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New Mothers and Social Media: The Effects of Social Media
Consumption and Production on Social Support
and Parental Stress

Rachel Clawson Nielsen

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Arts

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ABSTRACT

New Mothers and Social Media: The Effects of Social Media Consumption and Production on Social Support and Parental Stress

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Master of Arts

The restructuring of roles, responsibilities, and relationships that occurs during the transition to parenthood brings both rewards and challenges to first-time mothers (Bartholomew, Schoppe-Sullivan, Glassman, Dush, & Sullivan, 2012; Horowitz & Damato, 1999) and is often characterized as a time of parental stress (Crnic & Low, 2002; Deater-Deckard, 1998; Leigh & Milgrom, 2008). To effectively manage this stress, first-time mothers must feel a sense of social support (Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983; Cutrona, 1984; Gao, Chan, & Mao, 2009; McDaniel, Coyne, Holmes, 2012; Nakagawa, Teti, & Lamb, 1992). In today's technology-driven era, this essential sense of support may be conveniently achieved through social media.

Currently, research on the ability for social media platforms to increase perceptions of social support and, therefore, decrease parental stress among first-time mothers presents varied conclusions (see Bartholomew et al, 2012; McDaniel et al., 2012). The purpose of this paper, therefore, is to propose variables that may explain these results. Specifically, it analyzes how both *active production* and *passive consumption* of social media influence perceptions of social support and parental stress in first-time mothers.

The results reveal that for first-time mothers, production on social media can lead to increased social media-based feedback, which can then lead to increased perceptions of appraisal support. Passive consumption of social media content neither increases nor decreases perceptions of social support.

Keywords: transition to parenthood, social support, parental stress, social media

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TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES AND FIGURES	v
Chapter 1: Introduction	1
Chapter 2: Literature Review	3
Social Support and Parental Stress during the Transition to Parenthood	3
The Relationship Between Social Support and Parental Stress during the Transition to Parenthood	7
Maternal Social Support through Online Communication	9
Mediating Variables: Active Production and Passive Consumption	14
Chapter 3: Methods	19
Procedure	19
Participants	19
Measures	20
Strengths and Weaknesses	26
Chapter 4: Results	27
Hypothesis 1	27
Hypothesis 2	29
Chapter 5: Discussion	31
Chapter 6: Limitations and Future Research	35
Limitations	35
Future Research	37
Chapter 7: Conclusion	38
References	39
Appendix A: Survey Instrument by Variable	49
Appendix B: Implied Consent	54

LIST OF TABLES AND FIGURES

Figure 1: Hypothesis 1	16
Figure 2: Hypothesis 2	18
Figure 3: Test of Hypothesis 1	28
Figure 4: Hypothesis 1 Alternative Model	28
Figure 5: Test of Hypothesis 2	29
Table 1: Pearson Correlations	30

Chapter 1: Introduction

“Even on those days when we can’t escape the four walls of our homes and those walls are seemingly closing in on us, we can hop on our computers and find a community of support. For those few moments, we have a break from the loud monotony of raising our children.”

(Cole, 2009, para. 6)

The restructuring of roles, responsibilities, and relationships that occurs during the transition to parenthood brings both rewards and challenges to first-time mothers (Bartholomew, Schoppe-Sullivan, Glassman, Dush, & Sullivan, 2012; Horowitz & Damato, 1999). Along with engendering a sense of achievement and building new, satisfying relationships (Horowitz & Damato, 1999), the transition to parenthood is characterized as a time of parental stress (Crnic & Low, 2002; Deater-Deckard, 1998; Leigh & Milgrom, 2008), which can have negative effects on both mother and child (Leigh & Milgrom, 2008). To manage this stress, and thus defend against negative outcomes, first-time mothers need to feel a sense of social support (Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983; Cutrona, 1984; Gao, Chan, & Mao, 2009; McDaniel, Coyne, Holmes, 2012; Nakagawa, Teti, & Lamb, 1992). And in today’s technology-driven era, this essential sense of support may be conveniently achieved through social media because it provides mothers with a quick and nearly ever-present way to “escape the four walls of [their] homes . . . and find a community of support” (Cole, 2009, para. 6).

Currently, research on the ability for social media platforms to increase perceptions of social support and, therefore, decrease parental stress among first-time mothers presents varied conclusions (see Bartholomew et al, 2012; McDaniel et al., 2012). The purpose of this paper, therefore, is to propose and test variables that may explain these results. Specifically, it will

analyze how both *active production* and *passive consumption* of social media influence perceptions of social support and parental stress in first-time mothers.

By fulfilling this purpose, the present research will help scholars, practitioners, and mothers better understand factors leading to perceptions of social support and parental stress in first-time mothers. This may give first-time mothers the tools to increase perceptions of social support and decrease perceptions of parental stress, contributing to improved well-being of both mother and child.

Chapter 2: Literature Review

The following literature review will (1) cover social support and parental stress during the transition to parenthood; (2) discuss the relationship between social support and parental stress; (3) synthesize the effects of online communication on social support and parental stress; and (4) conclude with a discussion on how consumption and production of social media may influence these effects.

Social Support and Parental Stress during the Transition to Parenthood

The study of the transition to parenthood began when LeMaster (1957) found that 83% of new parents experienced “moderate or severe crisis” in their marital and family life in the years following the birth of their first child (Cowan & Cowan, 1995). This statistic was one of the first to pinpoint the difficulty of the transition to parenthood, which surprised scholars and induced a handful of research both contending and supporting LeMaster’s claim (Bartholomew et al., 2012; Cowan & Cowan, 1995; Russell, 1974). This scholarly feud provided a starting point for a new and unique field of study for sociologists, psychologists, health professionals, and other scholars interested in understanding this oft-celebrated and surprisingly vulnerable time.

Today, studies on the transition to parenthood create a more cohesive whole. According to this body of research, the transition begins when parents start developing an emotional bond with their unborn child and continues after the birth of the baby (Perren, Von Wly, Bürgin, Simoni, & Von Klitzing, 2005). Scholars have examined this transition in a variety of time frames, including during pregnancy (Imle, 1990), during the postpartum period (Pridham & Chang, 1992), and up to 18 months postpartum (Majewski 1987; see also Nyström & Öhring, 2004).

Regardless of the time frame studied, however, the volatility of this period arises from the psychological and social adjustments that must occur as the new child “disrupts” the family system and necessitates a shift in parents’ relationships, roles, social interactions, and internal and external behavior (Cowan & Cowan, 1995; Cowan & Hetherington, 1991; McDaniel et al., 2012; Nyström & Öhrling, 2004; Perren et al., 2005). Such a rapid shift in both self concept and behavior gives life to both challenges and rewards, including managing with decreased financial resources, feeling “trapped” at home, learning to meet the needs of both self and baby, developing a fulfilling relationship with the baby, and feeling a sense of achievement (Horowitz & Damato, 1999).

To better explain the many consuming changes that take place during the transition to parenthood, Cowan and Cowan (1995) proposed a comprehensive list of five domains where transition to parenthood changes can occur:

1. the quality of the relationship in the new parents’ families of origin,
2. the quality of the new parents’ relationship as a couple,
3. the quality of relationship that each parent develops with the baby,
4. the balance between life stress and social support in the new family,
5. the well-being or distress of each parent and child as individuals (p. 413).

With an emphasis on parental stress and social support, this paper looks at the transition to parenthood in domain four, “the balance between life stress and social support” (Cowan & Cowan, 1995, p. 413). I have chosen this domain as the focus for the present study because past research suggests that this is an area that can be impacted by social media use (see Bartholomew et al, 2012; McDaniel et al., 2012). Accordingly, the remainder of this section will discuss (1) parental stress and (2) social support during the transition to parenthood.

Parental stress.

Definition. “Parental stress” is a far-reaching term that encompasses the difficulties that arise during the transition to parenthood—such as depression, difficult parent-child interactions, and daily parenting hassles—and continue throughout the parenting experience (Crnic & Low, 2002; Deater-Deckard, 1998; Leigh & Milgrom, 2008). These challenges are unique to parenthood and often arise because parents perceive that their personal and social resources do not meet the demands of raising children (Beck, Copper, McLanahan, & Brooks-Gunn, 2010; Deater-Deckard, 1998). While parental stress can be found among all parents, it can be conceptualized on a scale from “normal” to “extreme”, with extreme levels marked by neglectful and abusive parental behaviors (Deater-Deckard, 1998) that can negatively affect the development and adjustment of the child as well as the adjustment of the parent during the transition to parenthood (Leigh & Milgrom, 2008).

Effects of parental stress on maternal well-being. Research has shown that parental stress levels in new mothers increase from the time they are six months pregnant to at least eight months after the baby is born (Miller & Sollie, 1980) and that new mothers have higher postpartum stress levels than new fathers (Lou, 2006; Miller & Sollie, 1980; Wilke & Ames, 1986). This stress can have a significant impact on how effectively mothers make the transition to parenthood by affecting emotional, behavioral, and physiological aspects of well-being (Crnic & Low, 2002). For example, increased stress can have negative effects on mental health and marital satisfaction (Lu, 2006) and can lead to negative attitudes and behaviors (Crnic et al., 1983). As these outcomes suggest, the ability to achieve lower levels of stress as the transition to parenthood progresses is an essential phase in mothers’ adaptation to their new role (Deater-Deckard, 1998). One of the ways to accomplish this is through adequate social support systems

(Crnic et al., 1983; Cutrona, 1984; Gao et al., 2009; McDaniel et al., 2012; Nakagawa et al., 1992).

Social support.

Definition. Because social support has been researched in a variety of fields, there are many conflicting opinions about what the phenomenon is and how it should be defined and conceptualized; however, among this collection of diverse perspectives, there are several commonalities. Uchino (2004) explains,

Social support is usually defined to include both the *structures* of an individual's social life (for example, group memberships or existence of familial ties) and the more explicit *functions* they may serve (for example, provision of useful advice or emotional support).
(p. 9–10)

In the context of the present research, the *structures* of social support are the networks available through social media and the *functions* are (1) appraisal support, the availability of someone to talk to; (2) social integration, the availability of a network of individuals who share interests and concerns; and (3) self-esteem support, the availability of a positive comparison between one's self and others (Cohen & Hoberman, 1983; Cohen & McKay, 1984; Cutrona, 1984). These three functions have been selected for this research because these types of support are frequently derived from online communication among mothers (see "Maternal Support through Online Communication").

Effects of social support on maternal well-being. For all individuals, the tie between social support and well-being is so strong that the absence or even insufficient quantity and quality of these relationships can lead to increased risk of mortality (House, Landis, &

Umberson, 1988). The presence of these relationships, however, leads to emotional, informational, and tangible support as well as a sense of belonging (Uchino, 2004).

For mothers in particular, social support is a critical component to successfully navigating the transition to parenthood (Fielde & Gallagher, 2008; Milkie, 2011; Lu, 2006). Researchers have found that social support produces better maternal health (Meadows, 2010); increases relationship satisfaction with spouse (Salmela-Aro, Nurmi, Saisto, & Halmesmäki, 2010); leads to more positive attitudes and behaviors (Crnic et al., 1983); and generates higher life satisfaction, parenting satisfaction, and perceived quality of parent-child interactions (Crnic, Greenberg, Robinson, & Ragozin, 1984). Additionally, McDaniel, Coyne, and Holmes (2012) confirmed that social support leads to decreased marital conflict and decreased parenting stress. It is this connection between social support and parental stress that this paper is concerned with.

The Relationship Between Social Support and Parental Stress during the Transition to Parenthood

Scholars have consistently found that adequate social support in parenthood leads to a decrease in parental stress (Crnic et al., 1983; Cutrona, 1984; Gao et al., 2009; McDaniel et al., 2012; Nakagawa et al., 1992). In an attempt to understand this relationship, Cohen and Willis (1985) proposed the buffering model, which introduces stress as a variable that sits between social support and well-being. Cohen and Willis (1985) explain,

[This] model proposes that support is related to well-being only (or primarily) for persons under stress. This is termed the *buffering* model because it posits that support ‘buffers’ (protects) persons from the potentially pathogenic influence of stressful events. (p. 310)

This proposal received a significant amount of attention and has been successfully applied to transition to parenthood research, firmly connecting social support and stress as related variables (see Bost, Cox, Burchinal, & Payne, 2004; Coffman, Levitt, Deets, & Quigley, 1991).

Parallel to the buffering hypothesis, Belsky's (1984) model on the determinants of parenting created and perpetuated the connection between social support and stress in parental well-being research. This model proposes three factors that impact parental behavior: (1) the parent's disposition and psychological resources, (2) the child's characteristics, and (3), the factor relevant to this study, outside sources of both stress and support. Belsky (1984) divided these sources of stress and support into three categories: the marital relationship, work, and social networks. His suggestion that social networks can be sources of *both* stress and support that affect change in parental behaviors and influence parental well-being has, like the buffering model, provided a theoretical link between social support and parental stress in transition to parenthood studies (see Bartholomew et al., 2012; Feldman, 2000; Levy-Shiff, Llaná, & Har-Even, 1991).

With these two models as a guide, the body of transition to parenthood and parenthood research has developed a rather unified voice on the relationship between parental stress and social support: parental stress decreases if there is adequate social support available to the new mother (Crnic et al., 1983; Cutrona, 1984; Gao et al., 2009; McDaniel et al., 2012; Nakagawa et al., 1992). In particular, social support moderates the negative effects of stress on mother's life satisfaction (Crnic et al., 1983); high levels of stress and low levels of social support are indicators of postnatal depression (Gao et al., 2009); and mothers perceive more parenting stress with inadequate social support and less parenting stress with adequate social support (Nakagawa et al., 1992).

Cohen and Willis (1985) suggest that the three types of social support specifically analyzed in this study—appraisal support, social integration, and self-esteem support—help buffer against the effects of stress. However, to the researcher's knowledge, no transition to parenthood studies have analyzed the individual effects of appraisal support, social integration, and self-esteem support on parental stress specifically. This is partly attributable to the extreme lack of consensus regarding the conceptualization, definition, and measurement of social support (Uchino, 2006). However, given that scholars have consistently shown that these three functions of support are fulfilled through online communication, they will serve as variables in the present research.

Maternal Social Support through Online Communication

The shift in roles, responsibilities, and relationships that occurs during the transition to parenthood leads many mothers to actively use online technology for the purpose of communicating with others. This is evidenced in McDaniel's et al. (2012) study that found that 61% of first-time mothers in their sample (n=157) authored their own blogs and Bartholomew's et al. (2012) research that found that first-time mothers perceive a significant increase in their Facebook use after their children are born. Additionally, Edison Research (2013) found that among the individuals they surveyed (mothers: n=319, total sample: n=2,021), 90% of moms have the ability to access the Internet from any location, 95% percent of moms own a cell phone, and moms spend an average of 15 more minutes on the Internet each day than other individuals 12 years of age and older. Scholars have found that one of the prevailing purposes of this online technology use is to create and maintain feelings of social support (Brady & Guerin, 2010; Madge & O'Conner, 2006).

To better understand this connection, the remainder of this section will look at (1) the theoretical connection between technology-based communities and mothers' perceptions of social support, (2) the effects of online communication in general on social support, and (3) the effects of social media on social support.

Theoretical connection between online communication and social support. The ability for scholars to propose and make connections between technology-based communities and mothers' perceptions of social support has been validated through Bronfenbrenner's ecological theory, which is primarily concerned with explaining how "intrafamilial processes [are] affected by extrafamilial conditions" (Bronfenbrenner, 1986, p. 723; see also McDaniel et al., 2012). This theory suggests that individuals, and therefore families, are influenced and shaped by four types of environmental systems (Bronfenbrenner, 1979):

1. A *microsystem* consists of "activities, roles, and interpersonal relationships" that are experienced in an immediate setting—a place where individuals can participate in face-to-face interactions (Bronfenbrenner, 1979, p. 22).
2. A *mesosystem* is the interaction between two or more settings or institutions in which an individual participates.
3. An *ecosystem* is a setting that is "'external' to a developing person" (Bronfenbrenner, 1986, p. 723). It involves systems that influence an individual's development but do not involve the individual directly.
4. A *macrosystem* encompasses consistencies in micro-, meso-, and ecosystems, as well as the beliefs and ideologies underlying these consistencies, that exist in a culture or subculture.

Bronfenbrenner (1979, 1986) argues that these environments are not independent and that the interplay and interconnections between them have a significant influence on individuals and families.

With this theory as a guide, McDaniel and colleagues (2012) point out that the two systems most relevant to mothers and media are the microsystem and the mesosystem. They explain that in the context of mothers and media, the microsystem can be conceived of as the interactions between the mother, her partner, and her child in immediate settings such as the home and the mesosystem can be conceived of as connections and networks made through blogs and social media sites. They then explain,

Guided by this framework, mothers should be able to improve interactions within their microsystem (e.g., interactions with their partner and their child) if these microsystemic interactions are facilitated by their interaction with others in the mesosystem (e.g., relationships with others in their community through media institutions such as blogging and social networking sites). For example, mothers may be able to share successful personal experiences on a blog or social networking site and receive feedback from other parents that will reinforce perceptions of social support. (p. 1510)

It is this theoretical foundation that allows researchers to draw connections and explain relationships between online-communities and perceptions of social support, which can often dictate the nature of interactions in the home (see Crnic et al., 1983; Crnic et al., 1984; Salmela-Aro et al., 2010).

Effects of online communication on social support. Internet use among mothers engenders feelings of social support during the transition to motherhood, especially for women who are geographically or socially isolated from friends and family (Madge & O'Connor, 2006),

and may even rival the support traditionally received from neighbors (Brady & Guerin, 2010). The literature in this area suggests that the types of support mothers most often feel through Internet use are appraisal support, the availability of someone to talk to; social integration, the availability of a network of individuals who share interests and concerns; and self-esteem support, the availability of a positive comparison between one's self and others (see Cohen & McKay, 1984; Cutrona, 1984).

Participation on blogs and online chat groups is especially useful for helping mothers develop a sense of appraisal support and social integration by providing them with people to talk to and a community to belong to where participants share similar interests and concerns (Baum, 2004; McDaniel et al., 2011; Palmén & Kouri, 2012). Most often, these types of support emanate from information exchange. For example, in an ethnographic study of new mothers and technology use, Gibson and Hanson (2013) found that new mothers use the Internet to find information on parenting, their child's developmental stages, feeding, and health concerns. This creates a dialogue between new mothers that reassures them that they are not the only ones experiencing the stresses of parenthood and also engenders feelings of empowerment and empathy (Brady & Guerin, 2010; Doty & Dworkin, 2014; Gibson & Hanson, 2013; Hall & Irvine, 2009; Madge & O'Connor, 2006). Information exchanges in social online support groups have also been shown to build communities that help generate relief (Baum, 2004) and overcome isolation (Doty & Dworkin, 2014).

In addition to increasing perceptions of appraisal support and social integration, the communities and discussions facilitated through online technology have been shown to increase mothers' self-esteem (Hall & Irvine, 2009; Madge & O'Connor, 2006). For example, in interviews with users of a UK-based parenting site, Madge and O'Connor (2006) discovered that

through the conversations and connections mothers made on the site, they were able to handle threats to their self-esteem.

Effects of social media on social support. Recently, new mothers in the United States have become highly involved in social media. A 2011 study, for example, demonstrates that moms with children under 18 are 19% more likely than the general population to participate in social media and that they are responsible for one-fourth of all video streams posted on social networks (Nielsen, 2011). The relatively high use of social media among mothers has sparked a small body of research analyzing its effects on motherhood in general and during the transition to parenthood specifically.

Several scholars argue that mothers use social media for the same reasons that they use other online technologies, to feel a sense of social support (Bartholomew et al., 2012; Gibson & Hanson, 2013; Jang & Dworkin, 2014; Palmén & Kouri, 2012). And like other online technologies, it may generate appraisal support, social integration, and self-esteem support through the exchange of information (Jang & Dworkin, 2014). Gibson and Hanson (2013), for example, found that women in their sample used Facebook to ask questions and receive answers, and, similarly, Morris (2014) found that mothers commonly ask questions on Twitter. But whether or not this exchange of information leads to feelings of social support is unknown.

Currently, the two studies that look at social media use among first-time mothers and its effects on social support and parental stress in particular have varying results. McDaniel and colleagues (2012) found that there was no connection between social media use among first-time mothers and feelings of connectedness. Bartholomew et al. (2012), on the other hand, found that (1) mothers who reported that their friends are likely to comment on pictures of their child felt greater social support and (2) first-time mothers who spend more time visiting Facebook and

managing their account actually report higher levels of parenting stress. An explanation of these varying results may be found in the ways new mothers engage with their social media accounts, specifically their level of active production and the resulting feedback they receive from others as well as their level of passive consumption.

Mediating Variables: Active Production and Passive Consumption

Parallel to the research on the effects of social media on new mothers' perceptions of parental stress and social support, some scholars have suggested that Facebook use in general produces increased feelings of social support and thus improved well-being (Ellison, Steinfield, & Lampe, 2007), decreased stress (Nabi, Prestin, & So, 2013), and improved satisfaction with life (Grieve, Indian, Witteveen, Tolan, & Marrington, 2013) while others have argued that the social networking site leads to decreased self-esteem (Kalpidou, Costin, & Morris, 2011) and well-being (Kross, Verduyn, & Demiralp, 2013). To understand this collection of both positive and negative results, scholars have begun turning to passive and active social media use as a mediating variable. This paper suggests that these variables may apply to new mothers' social media use as well.

Active production and feedback. Active production on social media sites has been characterized as creating and sharing content both with a large undefined audience and with specific individuals (Burke, Marlow, & Lento, 2010). Studies have begun to show that this type of social media use can improve feelings of social connectedness. For example, directed production on Facebook—posting on someone's wall or commenting on or “liking” their post—increases feelings of social capital and decreases feelings of loneliness (Burke, 2011; Burke, Kraut, & Marlow, 2011; Burke et al., 2010), and increased undirected production on Facebook—sharing status updates—reduces feeling of loneliness because individuals feel more connected to

their family and friends (Deters & Mehl, 2012). Similarly, Kross et al. (2013) found that the more time people spend on Facebook, the more their life satisfaction levels decline, but that interacting with others directly on Facebook does not predict these negative outcomes. These results have been explained through the feedback individuals receive when they actively produce social media content.

Feedback on social media is the communication individuals receive from others in the form of comments, likes, and direct messages and has been characterized as “reciprocity in interactions” (Bartholomew et al., 2012, p. 465). The literature on online communities and motherhood indicates that mothers who actively produce content online receive feedback and, therefore, are rewarded with perceptions of social support. For example, mothers who post to online community boards received more support on- and off-line, resulting in increased self-esteem and decreased depression (Miyata, 2008). Similarly, mothers who reported that their friends were more likely to comment on Facebook photos of their child, a measure inherently capturing social media production, reported greater parenting satisfaction (Bartholomew et al., 2012). From these findings, Bartholomew and colleagues (2012) suggest, “It may be reciprocity in interactions with friends on and outside of Facebook that is behind the extent to which Facebook serves to maintain or increase bonding social capital with new parents” (p. 465).

Certainly actively producing social media content is a way to increase this feedback.

With this literature as a foundation, I propose the following hypotheses (see Figure 1):

H1a: Levels of active social media production by first-time mothers positively predict social media-based feedback.

H1b: Social media-based feedback positively predicts first-time mothers’ perception of appraisal social support.

H1c: Social media–based feedback positively predicts first-time mothers’ perception of social integration.

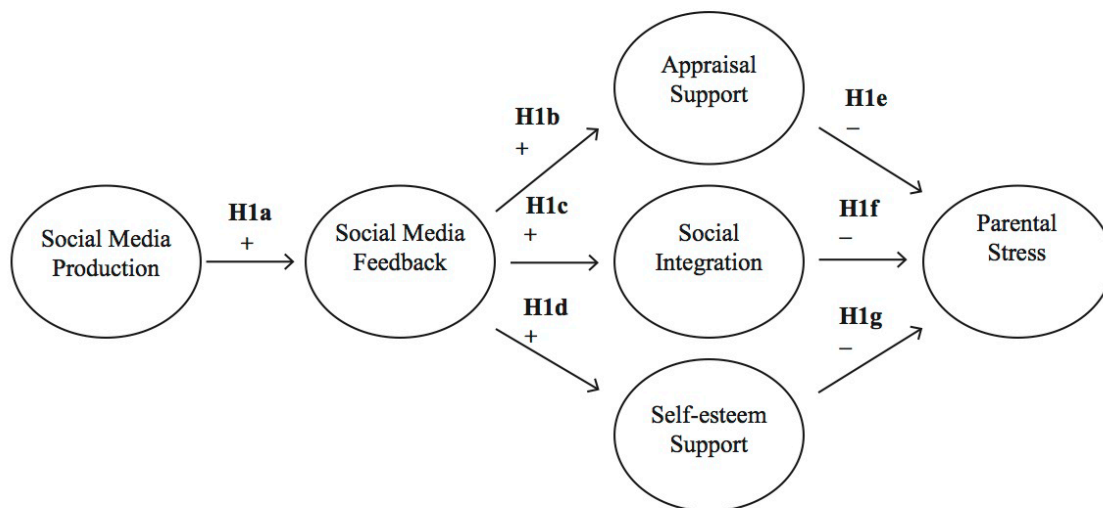
H1d: Social media–based feedback positively predicts first-time mothers’ perception of self-esteem social support.

H1e: First-time mothers’ perceptions of appraisal social support negatively predict perceptions of parental stress.

H1f: First-time mothers’ perceptions of social integration negatively predict perceptions of parental stress.

H1g: First-time mothers’ perceptions of self-esteem social support negatively predict perceptions of parental stress.

Figure 1: Hypothesis 1



Passive consumption. Passive social media consumption has been defined as viewing or reading social media content without contacting others, indicating that one has seen the content, or creating any new content to share (see Burke & Kraut, 2014). The effects of passive consumption, unlike the effects of active production, appear to be detrimental to feelings of

social support. Facebook users who consume greater levels of content, for example, report reduced feelings of social capital and increased loneliness (Burke et al, 2010) as well as increased envy, thought to be caused through upward social comparison (Krasnova, Wenninger, Widjaja, & Buxmann, 2013). Similarly, Kross et al. (2013) found that Facebook use that excluded directed production led to a decline in life satisfaction.

Given these results, I advance the following hypotheses (see Figure 2):

H2a: Levels of passive social media consumption negatively predict first-time mothers' perception of appraisal social support.

H2b: Levels of passive social media consumption negatively predict first-time mothers' perception of social integration.

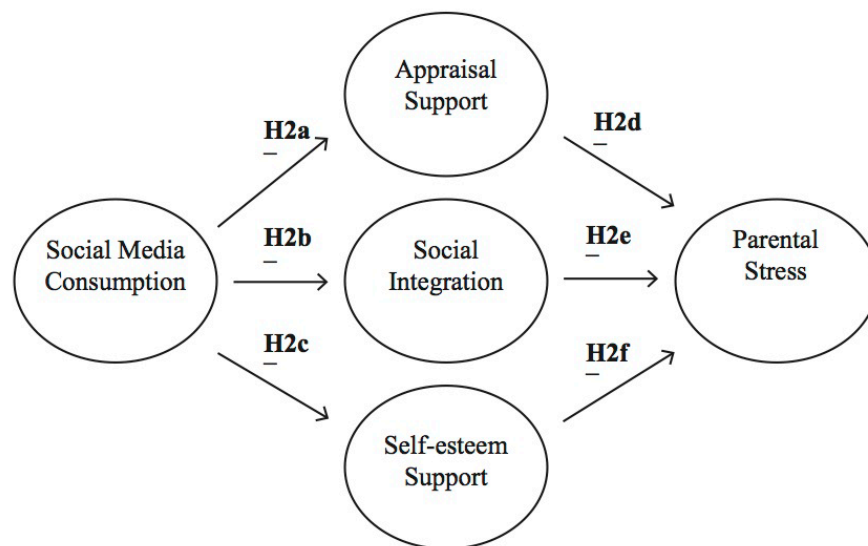
H2c: Levels of passive social media consumption negatively predict first-time mothers' perception of self-esteem social support.

H2d: First-time mothers' perceptions of appraisal social support negatively predict perceptions of parental stress.

H2e: First-time mothers' perceptions of social integration negatively predict perceptions of parental stress.

H2f: First-time mothers' perceptions of self-esteem social support negatively predict perceptions of parental stress.

Figure 2: Hypothesis 2



Chapter 3: Methods

This methods section will cover (1) data collection procedures, (2) a description of participants, (3) measurements for independent and dependent variables, and (3) and analysis of the strengths and weaknesses of the method.

Procedure

A purposive nonprobability sample of first-time mothers was used to test the proposed hypotheses. Participants were recruited and compensated through Survey Sampling International, a survey and data collection company. To qualify for inclusion in the study, mothers were required to be female, 18 years or older, read and speak English, reside in the United States, and have a baby less than 12 months old who is their first and only child (see Miller & Sollie, 1980). Qualified participants completed an online survey (see Appendix A and B) administered using Qualtrics, a web-based survey software. The survey ran from October 16, 2014 to October 21, 2014.

Participants

Of 300 qualified respondents, 274 first-time mothers satisfactorily completed the study (91%). Responses were removed from analysis if a significant portion of the questions were left unanswered or if a respondent's results indicated that they moved through the survey without reading or considering the questions (results that had unvaried answers [i.e., "strongly agree" was selected for every question] or surveys that took a particularly short time to complete).

On average, participants were 27 years old ($SD = 4.80$), and 90% ($n = 246$) of participants' children were between the ages of 3 and 12 months (birth to 2 months: 9%, $n = 27$; 3 to 5 months: 24%, $n = 67$; 6 to 8 months: 23%, $n = 64$; 9 to 10 months: 19%, $n = 52$; 11 to 12 months: 23%, $n = 63$). Sixty-eight percent of the mothers were married ($n = 186$) and 30% were

single and have never been married ($n = 82$). There was a wide-range of education levels represented, with 30% ($n = 84$) completing a 4-year college degree, 27% ($n = 75$) completing some college, 18% ($n = 51$) completing high school or the GED, and 10% ($n = 30$) with master's degrees. Additionally, most women identified themselves as white (71%, $n = 194$).

Measures

Independent variables. In this study, various types of social media use served as independent variables. Specifically, I measured social media consumption, production, and feedback.

Social media use. Social media is a unique medium that combines elements of interpersonal, mass, and group communication. In academia, this medium is defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” (Kaplan & Haenlein, 2010, p. 61). In this definition, “Web 2.0” refers to an ideological shift marked by a move from Internet content being created and published by individuals to content being continually modified by a community of participants (Kaplan & Haenlein, 2009) and “User Generated Content” refers to media that is created and shared on the Internet by non-professionals and involves some level of creative effort (Shao, 2009). Because the effects of full-scale blogging on social support and parental stress during the transition to parenthood have already been established (see McDaniel et al., 2012), the term “social media” in this study will refer to social media sites other than blogs (i.e., Facebook, Twitter, Instagram, Pinterest, Google Plus, etc.).

All three independent variables (*social media production, consumption, and feedback*) were assessed using modified versions of both the “Facebook Intensity Scale” (Ellison, Steinfield, & Lampe, 2007) and the “Facebook Motives Scale” (Papacharissi & Mendelson,

2011). The “Facebook Intensity Scale” was originally created to capture Facebook usage more accurately than frequency or duration by assessing emotional connection to Facebook and the extent to which Facebook is integrated into one’s daily activities rather than asking for self-reported statistics on how often individuals use the medium (Ellison et al., 2007). The “Facebook Motives Scale” (Papacharissi & Mendelson, 2011) was created to understand what motivates Facebook use. I have adapted these scales to apply to social media sites in general rather than Facebook specifically. Production, consumption, and feedback were measured on a Likert-type scale ranging from “strongly disagree” (1) to “strongly agree” (7).

Production. Production was measured on an 8-item scale designed to capture individuals’ emotional connection to producing social media content and whether or not production of content motivates their social media use (*Sharing content [status updates, links, photos, tweets, etc.] on social media is part of my everyday activity; Commenting on another person’s photos or posts is part of my everyday routine; I feel out of touch when I don’t post something on social media for a while; I feel out of touch when I don’t comment on other peoples’ posts for a while; I would feel sorry if I couldn’t post things on social media; I would feel sorry if I couldn’t comment on other peoples’ posts; I use social media to share information that may be of interest to others; I use social media to tell others a little bit about myself*). The Cronbach’s α was .91 ($M = 4.32$, $SD = 1.40$).

Consumption. Consumption was measured on a 7-item scale designed to capture individuals’ emotional connection to consuming social media content and whether or not consumption of content motivates their social media use (*Browsing social media newsfeeds is part of my everyday routine; Browsing other people’s social media pages is part of my everyday routine [e.g., someone’s Facebook timeline, Twitter profile, Pinterest board]; Browsing social*

media content I have posted in the past is part of my everyday routine; I feel out of touch if I don't browse social media sites for a while; I would feel sorry if I couldn't browse social media feeds; I use social media to see what other people are doing; I check social media sites frequently but rarely post anything). After initial analysis, the item "I check social media sites frequently but rarely post anything" was dropped to improve reliability. The resulting Cronbach's α was .84 ($M = 4.89$, $SD = 1.25$).

Feedback. Feedback was measured on a 9-item scale designed to capture how often individuals receive feedback on social media, individuals' emotional connection to receiving this feedback, and whether or not feedback motivates their social media use (*I frequently receive likes on my posts or photos; I frequently receive comments on my posts or photos; I frequently receive direct messages on social media [e.g., posts on my Facebook wall, private Facebook messages, direct Tweets, etc.]; I would feel out of touch if I didn't receive likes or comments on my social media posts for a while; I would feel out of touch if I didn't receive messages on social media for a while; I would feel sorry if I didn't receive likes, comments, or messages on social media; I use social media because people like my posts; I use social media because people comment on my posts; I use social media because people send me messages*). The Cronbach's α was .90 ($M = 4.44$, $SD = 1.30$).

Dependent variables. The dependent variables analyzed in this study were parental stress and social support.

Parental stress. Mirroring McDaniel's et al. (2012) study on the first-time mothers and media use as well as other studies on parental stress and social support (see Jackson, 2009; Respler-Herman, 2009), parental stress was measured using a modified version of the Parenting Stress Index—Short Form (PSI-SF; Abidin, 1995).

The PSI-SF consists of three subscales: (1) Parental Distress, stress stemming from personal factors, such as depression and marital discord (*I often have the feeling that I cannot handle things very well; I find myself giving up more of my life to meet my children's needs than I ever expected; I feel trapped by my responsibilities as a parent; Since having my child, I have been unable to do new and different things; Since having my child, I feel that I am almost never able to do things that I like to do; I am unhappy with the last purchase of clothing I made for myself; There are quite a few things that bother me about my life; Having a child has caused more problems than I expected in my relationship with my family; I feel alone and without friends; When I go to a party, I usually expect not to enjoy myself; I am not as interested in people as I used to be; I don't enjoy things as I used to*); (2) Parent-Child Dysfunction Interaction, stress stemming from dissatisfactory interactions with a child (*Sometimes I feel my child doesn't like me and doesn't want to be close to me; My child smiles at me much less than I expected; When playing, my child doesn't often giggle or laugh; My child doesn't seem to smile as much as most children his/her age; I expected to have closer and warmer feelings for my child than I do and this bothers me; My child seems to cry or fuss more often than most children his/her age*); and (3) Difficult Child, stress stemming from judgments of their child's self-regulatory abilities (*I feel that my child is very moody and easily upset; My child does a few things which bother me a great deal; My child reacts very strongly when something happens that my child doesn't like; My child gets upset easily over the smallest thing; My child's sleeping or eating schedule was much harder to establish than I expected; There are some things my child does that really bother me a lot; My child turned out to be more of a problem than I had expected; My child makes more demands on me than most children her/his age; I feel that I am* (a) very good at being a parent, (b) good at being a parent, (c) somewhat good at being a parent,

(d) *neither good nor bad at being a parent*, (e) *somewhat bad at being a parent* (f) *bad at being a parent*, (g) *very bad at being a parent*) (Respler-Herman, 2009). The original 36-item scale was reduced to 27 items because Adibin (1995) found that 6 items from the Parent-Child Dysfunction Interaction scale and 3 items from the Difficult Child scale had lower factor loadings than the rest of the items (see also McDaniel et al., 2012).

Twenty-six of the 27 questions were ranked on a Likert-type scale ranging from “strongly disagree” (1) to “strongly agree” (7), with higher scores representing higher parenting stress. The 27th question is a multiple-choice question rating the respondent’s perceived ability to be a parent. The choices range from “a very good at being a parent” (1) to “very bad at being a parent” (7). The Cronbach’s α was .96 ($M = 2.82$, $SD = 1.25$).

Social support. To capture the three dimensions of social support related to mothers’ online technology use, participants completed modified versions of (1) the Interpersonal Support Evaluation List (Cohen & Hoberman, 1983; Cohen, Mermelstein, Kamarck, & Hoberman, 1985) and (2) the Social Provisions Scale (Cutrona & Russell, 1987). These scales are fitting for this study as they have been used to understand the connection between social support and stress (Cohen et al., 1985; Cohen, Gottlieb, & Underwood, 2000; Cutrona & Russell, 1987) and similar scales have been used to assess the connection between social support and social media (Leung & Lee, 2005; Oh, Ozkaya, & LaRose, 2014). For the purpose of this study, the questions have been modified to apply to the support found on social media sites in particular.

Appraisal support. To measure perceptions of appraisal support, participants completed the 4-item “appraisal support” subscale from the Interpersonal Support Evaluation List—Short Form (*There really is no one I interact with on social media who can give me an objective view of how I’m handling my problems* [recoded]; *When I need suggestions on how to deal with a*

personal problem, there is someone I interact with on social media who I can turn to; There really is no one I interact with on social media that I can trust to give me good financial advice [recoded]; There is at least one person I know on social media whose advice I really trust) (Payne, Andrew, Butler, Wyatt, Dubbert, & Mosley, 2012). Each question was ranked on a 7-point scale ranging from “definitely false” (1) to “definitely true” (7). The Cronbach’s α was .76 ($M = 4.50$, $SD = 1.51$).

Self-esteem support. To measure perceptions of self-esteem support, participants completed the 4-item “self-esteem support” subscale from Interpersonal Support Evaluation List—Short Form (*Most of my friends on social media are more interesting than I am [recoded]; Most of my friends on social media are more successful at making changes in their lives than I am [recoded]; I am more satisfied with my life than most of my friends on social media are with theirs; I have a hard time keeping pace with my friends on social media [recoded]*) (Payne et al., 2012). Each question was ranked on a 7-point scale ranging from “definitely false” (1) to “definitely true” (7). After initial analysis, the item “I am more satisfied with my life than most of my friends on social media are with theirs” was dropped to improve reliability. The resulting Cronbach’s α was .75 ($M = 4.12$, $SD = 0.68$).

Social integration. To measure perceptions of social integration, participants completed the 4-item “social integration” subscale from the Social Provisions Scale (*There are people I interact with on social media who enjoy the same social activities I do; On social media, I feel part of a group of people who share my attitudes and beliefs; There is no one I interact with on social media who shares my interests and concerns [recoded]; There is no one I interact with on social media who likes to do the things I do [recoded]*) (Russell & Cutrona, 1984). Each question was ranked on a 7-point scale ranging from “strongly disagree” (1) to “strongly agree” (7). After

initial analysis, the item “On social media, I feel part of a group of people who share my attitudes and beliefs” was dropped to improve reliability. The resulting Cronbach’s α was .79 ($M = 2.7$, $SD = 1.39$).

Strengths and Weaknesses

Although the use of a survey prevents a conclusive analysis of causation and is subject to self-report errors, it does eliminate geographic boundaries and allow for a large amount of data to be collected in a relatively short amount of time (Wimmer & Dominick, 2011). Additionally, this method is especially appropriate for the study at hand because online surveys are conducive to the lifestyle of busy and often homebound mothers caring for brand-new children.

Chapter 4: Results

A path analysis using Analysis of Moment Structure (AMOS) software, version 22.0, tested the proposed models. The results of these analyses are shown in Figure 3 and Figure 4. Table 1 lists Pearson correlations among variables. Model fit was assessed by the chi-square (χ^2), the Tucker-Lewis Index (TLI), comparative fit index (CFI), and the root mean square error of approximation (RMSEA). Generally accepted thresholds for fit are as follows: a non-significant χ^2 is desirable, although it is typically difficult to achieve with larger sample sizes (Kline, 2011); TLI and CFI = .90 or greater (Schumaker & Lomax, 1996; Klein, 2011); RMSEA = .05 or lower, although .08 or lower indicates an acceptable fit (McDonald & Ho, 2002).

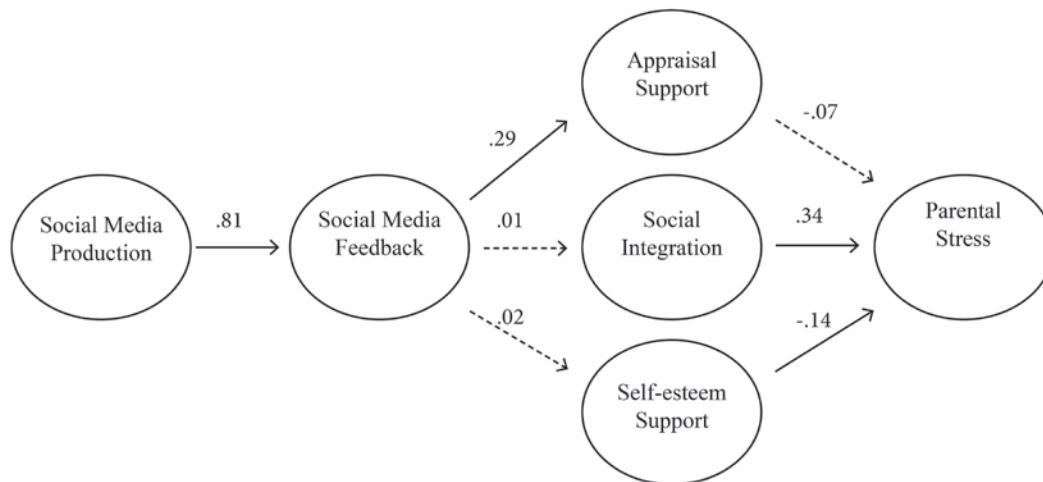
Hypothesis 1

The model for Hypothesis 1 did not achieve good fit (see Figure 3): $\chi^2 = 111.16$, $p = .00$, TLI = .58, CFI = .77, and RMSEA = .21, 90% CI [.18, .25]. There were, however, positive and significant path coefficients between production and feedback ($\beta = .81$, $p < .001$) and feedback and appraisal support ($\beta = .29$, $p < .001$) as well as a positive and significant path coefficient between social integration and parental stress ($\beta = .34$, $p < .001$) and a negative and significant path coefficient between self-esteem support and parental stress ($\beta = -.14$, $p < .01$).

To further test this hypothesis, however, I conducted additional path analyses. These tests revealed a model of good fit between social media production, social media feedback, and appraisal support (see Figure 4): $\chi^2 = .059$, $p = .81$, TLI = 1.01, CFI = 1.00, and RMSEA = .00, 90% CI [.00, .10]. In this model, there was a positive and significant path coefficient between production and feedback ($\beta = .81$, $p < .001$) and feedback and appraisal support ($\beta = .29$, $p < .001$). This indicates that first-time mothers who use social media to produce content receive an increased amount of feedback in the form of likes and comments and are motivated to use social

media because of the feedback they receive. This leads to an increased sense of appraisal support, or the availability of someone to talk to.

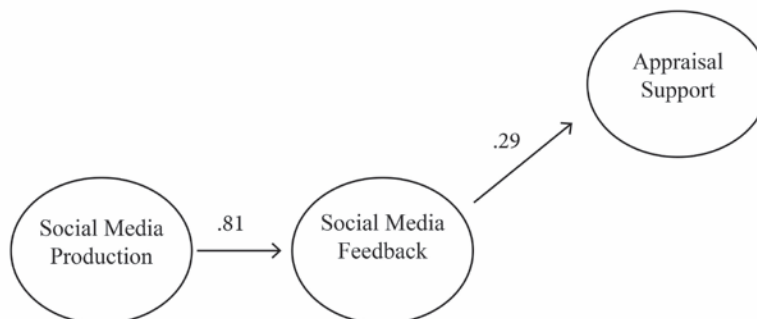
Figure 3: Test of Hypothesis 1



Model Fit: $\chi^2 = 111.16$, $p = .00$, TLI = .58, CFI = .77, and RMSEA = .21, 90% CI [.18, .25].

Note: Solid arrows indicate significant paths at $p < .05$. Dashed arrows indicate non-significant paths.

Figure 4: Hypothesis 1 Alternative Model



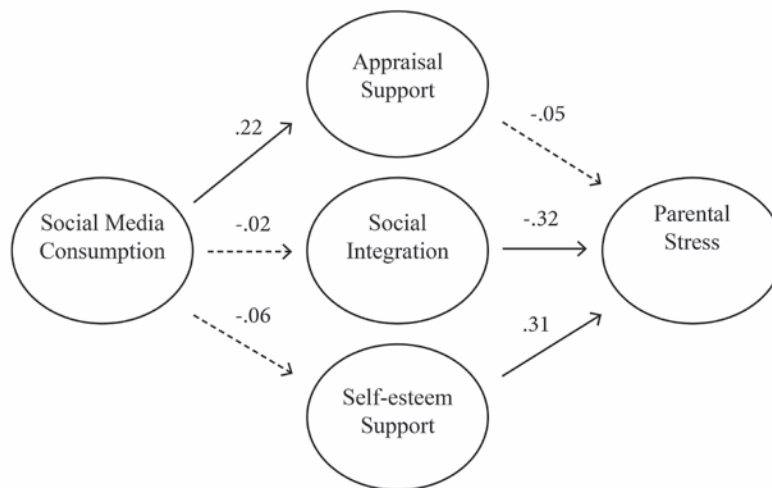
Model Fit: $\chi^2 = .059$, $p = .81$, TLI = 1.01, CFI = 1.00, and RMSEA = .00, 90% CI [.00, .10]

Note: Solid arrows indicate significant paths at $p < .01$. Dashed arrows indicate non-significant paths.

Hypothesis 2

The model for Hypothesis 2 did not achieve good fit (see Figure 5): $\chi^2 = 89.86$, $p = .00$, $TLI = -.47$, $CFI = .41$, and $RMSEA = .28$, 90% CI [.23, .33]. There were, however, positive and significant path coefficients between consumption and appraisal support ($\beta = .22$, $p < .001$) as well as a positive and significant path coefficient between social integration and parental stress ($\beta = .34$, $p < .001$) and a negative and significant path coefficient between self-esteem support and parental stress ($\beta = -.14$, $p = .01$).

Figure 5: Test of Hypothesis 2



Model Fit: $\chi^2 = 89.27$, $p = .00$, $TLI = -.25$, $CFI = .50$, and $RMSEA = .28$, 90% CI [.23, .33].

Note: Solid arrows indicate significant paths at $p < .001$. Dashed arrows indicate non-significant paths.

Table 1: Pearson Correlations

		Production	Feedback	Consumption	Appraisal	Self Esteem	Social Integration	Parental Stress
Production	Pearson Correlation Sig. (2-tailed)	1	.809** .000	.783** .000	.226** .000	.012 .849	.053 .383	.318** .000
Feedback	Pearson Correlation Sig. (2-tailed)	.809** .000	1	.771** .000	.289** .000	.010 .865	.016 .791	.313** .000
Consumption	Pearson Correlation Sig. (2-tailed)	.783** .000	.771** .000	1	.217** .000	.022 .714	-.058 .336	.259** .000
Appraisal	Pearson Correlation Sig. (2-tailed)	.226** .000	.289** .000	.217** .000	1	.256** .000	-.349** .000	-.223** .000
Self Esteem	Pearson Correlation Sig. (2-tailed)	.012 .849	.010 .865	.022 .714	.256** .000	1	-.202** .001	-.222** .000
Social Integration	Pearson Correlation Sig. (2-tailed)	.053 .383	.016 .791	-.058 .336	-.349** .000	-.202** .001	1	.382** .000
Parental Stress	Pearson Correlation Sig. (2-tailed)	.318** .000	.313** .000	.259** .000	-.223** .000	-.222** .000	.382** .000	1

** . Correlation is significant at the 0.01 level (2-tailed).

Chapter 5: Discussion

Prior to this study, research surrounding the effects of social media use on first-time mothers' perceptions of parental stress and social support presented varied conclusions. McDaniel et al. (2012) found that there was no connection between social media use among first-time mothers and feelings of connectedness. Bartholomew et al. (2012), on the other hand, found that (1) mothers who reported that their friends are likely to comment on pictures of their child (feedback) felt greater social support and (2) mothers who spent more time visiting Facebook and managing their account reported higher levels of parenting stress. To contribute to this conversation, the present study proposed that active production and passive consumption of social media may illuminate the connection between new mothers' social media use and perceptions of support and stress. Specifically, I hypothesized that (1) active production would lead to increased perceptions of social support and decreased perceptions of parental stress through feedback and (2) passive consumption would lead to decreased perceptions of social support and increased perceptions of parental stress.

Although past research indicates social media feedback is positively correlated with perceptions of social support, that consumption is negatively correlated to perceptions of social support (Bartholomew et al., 2012; Burke et al, 2010; Krasnova et al., 2013), and that greater social support leads to decreased perceptions of parental stress (Crnic et al., 1983; Cutrona, 1984; Gao et al., 2009; McDaniel et al., 2012; Nakagawa et al., 1992), the present research shows that for first-time mothers these phenomena do not work together in a statistically supported model: Hypothesis 1 and Hypothesis 2 were not supported.

While this result may be due to the limitations of the current research (see "Limitations" section below), one possible explanation is that perceptions of social support lead to social media

use rather than social media use generating perceptions of social support as the hypotheses predicted. This hearkens to research that suggests that Internet use is predicted by personality traits and social situations. Correa, Hinsley, & Gil de Zúñiga (2010), for example, found that extroversion and openness are positively related to social media use while emotional stability is a negative predictor; Kim, LaRose, & Peng (2009) identified loneliness as a predictor of detrimental Internet use; and Kraut, Kiesler, Boneva, Cummings, Helgeson, & Crawford (2002) found that the Internet use had better outcomes for those who initially have more social support. While none of these studies specifically point out that social support impacts how individuals use the media or that certain personality traits impact perceptions of social support, it could be that first-time mothers who experience introversion or loneliness sense less social support which then dictates their social media use rather than social media use impacting their perceptions of social support. Indeed, it may be that perceived face-to-face social support mediates the use and effects of social media. While this is certainly a possibility, the present study demonstrates that this is not always the case. In fact, social media production and feedback do predict increased appraisal support.

Although Hypothesis 1 and Hypothesis 2 did not achieve good fit as they were initially proposed, additional tests of Hypothesis 1 led to a viable model connecting production, feedback, and appraisal support. This model shows that first-time mothers who use social media to produce content receive an increased amount of feedback in the form of likes and comments and are motivated to use social media because of the feedback they receive. This leads to an increased sense of appraisal support, or the availability of someone to talk to (Cohen & Hoberman, 1983; Coehn & McKay, 1984; Cutrona, 1984).

This model adds clarity to the research done by McDaniel et al. (2012) and Bartholomew et al. (2012). Like McDaniel et al. (2012), who found no relationship between social media use and feelings of social support, I found no connection between social media *consumption* and feelings of social support; however, like Bartholomew et al. (2012), who found a relationship between receiving comments on social media and feelings of social support, I found a connection between social media *production, feedback, and appraisal support*. This suggests that first-time mothers may benefit from producing content on social media because it lends itself to increased perceptions of appraisal support while passive consumption is neither beneficial nor detrimental to these perceptions.

It is also important to note that in this model, feedback is not related to the two other types of social support tested in this study: social integration, the availability of a network of individuals who share interests and concerns, and self-esteem support, the availability of a positive comparison between one's self and others (Cohen & Hoberman, 1983; Coehn & McKay, 1984; Cutrona, 1984). This suggests that social media feedback, although beneficial for helping first-time mothers feel that they have access to individuals who they can talk to, does not necessarily make them feel that they are connected to individuals who are similar to them or make them feel that they are superior to those they interact with online. This highlights a unique difference between social media and other online-based communities specifically created for mothers (chat rooms, online support groups, etc.) as these Internet communities have been proven to help mothers feel both social integration and self-esteem support (Baum, 2004; Doty & Dworkin, 2014; Hall & Irvine, 2009; Madge & O'Connor, 2006). Perhaps the difference can be found in the types of individuals first-time mothers are connecting with on these two platforms. While online communities created for mothers connect women in similar situations, the reach

and nature of social media networks can connect first-time mothers not only to people who are similar to them but also to those who are very different. This may make it difficult for first-time mothers to perceive social integration and self-esteem support through their use of Facebook, Pinterest, Instagram, Twitter, etc. Another difference between these two web communities may stem from mothers' intention in using one platform over the other: mothers may participate in online groups specifically designed for their demographic for the purpose of finding support, but they may not see support as a driving motivation or outcome of social media use.

This research also raises interesting questions about the relationship between social support and parental stress. Although the literature consistently supports a negative correlation between parental stress and social support (Crnic et al., 1983; Cutrona, 1984; Gao et al., 2009; McDaniel et al., 2012; Nakagawa et al., 1992), in the model discussed above, appraisal support and parental stress are unrelated. Perhaps this is an indication that appraisal support derived through social media platforms in particular does not influence parental stress. It is also possible that social support derived through social media is somehow different from social support derived through the face-to-face communication typically studied in transition to parenthood research (see Crnic et al., 1983; Cutrona, 1984). This may be related to the level of intimacy available through social media relationships. Given that Crnic et al. (1983) found that among mothers of infants intimate social support had the most positive effects in terms of reducing stress, it could be that perceptions of social support garnered through social media are not intimate enough to reduce stress in this model.

Chapter 6: Limitations and Future Research

Limitations

This was the first study to create and use a survey instrument to specifically analyze social media consumption, production, and feedback, and while these scales are valuable, they do introduce limitations into the study. To assess these variables, I adapted Ellison, Steinfield, and Lampe's (2007) "Facebook Intensity Scale" and supplemented it with an adaptation of Papacharissi and Mendelson's (2011) "Facebook Motives Scale." These scales were used because scholars have suggested that intensity is a "better measure of Facebook [social media] usage than frequency or duration indices" (Ellison et al., 2007). Although these scales were useful and captured a dimension of social media use that is perhaps richer than self-reported measures of frequency and duration, the results left me curious as to how self-reported measures of time may have altered the findings. For example, although someone may not feel "sorry if they couldn't browse social media feeds," do they spend more time passively soaking in information found on social media than someone who feels emotionally attached to social media browsing? How are mothers affected by the *time* they spend on social media and perhaps away from their new child? This may explain why Bartholomew and colleagues (2012) found that mothers who reported frequent visits to their Facebook account reported higher levels of parental stress. In addition to capturing time-based measures, these scales could also be adapted to measure social media consumption, production, and feedback habits specifically related to parenting. For example, how does posting pictures of a child or asking Facebook friends about parenting concerns impact perceptions of social support and parental stress? How is this type of motherhood-focused production different from the production of other content? Using scales that measure motherhood-related social media use may also illuminate the differences between online

communities created specifically for mothers and general social media communities. Future research should look at how intensity- and motive-based measures of social media consumption, production, and feedback compare to self-reported measures of time and duration as well as how social media consumption, production, and feedback change based on the topic of the content.

Additionally, the measure analyzing social media consumption may not have accurately captured consumption as viewing or reading social media content without contacting others, indicating that one has seen the content, or creating any new content to share (see Burke & Kraut, 2014). Specifically, in initial tests of the consumption scale, the item “I check social media sites frequently but rarely post anything” was dropped to improve reliability. This indicates that although the consumption scale captured viewing social media, it did not exclude posting content. In a post hoc analysis of Hypothesis 2, the model was tested with the single item “I check social media sites frequently but rarely post anything” in place of the consumption scale in order to help account for this limitation. This version of the model, however, was also not a good fit, further validating the results presented above. Regardless, future research should continue to improve this scale to ensure that activities such as posting content and liking and commenting on posts is excluded from the measure, thus more accurately testing passive consumption.

The nature of survey research and the population surveyed introduced several more limitations into the study. For example, because the present research employed a purposive sample, the results cannot be generalized to the entire population. Additionally, the length of the survey may have caused survey fatigue. To guard against this, survey participants were compensated for completing the entire survey and responses that indicated that a participant did not consciously consider the questions were removed from the sample.

Future Research

The present research raises many interesting questions about social media use and perceptions of stress and support in first-time mothers. Future research should analyze when first-time mothers' social media use leads to perceptions of social support and test whether or not there are situations when perceptions of social support drive social media use. Understanding how these variables interact will bring valuable insight to social media effects research generally and to transition to parenthood research specifically. Scholars should also analyze the difference between social media and online support groups created specifically for mothers. Understanding how both of these impact perceptions of social support and whether or not one platform is better suited for assisting first-time mothers during the transition to parenthood will provide valuable information for mothers and those who work with them. Additionally, future research should begin to look at how social support experienced online and social support experienced in person differs for first-time mothers and how these differences impact parental stress.

Furthermore, this study is one of the first to develop scales for and analyze consumption, production, and feedback as variables that influence the effects of social media (Burke, 2011; Burke et al., 2010; Burke et al., 2011; Deters & Mehl, 2012; Krasnova et al., 2013; Kross et al., 2013) and the first to test social support among first-time mothers as three distinct concepts derived through social media. The results produced by these divisions add a unique depth to the transition to parenthood and social media effects research by suggesting that specific types of social media use and specific functions of social support interact differently in the same situations. Scholars interested in these areas should continue to test and develop these conceptualizations and measurements.

Chapter 7: Conclusion

This study is unique in its attempt to connect disparate research on the transition to parenthood, first-time mothers, social media use, social support, and parental stress. The results indicate that for first-time mothers, production on social media can lead to increased feedback, which can then lead to an increased perception of appraisal support. During the transition to parenthood, which can be difficult for many women, it may be valuable for first-time mothers to share information on social media in order for them to feel that they have people they can turn to as they learn their new roles and responsibilities. This study also demonstrated that passive consumption of social media content neither increases nor decreases perceptions of social support. Additionally, the research shows that looking at social media production, consumption, and feedback rather than looking at social media use as a single phenomenon as well as conceptualizing social support as a variety of functions of support rather than a single concept can add depth and insight to research in this and other fields.

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Appendix A: Survey Instrument by Variable

Qualifying Questions

1. Are you over the age of 18? (*must answer "yes"*)
 - a. Yes
 - b. No
2. What is your gender? (*must be female*)
 - a. male
 - b. female
3. How many children do you have? (*must have one child*)
 - a. 0
 - b. 1
 - c. 2 or more
4. How old is your child? (*must be 12 months or younger*)
 - a. 12 months or younger
 - b. 13 months or older

Independent Variables

As you answer the following questions, consider your use of social media platforms such as Facebook, Instagram, Twitter, Vine, Pinterest, Google Plus, etc. *Do not consider your use of blogs or blogging.*

Social Media Production

How much do you agree or disagree with the following statements?

1=strongly agree 2 3 4 5 6 7=strongly disagree

1. Sharing content (status updates, links, photos, tweets) on social media is part of my everyday activity.
2. Commenting on another person's photos or posts is part of my everyday routine.
3. I feel out of touch when I don't post something on social media for a while.
4. I feel out of touch when I don't comment on or like other peoples' posts for a while.
5. I would feel sorry if I couldn't post things on social media.
6. I would feel sorry if I couldn't like or comment on other peoples' posts.
7. I use social media to share information that may be of use or interest to others.
8. I use social media to tell others a little bit about myself.

Social Media Consumption

How much do you agree or disagree with the following statements?

1=strongly agree 2 3 4 5 6 7=strongly disagree

1. Browsing my social media newsfeeds is part of my everyday routine.

2. Browsing other people's social media feeds is part of my everyday routine (e.g., someone's Facebook timeline, Twitter profile, Pinterest board).
3. Browsing social media content that I have posted in the past is part of my everyday routine.
4. I feel out of touch if I don't browse social media sites for a while.
5. I would feel sorry if I couldn't browse social media feeds.
6. I use social media to see what other people are doing.
7. I check social media sites frequently but rarely post anything.

Social Media Feedback

How much do you agree or disagree with the following statements?

1=strongly agree 2 3 4 5 6 7=strongly disagree

1. I frequently receive likes on my posts or photos.
2. I frequently receive comments on posts or photos.
3. I frequently receive direct messages on social media (e.g., posts on my Facebook wall, private Facebook messages, direct Tweets)
4. I would feel out of touch if I didn't receive likes, comments on my social media posts for a while.
5. I would feel out of touch if I didn't receive messages on social media for a while.
6. I would feel sorry if I didn't receive likes, comments, or messages on social media.
7. I use social media because people like my posts.
8. I use social media because people comment on my posts.
9. I use social media because friends send me messages.

Dependent Variables

Parental Stress

As you read each statement, focus on your child. Then circle the response that best represents your opinion. While you may not find a response that exactly states your feelings, please circle the response that comes closest to describing how you feel. Your first reaction to each question should be your answer.

- 1=Strongly Disagree
 2=Disagree
 3=Somewhat Disagree
 4=Neither Disagree nor Agree
 5=Somewhat Agree
 6=Agree
 7=Strongly Agree

1. I often have the feeling that I cannot handle things very well.
2. I find myself giving up more of my life to meet my child's needs than I ever expected.
3. I feel trapped by my responsibilities as a parent.
4. Since having a child, I have been unable to do new and different things.

5. Since having a child, I feel that I am almost never able to do things that I like to do.
6. I am unhappy with the last purchase of clothing I made for myself.
7. There are quite a few things that bother me about my life.
8. Having a child has caused more problems than I expected in my relationships with my family.
9. I feel alone and without friends.
10. When I go to a party, I usually expect not to enjoy myself.
11. I am not as interested in people as I used to be.
12. I don't enjoy things as I used to.
13. Sometimes I feel my child doesn't like me and doesn't want to be close to me.
14. My child smiles at me much less than I expected.
15. When playing, my child doesn't often giggle or laugh.
16. My child doesn't seem to smile as much as most children.
17. I expected to have closer and warmer feelings for my child than I do and this bothers me.
18. My child seems to cry or fuss more often than most children.
19. I feel that my child is very moody and easily upset.
20. My child does a few things that bother me a great deal.
21. My child reacts very strongly when something happens that my child doesn't like.
22. My child gets upset easily over the smallest thing.
23. My child's sleeping or eating schedule was much harder to establish than I expected.
24. There are some things my child does that really bother me a lot.
25. My child turned out to be more of a problem than I had expected.
26. My child makes more demands on me than most children her/his age.
27. I feel that I am:
 - a. very good at being a parent
 - b. good at being parent
 - c. somewhat good at being a parent
 - d. neither good nor bad at being a parent
 - e. somewhat bad at being a parent
 - f. bad at being a parent
 - g. very bad at being a parent

total stress (Q1–Q27)

parental distress (Q1–Q12)

parent-child dysfunctional interaction (Q13–Q18)

difficult child (Q19–Q27)

Social Support

This scale is made up of a list of statements each of which may or may not be true about you. For each statement check “definitely true” if you are sure it is true about you and “probably true” if you think it is true but are not absolutely certain. Similarly, you should check “definitely false” if you are sure the statement is false and “probably false” if you think it is false but are not absolutely certain.

Appraisal Support

1=Definitely False

- 2=Most Likely False
 3=Probably False
 4=Neither True nor False
 5=Probably True
 6=Most Likely True
 7=Definitely True

1. There really is no one I interact with on social media who can give me an objective view of how I'm handling my problems.
2. When I need suggestions on how to deal with a personal problem, there is someone I interact with on social media who I can turn to.
3. There really is no one I interact with on social media that I can trust to give me good financial advice.
4. There is at least one person I know on social media whose advice I really trust.

Self-esteem Support

- 1=Definitely False
 2=Most Likely False
 3=Probably False
 4=Neither True nor False
 5=Probably True
 6=Most Likely True
 7=Definitely True

1. Most of my friends on social media are more interesting than I am.
2. Most of my friends on social media are more successful at making changes in their lives than I am.
3. I am more satisfied with my life than most of my friends on social media are with theirs.
4. I have a hard time keeping pace with my friends on social media.

Social Integration

For the following questions, consider your current relationships on social media and indicate how much you agree or disagree.

- 1=Strongly Disagree
 2=Disagree
 3=Somewhat Disagree
 4=Neither Disagree nor Agree
 5=Somewhat Agree
 6=Agree
 7=Strongly Agree

1. There are people I interact with on social media who enjoy the same social activities I do.
2. On social media, I feel part of a group of people who share my attitudes and beliefs.
3. There is no one I interact with on social media who shares my interests and concerns.
4. There is no one I interact with on social media who likes to do the things I do.

Demographic Questions

1. What is your age as of your last birthday?
2. How old is your child?
 - a. birth to 2 months
 - b. 3 to 5 months
 - c. 6 to 8 months
 - d. 9 to 10 months
 - e. 11 to 12 months
3. Please indicate your marital status
 - a. single, never married
 - b. married
 - c. widowed
 - d. divorced
 - e. separated
4. What is your race?
 - a. White/Caucasian
 - b. African American
 - c. Hispanic
 - d. Asian
 - e. Native American
 - f. Pacific Islander
 - g. Other: _____
5. What is the highest level of education you have completed?
 - a. less than high school
 - b. high school/GED
 - c. some college
 - d. 2-year college degree
 - e. 4-year college degree
 - f. Masters degree
 - g. Doctoral degree
 - h. professional degree (JD, MD)

Appendix B: Implied Consent

Participants were shown the following text after qualifying for the survey.

My name is Rachel Nielsen. I am a graduate student at Brigham Young University and I am conducting this research under the supervision of Professor Pamela Brubaker, Ph.D., from the Department of Communications at Brigham Young University. You are being invited to participate in this research study of new mothers and social media. I am interested in finding out about how social media influences perceptions of social support and parental stress in first-time mothers.

Your participation in this study will require the completion of the attached survey. This should take approximately 20 minutes of your time. Your participation will be anonymous and you will not be contacted again in the future. You will not be paid by the researcher for being in this study; however, if you qualify for the study and complete it, you will be compensated through your survey panel. The benefits, however, may impact society by helping increase knowledge about how first-time mothers can increase perceptions of social support and decrease parental stress.

You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem you may contact me, Rachel Nielsen, at rachelnielsen25@gmail.com or 707-639-6031 or my advisor, Dr. Pamela Brubaker, at pamela_brubaker@byu.edu or (801) 422-5591.

If you have any questions about your rights as a research participant you may contact the IRB Administrator at A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu; (801) 422-1461. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

The completion of this survey implies your consent to participate. If you choose to participate, please select "yes".