birth of their children to study their Facebook use, parental satisfaction, self-efficacy, and stress. Findings suggested that mothers use Facebook more often than fathers. Furthermore, mothers who used Facebook more often and with greater content management reported increased levels of parental stress. These findings suggest that parents, particularly new parents, tend to use the Internet and social-media frequently. As a result, parents have access to millions of comparison targets, making engagement in social comparisons easy for this population.

Summary and Closing

While all individuals may engage in social comparisons at least occasionally, the prevalence of social-media use may increase the likelihood of individuals engaging in social comparisons because they have easy access to millions of comparison targets. As a result, much of the research on social comparisons has focused on the impact of engaging in social comparisons when using social media. Frequent engagement in social comparison has been found to negatively impact mental health, including self-esteem

(Butzer & Kuiper, 2006; Cramer et al., 2016; de Vries & Kuhne, 2015; Wang et al., 2017), anxiety (Mitchell & Schmidt, 2014), and depression (Feinstein et al., 2013; Liu et al., 2017; Pantic et al., 2012; Steers et al., 2014). Additionally, couples who engage in relationship social comparisons may experience negative moods (Buunk, 2006; Buunk & Ybema, 2003; Morry & Sucharyna, 2016) and decreased relationship satisfaction (LeBeau & Buckingham, 2008).

Although research regarding the effects of engaging in social comparisons is expansive, most of these studies have been conducted with undergraduate and young-adult populations. Therefore, other demographics impacted by social comparisons, such as parents, may be overlooked. Limited research has been conducted on social comparisons with a parent population. Furthermore, the limited studies available typically examine only mothers and exclude fathers (Blanchard et al., 1999; Chae, 2015; Coyne et al., 2016). Similar to the research with undergraduate and young-adult populations, research on parents who engage in social comparisons reveals negative impact in the areas of mental health and relationship satisfaction (Blanchard et al., 1999; Coyne et al., 2016). Parents who engage in social comparisons may also negatively evaluate their competency as parents (Coyne et al., 2016).

Despite the limited research on parents and social comparisons, numerous studies have examined the impact of stress and parenting because becoming a parent is often viewed as a time of stress and transition. Additionally, a relationship exists between frequency of social comparisons and times of stress and change (Gibbons & Buunk, 1999). This relationship suggests that parents may be very likely to engage in social comparisons because they are under a great deal of stress as they transition to the new

role of parent. Parental stress is associated with depression and anxiety (Don et al., 2014; Johansson et al., 2017) and relationship problems (Johansson et al., 2017). Furthermore, some research indicates that parents have limited information regarding the transition to parenthood (Deave et al. 2008). As a result, parents may be more likely to use online and social-media platforms as a way to gather easy access to information on parenting. Research suggests that parents use the Internet for social support and health and childrearing information (Plantin & Daneback, 2009; Rothbaum et al., 2008). This Internet use also provides the opportunity for parents to be presented with various comparison targets, leading to an increased likelihood of engaging in social comparisons. Therefore, if parents engage in social comparisons, they may be at an increased risk of experiencing the negative outcomes associated with social comparisons because they may already be dealing with the negative effects of parental stress.

Chapter 3: Method

Design and Justification

The present study examined the impact of engaging in social comparisons on perceived parental competence, mental health, and relationship satisfaction in a parent population. This study is prospective, using both a between groups and correlational design. Data were collected through the administration of several self-report questionnaires.

Participants

Participants included parents, both mothers and fathers, who were in a romantic relationship and whose eldest child was between the ages of 1 and 8 years old. The 1,263 parent participants were recruited from different areas of the country through online and in-person methods. Of the 1,263 participants, 184 participants completed the survey. Those 183 participants indicated their ages as between 24 and 56 years ($M = 34.87$, $SD = 4.96$). One participant did not report age. In addition, 107 participants indicated they had at least two children between the ages of 1 and 8, and 33 participants had three or more children (see Table 1). The majority of participants (88%) were female and reported they were the mothers of a child (85.9%). Most of the participants (88%) also stated they were married. Of the participants, 7.6% reported they were living together, and 3.8% indicated they were dating someone. Most of the participants indicated they lived with a spouse or partner (96.2%), and 95.1% indicated they lived with at least one child. The majority of participants were from the East Coast (72.3%; see Table 2 for complete demographic

information on parenting status, relationship status, household members, and geographic location).

Inclusion Criteria

A parent is defined as a biological or adoptive parent who is at least 18 years of age and who has been living with his or her child for at least 1 year. Parents must have at least one child between the ages of 1 and 8 years old. The parents must have been in a relationship with a significant other for at least 1 year. However, the significant other does not need to be the other parent of the child.

Exclusion Criteria

Participants were excluded if they were parents of any children older than 8 years of age.

Recruitment

Participants were recruited online and in person. Participants were recruited online through social-media platforms (e.g., Facebook), via email, and through the website Research Match. Additionally, participants were recruited in person via flyers hung up at libraries, daycare centers, and church groups and through snowball sampling. Participants were asked to complete a screener to determine eligibility before completing the study.

Measures

Iowa-Netherlands Comparison Orientation Measure (INCOM; Gibbons & Buunk, 1999)

The INCOM was developed in order to examine individual differences in social comparison orientation (SCO). The measure was created based on the notion that all individuals engage in social comparisons at least occasionally, but the frequency of this comparison varies among individuals. The format of the INCOM consists of three scales. The first section of statements measures individuals' engagement in nondirectional social comparisons and the next two subsections measure upward and downward social comparisons. The section on nondirectional social comparisons asks individuals to rate their agreement with 11 statements using a Likert-scale ranging from 1 (*I disagree strongly*) to 5 (*I agree strongly*). The upward and downward social comparisons subsections require individuals to rate their agreement with six statements using the same Likert-scale. Scoring is completed by adding the total number of scores in each section and subsection. Scores range from 6 to 30 for each subscale. One should note that Items 6 and 10 in the section on nondirectional social comparisons are reverse coded. Higher scores indicate more frequent social comparisons. The INCOM was developed to be used in both American and Dutch cultures. Analyses of the measure suggest that it shows good internal consistency and reasonable temporal stability and demonstrates the ability to effectively predict comparison behavior (Gibbons & Buunk, 1999). Cronbach's alpha in the original sample of the measure was .83 and was consistent across other samples, ranging from .78 to .85 for the American version.

Parenting Sense of Competence Scale (PSOC Scale; Gibaud-Wallston & Wandersman, 1978)

The PSOC Scale is frequently used to measure parenting self-esteem, parental self-efficacy, and satisfaction with parenting (Gilmore & Cuskelly, 2009; Ohan, Leung, & Johnston, 2000). The measure was created based on the concept that parenting self-esteem and problematic child behaviors, parenting style, and family interactions (e.g. marital relationships) all impact each other. The scale was initially developed to measure parents' perceived competence with infants and included Value/Comforting and Skills/Knowledge scales. It was later revised by Johnston and Mash (1989), who reworded items on the scale from "infant" to "child" and administered the scale to parents of school-aged children. As a result, two factors were distinguished as consistent with the original scales. These factors were identified as the Satisfaction scale (e.g., how the individual likes the parenting role) and the Efficacy scale (e.g., the individual's perceived competence in the parenting role; Ohan et al., 2000). The scale's current version is a self-report measure that asks parents to rate the extent of their agreement with 17 statements using a Likert-scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Scoring is completed by adding the total number of scores for each item, with some items being reverse scored. Higher scores suggest a greater sense of parental competence. One should note that there are no average or cut-off scores for this measure. Research examining the factor structure of the PSOC scale with a non-clinical sample of mothers and father distinguishes three acceptable factors: satisfaction, efficacy, and interest (Gilmore & Cuskelly, 2009). Cronbach's alpha shows acceptable internal consistency for both mothers and fathers on these subscales: Satisfaction subscale, mothers = 0.72 and fathers

= 0.76; Efficacy subscale, mothers = 0.68 and fathers = 0.74; and Interest subscale, mothers = 0.62 and fathers = 0.57. Additional research found good internal consistency and significant small to moderate correlations between parents' reports of internalizing and externalizing child problems and scores on the Satisfaction scale (Ohan et al., 2000). For mothers, the internal consistency of the Efficacy and Satisfaction scales' was .80. For fathers, the internal consistency of the Efficacy scale was .77 and was .80 for the Satisfaction scale. One should note that the wording on the current PSOC Scale includes only the word "mother" in certain statements. As the purpose of the present study was to examine both mothers' and fathers' perceived parental competence, the word "mother" was changed to "parent."

The Center for Epidemiological Studies Depression Scale Revised (CESD-R; Radloff, 1977; Eaton, Muntaner, Smith, Tien, & Ybarra, 2004).

The CESD-R is a self-report measure designed to assess for symptoms of depression in the general population (Dam & Earleywine, 2010). The original version was developed in 1977 and was revised in 2004 to reflect modern diagnostic criteria and improve upon the psychometric limitations of the previous version. It consists of 20 items that measure symptoms associated with depression in nine different groups based on *Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5; 2013)* criteria (CESDR-R, 2017). Individuals are asked to rate how often they had felt a certain way during the previous week using a Likert-scale ranging from 1 (*rarely or none of the time; less than 1 day*) to 4 (*most or all of the time; 5-7 days*). Scoring is completed by calculating the sum of the responses to all of the items, ranging from 0 to 60. Scores equal to or greater than 16 suggest that an individual is at risk for clinical depression.

Additionally, scoring information is provided to indicate if the individual meets criteria for major depressive disorder, probable major depressive episode, possible major depressive episode, subthreshold depression symptoms, or no clinically significant symptoms.

Research conducted with a large community sample and smaller student sample indicates that the CESD-R demonstrates high internal consistency and strong factor loadings and has theoretically consistent convergent and divergent validity with anxiety, schizotypy, and positive and negative affect (Dam & Earleywine, 2010). Cronbach's alpha shows that internal consistency is high at 0.92 for the large community sample and at 0.93 for the smaller student sample. Findings with the large community sample demonstrate a positive correlation between the CESD-R and the State-Trait Inventory for Cognitive and Somatic Anxiety (STICSA), $r = 0.737, p < 0.01$. A medium positive correlation is also found between the CESD-R and the Schizotypal Personality Questionnaire - Brief (SPQ-B), $r = 0.436, p < 0.01$. Additionally, findings with the smaller student sample show a large positive correlation between the CESD-R and the STICSA, $r = 0.653, p < 0.01$ and a medium positive correlation between the CESD-R and the SPQ-B, $r = 0.426, p < 0.01$.

Generalized Anxiety Disorder 7-Item Scale (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006).

The GAD-7 is a brief, self-report scale used to determine possible symptoms associated with generalized anxiety disorder (GAD). The questions focus on symptoms commonly associated with GAD and are based on the criteria for GAD included in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV; 1994).

Individuals are asked to rate how often they had been bothered by specific problems over the previous 2 weeks using a Likert-scale ranging from 0 (*not at all*) to 3 (*nearly every day*). Additionally, individuals who endorse any problems on the measure are instructed to rate the difficulty caused by the problems to do work, take care of things at home, or get along with other people. Individuals can rate this level of difficulty by checking off *not at all*, *somewhat difficult*, *very difficult*, or *extremely difficult*. Scoring is completed by adding all of the columns for a total score. A score of 10 or higher indicates a possible diagnosis of GAD. A score of 5 suggests mild anxiety, 10 moderate anxiety, and 15 severe anxiety. Analysis of the GAD-7 shows that it demonstrates excellent internal consistency (Cronbach's alpha = .92); good test-retest reliability (intraclass correlation = 0.83); and criterion, construct, factorial, and procedural validity (Spitzer et al., 2006). Furthermore, the scale demonstrates good agreement between self-report and interviewer-administered versions.

Clinically Useful Social Anxiety Disorder Outcome Scale (CUSADOS; Dalrymple et al., 2013)

The CUSADOS was developed as a self-report measure to assess for social anxiety disorder (SAD). The purpose of the scale is to address limitations found in other self-report scales available for SAD, including length, accessibility, comprehensiveness (e.g., only measuring certain aspects of SAD), cost, difficulty in scoring, and format (e.g., only True or False responses), that may impact its use in clinical practice. Content for the measure is based on the Psychiatric Diagnostic Screening Questionnaire and the Structured Clinical Interview for the *DSM* (SCID). The initial version of the measure consisted of 18 items to assess symptoms related to social anxiety over the previous week

in the domains of affect, cognitions, situations, and behaviors. In the current version, individuals are asked to indicate how well 12 items describe them during the previous week, including today, using a Likert-scale ranging from 0 (*not true at all*) to 4 (*almost always true*). Scoring is completed by adding the total number of scores, with higher scores suggesting the presence of SAD. Research conducted in an outpatient setting suggests that the measure shows excellent internal consistency (Cronbach's alpha = 0.96) and test-retest reliability (Dalrymple et al., 2013). Test-retest reliability is found to be statistically significant for the overall measure, $r = 0.89$, and for each test item, ranging from 0.73 to 0.82. Furthermore, in additional sub-samples, it demonstrates good discriminant and convergent validity. The CUSADOS is significantly correlated with various other measures of anxiety and mood disorders, including Eating Disorder Inventory (anorexia, bulimia, and body dissatisfaction subscales); Beck Depression Inventory (BDI); Brief Fear of Negative Evaluation Scale; Fear Questionnaire (social phobia and agoraphobia subscales); Social Phobia and Anxiety Inventory (agoraphobia subscale); Posttraumatic Stress Disorder Scale; Obsessive-Compulsive Inventory; Penn State Worry Questionnaire (PSWQ); Beck Anxiety Inventory (BAI); Anxiety Control Questionnaire; Michigan Alcohol Screening Test; Drug Abuse Screening Test; Whitely Index; Self-Report Manic Inventory; Symptom Rating Test (paranoia and psychosis subscales); and Somatic Symptom Index. The highest correlations are found between the CUSADOS and the other measures of social anxiety, median $r = 0.67$.

Couples Satisfaction Index (CSI-32; Funk & Rogge, 2007)

The CSI-32 was developed as a self-report measure of relationship satisfaction. The questions included in the CSI-32 were gathered after a principal-components

analysis, and item response theory was applied to items in other well-validated self-report measures of relationship satisfaction. Individuals are instructed to indicate their responses to 32 statements using a Likert-scale. The measure was also designed to be used in a 16-item or 4-item format. For the purpose of this study, the 16-item version of the CSI scale was used. Additionally, because of errors in converting scores from SurveyMonkey to SPSS, Items 11 to 16 were removed from the final data analyses. Scoring is completed by totaling the responses to all of the items. One should note that the point values are usually not presented to the individuals when filling out the scale. Scores range from 0 to 161 for the 32-item version, with higher scores indicating greater levels of relationship satisfaction. The CSI demonstrates strong convergent validity with other measures of relationship satisfaction and has excellent construct validity (Funk & Rogge, 2007). Furthermore, when compared to other well-validated relationship satisfaction scales such as the Marital Adjustment Test (MAT) and Dyadic Adjustment Scale (DAS), the CSI scales are found to have higher precision of measurement and greater power to sense differences in relationship satisfaction levels.

Procedure

Before recruiting participants online and in person, the investigator obtained permission from the Institutional Review Board (IRB) to recruit participants. Participants were asked to participate in a research study regarding their social comparison behaviors and their effects on their parenting efficacy, mood, and relationship satisfaction. Online participants were asked to participate through posts on Facebook, via e-mail, and through the website Research Match. In-person participants were asked to participate through flyers hung up at libraries, daycare centers, and church groups. Furthermore, all

participants were encouraged to tell their friends about the study, as potential participants. Participants were asked to complete a screener to determine their eligibility to participate in the study. Eligible participants were then instructed to complete a series of self-report measures. Online participants were directed to complete the self-report measures via a SurveyMonkey link. In-person participants were instructed to follow a link posted on flyers to complete the measures online via SurveyMonkey. Participants were informed that filling out the measures would take approximately 10 to 15 minutes. Each participant was given a numerical code to maintain his or her anonymity. After completing all of the self-report measures, participants were thanked for their participation and given the opportunity to enter a raffle in order to win one of two \$50 Visa gift cards for their participation in the study. Recruitment took place over the course of 7 months, from September 2018 to March 2019. Following the completion of the self-report measures, SurveyMonkey data were converted to SPSS files and analyzed.

Chapter 4: Results

All statistical analyses were computed using SPSS. The statistical plan consisted of descriptive statistics, correlational analyses, regression analyses, and multivariate analysis of variance (MANOVA). For all analyses, the power level was set at .80 with a significance level of .05 and a medium effect size. Hypothesis 1 required 180 participants, Hypothesis 2 required 85 participants, Hypothesis 3 required 82 participants, and Hypothesis 4 required 150 participants. Demographic information for all participants was analyzed. Table 1 details the number of children in the household, along with the means of the children's ages. The frequencies of parenting status, relationship status, household members, and geographic location are detailed in Table 2. The means, range, and standard deviation for each measure were calculated (see Table 3). In addition, *t*-tests on all measures with gender as the grouping factor were calculated, indicating no significant differences in mother versus father reporting, except for generalized anxiety, $t(182) = -3.55, p = .001$. Male participants ($M = 3.91, SD = 4.03$) reported less generalized anxiety than female participants ($M = 7.33, SD = 5.51$).

Table 1

Demographic Information of Parent Participants (Age and Number of Children)

Participants	N	Minimum	Maximum	Mean	SD
Participant	183	24	56	34.87	4.964
age					
Child 1	184	1	8	3.95	2.302
Child 2	107	1	8	3.61	1.957
Child 3	28	1	8	2.89	2.097
Child 4	5	1	5	2.80	1.643

Table 2

Demographic Information of Parent Participants (Parenting Status, Relationship Status, Household Members, Geographic Location)

Parenting status	Frequency	Percent
Mother	158	85.9
Father	21	11.4
Step-parent	4	2.2
Relationship status		
Single	3	1.6
Dating	4	2.2
Living together	14	7.6
Married	162	88.0

Household members		
Spouse	177	96.2
Child	175	95.1
Grandparent	11	6.0
Other family member	3	1.6
Non-family member		
	2	1.1
Geographic location		
East coast	133	72.3
West coast	8	4.3
Midwest	22	12.0
Southwest	1	.5
South	20	10.9

Table 3

Descriptive Statistics (Measures)

Measure	N	Minimum	Maximum	Mean	SD	Variance
PSOC total	184	31	95	69.93	11.19	125.214
CSI total	184	15	59	43.79	9.94	98.824
INCOM	184	13	51	37.18	6.91	47.733
general total						
INCOM						

upward total	184	6	30	18.43	5.57	31.011
INCOM	183	6	30	16.58	5.30	28.090
downward						
total						
INCOM	183	29	107	72.28	14.38	206.807
total all						
GAD total	184	.00	21	6.92	5.46	29.857
CUSADOS	184	12	.59	24.36	10.38	107.741
total						
CESD total	184	20	71	38.08	8.17	66.829

Note. Total represents all data for the measure. For the INCOM, data is broken up into all data for that measure (e.g., total all) and then data for each subset of the measure (i.e., general, upward, and downward).

Hypothesis 1

To determine whether parents who report higher levels of social comparisons report lower levels of perceived parental competence and higher levels of depression and anxiety as compared to parents with low social comparisons, a one-way MANOVA was used. Social comparison frequency was the independent variable with two levels (i.e., high, low), and parental competence, depression, general anxiety, and social anxiety were the four dependent variables. Levels of social comparison frequency were determined by

calculating the median for all scores on the Iowa-Netherlands Comparison Orientation Measure (INCOM; 75) and separating scores below 75 as low comparison and scores above 75 as high comparison. Before running the analysis, the assumptions of a MANOVA were tested, including the assumptions of equal variances and normal distribution. A Levene's test was conducted to determine whether equal variances could be assumed. The Levene's test was found to not be significant for parental competence ($p = .659$), social anxiety ($p = .360$), and depression ($p = .110$); therefore, equal variances could be assumed for these variables. A significant effect was found for parental competence, $F(1, 181) = 19.83, p < .001$, social anxiety $F(1, 181) = 24.97, p < .001$, and depression $F(1, 181) = 7.46, p < .01$ on levels of social comparison. Parents who reported lower levels of social comparisons reported greater perceived parental competence ($M = 73.15, SD = 11.03$) compared to those with higher levels of social comparisons ($M = 66.16, SD = 10.09$). Parents who reported lower levels of social comparisons reported lower levels of social anxiety ($M = 20.99, SD = 9.56$) compared to those with higher levels of social comparisons ($M = 28.21, SD = 9.97$). Parents who reported lower levels of social comparisons reported lower levels of depression ($M = 36.56, SD = 7.74$) compared to those with higher levels of social comparisons ($M = 39.82, SD = 8.37$). Since the Levene's test was found to be significant for generalized anxiety ($p = .005$), a Brown-Forsythe was conducted. An overall significant difference was found $F(1, 162.567) = 26.346, p < .001$. Parents who reported lower levels of social comparisons reported lower levels of generalized anxiety ($M = 5.08, SD = 4.48$) compared to those with higher levels of social comparisons ($M = 9.01, SD = 5.73$).

Hypothesis 2

A multiple regression was used to test whether negative perceptions of parental competence and poor mental health (i.e., anxiety, depression) predict poor relationship satisfaction. Parental competence, general anxiety, social anxiety, and depression were the independent variables, and relationship satisfaction was the dependent variable. Before running a multiple regression, a Pearson correlation was conducted between the independent variables and was found to be statistically significant, but not large enough to suggest multi-collinearity (see Table 4). Therefore, a multiple regression was run and found to be significant, $F(4, 179) = 5.89, p < .001$. The adjusted R squared value was .097, indicating that 9.7% of the variance in relationship satisfaction was explained by a combination of perceptions of parental competence and mental health. When looking at the individual variables, only perceptions of parental competence was found to be a predictor making a significant contribution to the model. Therefore, a simple linear regression was conducted to determine the amount of contribution perceptions of parental competence made in predicting relationship satisfaction. A simple linear regression statistic was found to be significant, $F(1, 182) = 15.40, p < .001$. The adjusted R squared value was .073, indicating that 7.3% of the variance in relationship satisfaction was explained by perceptions of parental competence.

Table 4

Correlations (Hypothesis 2)

Measures	CESD total	CUSADOS total	GAD total	CSI total
CESD total				
Pearson correlation	1	.566**	.664**	-.234**
Sig. (2-tailed)		.000	.000	.001
<i>N</i>		184	184	184
CUSADOS total				
Pearson correlation	.566**	1	.633**	-.166*
Sig. (2-tailed)	.000		.000	.024
<i>N</i>	184	184	184	184
GAD total				
Pearson correlation	.664**	.633**	1	-.292**
Sig. (2-tailed)	.000	.000		.000
<i>N</i>	184	184	184	184
CSI total				
Pearson correlation	-.234**	-.166**	-.292**	1
Sig. (2-tailed)	.001	.024	.000	
<i>N</i>	184	184	184	184
PSOC total				
Pearson correlation	-.305**	-.409**	-.501**	.279**

Sig. (2-tailed)	.000	.000	.000	.000
<i>N</i>	184	184	184	184

Note. ** = correlation is significant at the 0.01 level (2-tailed); * = correlation is significant at the 0.05 level (2-tailed).

Hypothesis 3

A Pearson correlation was conducted to determine whether a significant relationship existed between frequency of social comparisons and relationship satisfaction. The Pearson correlation was not significant, $r(182) = -.07, p = .361$. Therefore, the frequency of engaging in social comparisons is not related to participants' level of relationship satisfaction.

Hypothesis 4

A one-way MANOVA was conducted to determine whether those who are satisfied in their relationships report more downward and fewer upward social comparisons than those who are not satisfied in their relationships. Relationship satisfaction served as the independent variable with two levels (i.e., high, low), and upward social comparisons and downward social comparisons served as the two dependent variables. Levels of relationship satisfaction were determined by calculating the median for all scores on the Couples Satisfaction Index (CSI; 46) and separating scores below 46 as low satisfaction and scores about 46 as high satisfaction. The Levene's test was found to not be significant for downward ($p = .413$) or upward ($p = .226$) social comparisons; therefore, equal variances could be assumed across groups. No significant differences were found between relationship satisfaction and downward social

comparisons, $F(1, 181) = 3.83, p = .052$, and upward social comparisons $F(1, 182) = .84, p = .360$.

Hypothesis 5

An exploratory analysis using a Pearson correlation was run to determine whether a relationship existed between upward and downward social comparisons and mental health (i.e., depression, anxiety). The Pearson correlation was found to be statistically significant for upward social comparisons and generalized anxiety, $r(182) = .405, p < .001$, social anxiety, $r(182) = .465, p < .001$, and depression, $r(182) = .243, p < .001$. The Pearson correlation was also found to be statistically significant for downward social comparisons and generalized anxiety, $r(181) = .225, p < .01$, social anxiety, $r(181) = .204, p < .01$, and depression, $r(181) = .149, p < .05$.

Chapter 5: Discussion

General Findings

The current study examined the effects of engaging in social comparisons with a parent population, specifically how social comparisons impact perceived parental competence, mental health, and relationship satisfaction. The study included both mothers and fathers, as research regarding the effect of social comparisons is limited with parent populations, and the existing literature has primarily focused on the impact of this behavior on mothers. However, no significant differences were found between mothers' and fathers' views of their parental competence, relationship satisfaction, and most aspects of their mental health.

Parents who reported a higher frequency of engaging in social comparisons reported less parental competence, higher symptoms of social anxiety, higher symptoms of generalized anxiety, and higher levels of depression. This finding is consistent with findings from Coyne et al. (2016), which found that greater frequency of social comparisons was associated with lower levels of parental competence and higher levels of depression. Additional research supports the connection between engagement in social comparisons and their negative impact on mental health, including anxiety and depression ((Butzer & Kuiper, 2006; Feinstein et al., 2013; Liu et al., 2017; Mitchell & Schmidt, 2014; Pantic et al., 2012; Steers et al., 2014; Wang et al., 2017). Therefore, the results of this study suggest that parents who engage in frequent social comparisons may be evaluating their parenting abilities compared to other parents they view online through social media, and/or in person through various functions with their children (i.e., school, children's parties, extra-curricular activities, etc.). This evaluation may lead to parents

questioning their competency as parents and feeling worse about themselves overall, resulting in symptoms of depression and/or anxiety.

While perceptions of parental competence predicted relationship satisfaction, mental health did not. These results suggest that individuals who view themselves as more competent as parents might feel satisfied in their relationships, which is consistent with recent literature on self-efficacy and relationship satisfaction (Weiser & Weigel, 2016). Using a sample of university students, researchers found that individuals who reported higher self-efficacy in their relationships also indicated greater relationship satisfaction. Additionally, these individuals were more likely to use relationship maintenance behaviors (i.e., behaviors associated with the continuation of valued relationships, such as positivity, openness, assurances, networks, and sharing tasks) and reported greater satisfaction in their relationships. Although this research did not study parental competence and relationship satisfaction, parents who view themselves more competently as parents might also have a high degree of self-efficacy, leading to the engagement in more relationship maintenance behaviors, and thereby improving communication and leading to greater relationship satisfaction. Contrary to recent literature, this study did not find that mental health predicted relationship satisfaction. However, the mean of this particular sample shows that, in general, these individuals reported high levels of satisfaction in their relationships. Therefore, the variability in the sample may not have been sufficient to indicate the level of satisfaction in individuals' relationships, thus explaining the lack of an association between mental-health symptoms and relationship satisfaction. While recent literature suggests an association between depression, anxiety, and relationship satisfaction (Porter & Keefe, 2017; Rehman et al.,

2015), the current study might not have captured this effect because the individuals in this study reported lower levels of mental-health symptoms overall. Additionally, the measures used to assess both mental-health and relationship satisfaction in the current study were different from those used in these other studies. Therefore, the questions on the measures used in the other studies might have targeted individuals' symptoms differently. For example, Rehman et al. (2015) used the Dyadic Adjustment Scale (DAS; Spanier, 1976) to measure relationship satisfaction. This measure consists of a variety of relationship-functioning aspects, including finances, religion, career, and ways of dealing with parents or in-laws; these aspects might have captured an individual's sense of his or her relationship more completely. Furthermore, the participants in one study (Porter & Keefe, 2017) were composed of undergraduate students, and the study did not indicate whether any of the participants had children. Therefore, having children might influence these factors.

Surprisingly, frequent social comparisons was not associated with lower relationship satisfaction. However, as previously noted, the individuals in this sample reported a high degree of relationship satisfaction, so the variability in the sample might not have been sufficient to indicate a significant association. Also, as previously noted, some of the items were removed from the final data analyses of the Couples Satisfaction Index (CSI) because of errors in converting scores from SurveyMonkey to SPSS. Some of those items may have provided a more comprehensive view of the participants' feelings regarding relationship satisfaction. Furthermore, relationship social comparison behavior is separate from the tendency to engage in general social comparisons. Therefore, using a specific measure for relationship social comparison behavior, such as

the Relationship Social Comparison Measure (RSCM), may provide more information on these behaviors. While one study suggests that the tendency to engage in relationship social comparisons results in increased relationship insecurity and decreased perceived relationship quality (LeBeau & Buckingham, 2008), this finding does not necessarily conclude that individuals are less satisfied in their relationships, as relationship satisfaction was not specifically measured in that study.

Engaging in downward social comparisons did not predict greater relationship satisfaction and engaging in upward social comparisons did not predict lower relationship satisfaction. Although Buunk et al. (2001) found that individuals who engaged in downward social comparisons reported greater relationship satisfaction, the participant sample did not indicate whether any of the participants were parents. Therefore, relationship satisfaction might be viewed differently in a parent population. This notion is consistent with Coyne et al. (2016), who found that social comparison behavior was associated with less positive co-parenting relationships, but not with relationship satisfaction.

Finally, upward and downward social comparisons were associated with generalized anxiety, social anxiety, and depression. This finding is consistent with research findings that suggest engaging in social comparisons results in a greater likelihood of experiencing symptoms of depression and anxiety (Butzer & Kuiper, 2006; Feinstein et al., 2013; Liu et al., 2017; Mitchell & Schmidt, 2014; Pantic et al., 2012; Steers et al., 2014; Wang et al., 2017). Furthermore, engaging in upward social comparisons was more significant for depression symptoms compared to engaging in downward social comparisons. Although research in this area is mixed, these findings are

consistent with those of studies by Butzer and Kuiper (2006) and Wood and Lockwood (1999), who found that individuals who are more depressed make more frequent upward social comparisons. Therefore, individuals may be comparing themselves to others who they believe are doing better than they are. This comparison results in more negative evaluations of one's own qualities and abilities, leading individuals to feel worse about themselves and thus, to experience symptoms of depression.

Implications of Findings

As the theory of social comparison suggests that most individuals evaluate aspects of themselves through comparison with others, parents might benefit from being aware of the potential negative consequences this behavior can have on their perceived parental competence and mental health. As the research on the effects of engaging in social comparisons is limited with parent populations, most parents may be unaware that this behavior may be associated with negative outcomes. Parents may be very likely to engage in social comparisons for a variety of reasons, including the availability of comparison targets through increased Internet and social-media use for the purposes of gathering information and connecting with others. Furthermore, parents may be exposed to similar comparison targets in their daily lives, through their children's schooling and extra-curricular activities. As parenting is a time of stress and change, they may also be more likely to engage in social comparisons, as research suggests (Gibbons & Buunk, 1999). This increased likelihood may put parents at an increased risk for the negative outcomes associated with social comparisons, as they are already dealing with the stressors of parenting. Additionally, this information may be beneficial to mental-health practitioners treating parents for issues related to parental competence and mental health,

as they may be able to help parents to recognize when they are engaging in this behavior and to suggest interventions, such as limiting their access to the Internet and social-media in order to decrease negative outcomes. Parents should also recognize that individuals often portray their “best selves” on social media, so parents may be engaging in social comparisons with idealized rather than realistic targets. Nevertheless, social comparisons are helpful at times, such as when parents are truthful and engaging in this behavior to gain a more comprehensive understanding of their children’s development levels. However, practitioners offering patients educational resources on development would be more prudent than just making social comparisons or going by popular opinion, as children may vary along a normal range of development. Therefore, the results of this study may help to guide more specific interventions for this population in order to decrease the negative outcomes associated with social comparison behavior.

Limitations

Much of the recruitment was done locally and relied on participants encouraging their friends to take part in the study, thereby possibly impacting the generalizability of these results to the greater population because many of the participants came from similar demographics. For example, the majority of participants were located on the East Coast (72.3%) and living with a spouse or partner (96.2%) and a child (95.1%). Furthermore, although both male and female participants were recruited, most of respondents were female and mothers (88.0%; 85.9%). Therefore, as in the few other studies conducted with parent populations, most of the information gathered is from the perspective of mothers and may not be generalized to fathers, although results from this study indicated generally no differences between mother and father reporting on the variables of interest.

Another factor impacting generalizability may be participants' ethnic backgrounds, as this information was not collected. Various cultures may view mental-health symptoms differently, resulting in varying responses on the depression and anxiety measures. Furthermore, some cultures may view mental-health symptoms with stigma, possibly leading to underreporting of symptoms and impacting the generalizability of results. This sample of parents also indicated lower levels of depression and anxiety overall, so a sample with more variability in symptoms may result in different findings.

Additionally, as this study is examining the effects of engaging in social comparisons with parents of younger children, it may not reflect all parental experiences as parents of older children may have different perceptions. For example, parents of younger children or with only one child may not view themselves as competently as a parent, while parents of older and/or multiple children may have a greater sense of parental competence. Based on this assumption, an ancillary analysis was run to compare the differences in scores between parents who reported having one child versus multiple children. No significant differences were found within this sample. However, examining the possible differences between these groups with additional samples of parents may be beneficial, as the research with parent populations overall is limited.

Furthermore, as the results were not significant for relationship satisfaction, the lack of variability in the sample regarding relationship satisfaction or the removal of specific items from the relationship satisfaction measure could have impacted the findings. As previously noted, a specific relationship social comparison measure was not used and may have contributed to the findings.

Future Directions

As the research on the impact of parents engaging in social comparisons is limited, future research can continue to examine the variables of parental competence, mental health, and relationship satisfaction with this population to provide a better understanding of the possible effects of social comparisons on both mothers and fathers. Furthermore, studying the impact of these variables with just fathers may be beneficial, as little research has examined social comparisons with this group, and the results may differ significantly from those of the studies done with mothers, including the present study. Although the present study did not find any significant differences in general between mothers and fathers, the sample of fathers in this study was small. Therefore, determining if a larger sample of fathers would yield different results would still be beneficial. As this study examines the impact of engaging in social comparisons with parents of younger children, studying the effects of this behavior with parents of older children may also be important, as they may report different experiences. Comparing any differences between these populations can be useful in guiding interventions, as they may need to vary depending on the differences found between fathers or parents of younger and older children.

Future research can also consider the role of relationship satisfaction and social comparisons in more depth. Using a separate measure, such as the RSCM, may be beneficial in measuring the impact of the direction and frequency of social comparisons on relationship satisfaction. Examining the relationship between parental competence, self-efficacy, and relationship satisfaction may also be useful, as both parental competence and self-efficacy have been shown to impact relationship satisfaction. As

research is mixed regarding the relationship between the impact of upward and downward social comparisons on depression and anxiety, another variable could be affecting this relationship. For example, cognitive distortions may contribute to symptoms of depression and anxiety because individuals who engage in frequent social comparisons may also engage in cognitive distortions. Cognitive distortions have also been found to negatively impact mental health (Kovacs & Beck, 1978). Therefore, future research that examines the role of cognitive distortions in social-comparison behavior and its impact on individuals' mental health could be beneficial in guiding interventions as well. The negative consequences of engaging in social comparisons is evident. Future research that focuses on the effects of this behavior with specific populations, such as parents, and other variables impacted by this behavior is important in guiding interventions that may improve the negative symptoms associated with engagement in social comparisons.

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