

**Finding the Others Like Me: Facebook Use and Invisible Minorities' Satisfaction With
Social Support**

by

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Abstract

In the face of oppression, stigmatized minority individuals demonstrate strategies of resilience such as affiliation with a group of similar others for support and connection. Invisible minorities, however, may have difficulty finding similar others because of the lack of visibility of their identities and so may not benefit from the stress-buffering effects of group membership and connection that visible minority groups often enjoy. Online social networking sites could provide access for individuals who identify as invisible minorities to connect to similar others so that they might gain connection, support, and information. The purpose of this research was to explore the relationship between use of Facebook to connect with similar others and satisfaction with social support for individuals identifying with a variety of invisible minority groups using hierarchical regression. Participants included 242 individuals who identified with one or more of a variety of invisible minority identities. Results did not support a significant relationship between use of Facebook to connect with similar others and satisfaction with social support, but did show a relationship between general social support and satisfaction with social support. Additionally, results did not show that factors such as outness, self-esteem, depression, or anxiety, moderated the relationship between use of Facebook to connect with similar others and satisfaction with social support, however, significant relationships between self-esteem, depression, and anxiety with satisfaction with social support were found. Finally, results indicated that engagement in initiating and information-seeking behavior on Facebook with similar others was associated with Facebook bridging social capital.

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I. Introduction

Growing research shows the extent to which people from stigmatized minority groups are negatively affected by discrimination and oppression (Crocker & Major, 1989; Meyer 2003, 2007). Models such as minority stress theory demonstrate how stigmatized minority members endure chronic stress that is unique and additive to the stress that majority populations experience as a result of socially based oppression emergent in social interactions, institutions, and structures (Meyer, 2003). In addition to exploring the detrimental aspects of oppression, research has also looked at past and present ingenuity and future potential for stigmatized minority groups to develop community and connection as a form of survival and resilience (Allport, 1953; Case & Hunter, 2012; Crocker & Major, 1989; Goffman, 1963; Jetten, Branscombe, Schmitt, & Spears, 2001).

Membership into a group and a sense of belongingness is essential for psychological well-being (Allport, 1953; Berkman, 2001; Brewer, 1991). This sense of belongingness is established through involvement in weak and close social interactions in a person's community (Berkman, 2001). Individuals from stigmatized minority groups, like all people, need to find similar others to feel understood and supported, perhaps even more so because of the unique stressors they face (Allport, 1953; Crocker & Major, 1989; Goffman, 1963; Jetten, Branscombe, Schmitt, & Spears, 2001). Stronger affiliations in a minority community and social support may buffer the impact of increased exposure to minority stress (Crocker & Major, 1989; Branscombe et al., 1999b; Brown et al., 1999). Joining a group of similar others can lead to feeling less alone and different, disclosing a secret part of oneself, sharing one's own experience and learning from those of others, and gaining emotional and motivational support (McKenna & Bargh, 1998).

This burgeoning understanding of the dynamics of oppression and resilience for

stigmatized minority groups, however, does not extend to stigmatized minority individuals whose minority status is invisible (Quinn & Chaudoir, 2009). Particularly absent is the study of how invisible minorities utilize connection and social support with similar others to buffer against minority stress, which is seen in visible minority groups. This absence of understanding is problematic because group identification for stigmatized minorities can relate to greater sense of well-being and protection from depression and other psychological concerns (Berkman, 2001; Goffman, 1963; Jetten, Branscombe, Schmitt, & Spears, 2001), as well as buffering from minority stress (Crocker & Major, 1989; Branscombe et al., 1999b; Brown et al., 1999).

Beyond minority groups exclusively, the social support literature makes several distinctions between type of support, who provides it, and when and how it is provided, but overall concludes an association of adequate social support with better physical, emotional, and mental health outcomes (Cohen & Wills, 1985; Gove & Geerken, 1977). Social capital and social support describe the resources and emotional, informational, and financial care a person can access through fluid connections with one's community (Bourdieu, 1985; Bourdieu & Wacquant, 1992; Coleman, 1988; Steinfield, Ellison, & Lampe, 2008). The term "social capital" may be utilized more by sociologists and political scientists, while psychologists tend to refer to the construct as "social support" (Burke, Kraut, & Marlow, 2011). Social support is thought to safeguard people from life stresses and lead to better physiological and psychological outcomes (Cohen & Wills, 1985; Thoits, 2011; Umberson & Montez, 2010).

Unfortunately, isolation and difficulty accessing social support is a common experience reported by invisible minorities (Frable et al., 1998). This isolation occurs for several reasons, including difficulty identifying similar others due to the invisibility of the stigma (Scotch, 1988; Webbick, 1981) as well as the risk involved with affiliation as it makes individuals more visible

and thus, more vulnerable to stigmatization (Scotch, 1988). Although concealment of one's minority status might yield rewards and protect one from discrimination, the process of concealment can be draining and stressful as it requires a great deal of cognitive and emotional energy (Frable, Platt, & Hoey, 1998; Goffman, 1963; Meyer, 2007; Pachankis, 2007; Smart & Wegner, 1999, 2000).

The internet and social networking sites such as Facebook offer a potential space for invisible minorities to access connection and social support. Anonymity (Crowson & Goulding, 2013; Morahan-Martin & Schumacher, 2003), privacy (Morahan-Martin & Schumacher, 2003), and opportunity for experimentation (DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013), as well as access to information and resources lacking or inaccessible offline (DeHaan et al., 2013; Mustanski, Lyons, & Garcia, 2011), are qualities of the internet and social networking sites that support the potential for such digital space to be a site for connection and resilience for invisible minorities. In fact, studies indicate that minority groups such as the LGBTQ community and racial and ethnic minorities such as African American, Latino, and Asian American college students utilize the internet and social networking sites more than majority populations for identity formation, information exchange, and connection with similar others (Correa & Jeong, 2011; DeHaan et al., 2013). Although there is research to suggest that individuals who identify with minority groups may use social networking to connect more with similar others, it is unclear what effect the extent to which a person is out (makes known the minority status) affects the potential benefit of use of social networking on well-being.

Studies that examine the mental health and well-being implications of Facebook use and the internet continue to show mixed results. Perhaps this is because what matters most is not the amount of Facebook use, but the type of use and the well-being of the user. Factors such as type

of use and the self-esteem, anxiety, and depression levels of the user have indeed shown to be moderating factors in determining the potential benefits or harms of Facebook (Burke et al., 2010; Burke, Kraut, & Marlow, 2011; Ellison, Steinfield, & Lampe, 2007; Grieve et al., 2013; Tandoc, Ferrucci, & Duffy, 2015).

Furthermore, it could be that the potential benefits of Facebook to invisible minority individuals is limited to those who are already skilled at accessing support across environments, offline as well as online (Kraut et al., 2002; Sheldon, 2008; Zywicki & Danowski, 2008). In this case, finding a positive relationship between Facebook use and well-being among invisible minorities would simply be a product of the extent to which certain individuals are generally able to access support. Therefore, in the study of potential benefits of Facebook use for invisible minorities, general social support is a confound that can obscure attempts to understand the specific role that Facebook use to connect with similar others plays in the well-being of invisible minorities. Similarly, given some research raising concerns about negative effects of Facebook and general internet use (Kraut et al., 2002; Shen & Williams, 2011), the amount of time and energy one spends on Facebook in general, not specifically with similar others, may be a confound when trying to understand how Facebook could be beneficial for well-being. These confounds will be controlled to develop a clearer perspective of how Facebook use with similar others for invisible minorities might predict satisfaction with social support above and beyond general support and general Facebook use.

Theoretical Framework and Purpose

Research on oppression and resilience shows that in the face of marginalization and stigmatization, people strive to maintain well-being through individual and community or “contextual” coping strategies (Case & Hunter, 2012). Individual coping strategies, termed

“adaptive responding” might include confrontation, minimization, and avoidance, while contextual strategies might consist of support networks or collective action (Case & Hunter, 2012). Case and Hunter (2012) advocate examining these communal strategies of resistance using a “counterspace” framework of analysis. “Counterspaces can be thought of as settings, which promote positive self-concepts among marginalized individuals (e.g., racial and sexual minority individuals, persons with disabilities, etc.) through the challenging of deficit-oriented dominant cultural narratives and representations concerning these individuals” (Case & Hunter, 2012, p. 261). Individuals who are out about their invisible minority status may be more readily able to create and join counterspaces (Corrigan & Matthews, 2003; Meyer, 2003). However, for individuals who are not out, physical offline counterspaces may not be an option and the use of social media may provide an alternative way for them to access the benefits discussed by Case and Hunter.

The support and resilience of counterspaces are generated and delivered through “narrative identity work,” “acts of resistance,” and “direct relational transactions” (Case & Hunter, 2012). Counterspaces can be created explicitly, such as youth development programs or community centers, or more implicitly (Case & Hunter, 2012). Although narrative identity work and acts of resistance might come out of relational transactions or vice versa, the focus of this dissertation is looking at the relational potential of social networking sites, namely, the potential of Facebook to serve as an implicit counterspace, where support is delivered informally to invisible minority individuals. This informal method may be particularly important for this group of individuals due to the previously discussed difficulty in locating similar others. This purpose is in line with Case and Hunter’s (2012) vision for utilizing counterspaces as a unit of analysis: to develop a “nuanced understanding of the indigenous ways in which marginalized individuals

respond to oppression in order to promote their own well-being,” which Case and Hunter suggest “can result in systematic ways to support and enhance those responses” (p. 267). Additionally, this dissertation’s scope of study, examining the experience across a broad range of groups instead of comparing groups, supported an intersectional form of analysis where oppression, privilege, and identity were viewed as multilayered, complex, and dynamic.

Significance to Counseling Psychology

This dissertation explored the potential of Facebook as a site for invisible minorities to connect and feel socially supported. Furthermore, this study examined how factors such as one’s outness, self-esteem, depression, and anxiety might have changed the relationship between invisible minorities’ use of Facebook and satisfaction with social support. This knowledge will ideally enhance researchers’, educators’, program administrators’, and psychotherapists’ understanding of how to support and develop interventions that benefit the well-being and resilience of invisible minority individuals and communities. Specifically, such interventions would be focused on the potential of Facebook use as a protective factor against minority stress and isolation. Additionally and more broadly, this dissertation aimed to enhance the field’s understanding of the lived experience of a group of understudied people – invisible minorities.

Operational Definitions

Invisible minority: One can be classified as an invisible minority if that person possesses a quality, identity, or experience that is or can be hidden and carries social devaluation (Crocker, Major, & Steele, 1998). There are many terms to describe this status, but the language used in this study is primarily invisible minority or a person who has an invisible minority identity. In this study an invisible minority included someone who holds one or more of the following statuses or identities: subscribing to a non-dominant religious belief (as defined by those that fall

outside of Christian affiliated religions or sects including atheists and agnostics), possessing an invisible disability, mental illness, or chronic illness or condition such as epilepsy or HIV/AIDS, possessing a disability such as deafness or a learning disability, being infertile, lesbian, gay, bisexual, queer, asexual, non-heterosexual identified, transgender, gender-nonconforming/genderqueer, a person of color who can pass as white, or belonging to a lower socioeconomic or working poor background.

Similar other: A person with the same or similar invisible minority status (listed above) as someone else.

Outness: Meidlinger and Hope (2014) define outness as “openness about one’s sexual orientation” (p. 489). In this study, the concept was extended to describe openness about one’s invisible minority identity for all studied invisible minority groups. Outness was a concept of interest because it is a “crucial construct in understanding the interplay between the factors composing minority stress” (Meidlinger & Hope, 2014, p. 489). In this study, outness was measured by scores on a revised version of the Nebraska Outness Scale (Meidlinger & Hope, 2014).

Social Capital/Support: Social capital or support refers to the resources and emotional, informational, and financial care a person can access through fluid connections with one’s community (Bourdieu, 1985; Bourdieu and Wacquant, 1992; Coleman, 1988; Steinfield, Ellison, & Lampe, 2008). In this study, general social support, which refers to objective or actual available social support, was measured by the Inventory of Socially Supportive Behaviors (ISSB) Short Form (Barrera, 1990). Satisfaction with social support, which describes the perceived fulfillment and adequacy of available social support, was measured by a revised version of the Social Support Questionnaire (Sarason et al., 1983).

Bridging social capital: Support garnered through more distant and infrequent connections to others that generally do not provide emotional support but do offer informational support and advice or perspective (Granovetter, 1973; Kraut et al., 1998). A revised version of the Internet Social Capital Scales (Williams, 2006) was used to measure Facebook Bridging social capital.

Bonding social capital: Support from closer and more intimate relationships which generally involve specific reciprocity, emotional support, and companionship (Wellman & Wortley, 1990). A revised version of the Internet Social Capital Scales (Williams, 2006) was used to measure Facebook Bonding social capital.

Facebook initiating behaviors: Actions that reflect use of Facebook to meet new people such as browsing their profiles, contacting them using Facebook, adding them as a Facebook Friend, or meeting them face-to-face (Ellison et al., 2007). In this study, a revised version of the Initiating subscale from the Connection Strategies measure (Ellison et al., 2011), was used to measure Facebook initiating behavior with similar others.

Facebook information-seeking behaviors: Actions that reflect use of Facebook to learn more about acquaintances such as browsing their profiles, contacting them using Facebook, adding them as a Facebook Friend, or meeting them face-to-face (Ellison et al., 2007). In this study, a revised version of the Information-seeking subscale from the Connection Strategies measure (Ellison et al., 2011), was used to measure Facebook initiating behavior with similar others.

Facebook maintaining behaviors: Actions that reflect use of Facebook to strengthen ties with existing close friends browsing their profiles, contacting them using Facebook, adding them as a Facebook Friend, or meeting them face-to-face (Ellison et al., 2007). In this study, a revised version of the Maintaining subscale from the Connection Strategies measure (Ellison et al., 2011), was used to measure Facebook initiating behavior with similar others.

Hypotheses:

Hypothesis 1: Greater use of Facebook to connect with similar others will predict higher satisfaction with social support after controlling for level of general social support and intensity of general Facebook use.

Aspects of the internet and social networking sites make for a more conducive space for invisible minorities to consider experimenting with disclosure and connecting with similar others to exchange information and support (Crowson et al., 2013; DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013; Morahan-Martin & Schumacher, 2003). For sexual minorities, behaviors such as cautiously and thoughtfully disclosing to others and participating in online message groups have been linked to increased self-acceptance, and in turn, higher likelihood of coming out to additional family and friends (Pachankis, 2007). Other benefits associated with disclosure (which may be safer to do online versus offline) include a sense of relief and renewed energy (Clair et al., 2005; Woods, 1994), increased self-esteem (Corrigan & Matthews, 2003), and the ability to identify and affiliate with similar others and foster closer stress-buffering interpersonal relationships (Corrigan & Matthews, 2003; Meyer, 2003). The relationships people form when they can affiliate with similar others are stress-buffering because they can decrease individual's subjective sense of isolation, foster a positive attitude about group membership, and teach one how to negotiate difficult interpersonal situations based on the stigma (Quinn & Chaudoir, 2009). In fact, the type of support that many invisible minorities would benefit from, such as being provided with a role model, information about how to navigate an issue, and empathic understanding, is most effective when it comes from one's secondary support group, which describes many online relationships

(Thoits, 2011). Therefore, it is likely that for invisible minority individuals, using Facebook to connect with similar others would relate to greater satisfaction with social support. Furthermore, level of general social support was controlled in order to rule out variance related to skill at accessing support across environments, offline and online, as well as variance related to time and energy spent on Facebook, in general, rather than Facebook use specifically with similar others.

Hypothesis 2: Degree of outness will moderate the relationship between the extent one uses Facebook to connect with similar others and satisfaction with social support controlling for level of general social support and intensity of general Facebook use. Specifically, it is hypothesized that less outness will be associated with a stronger relationship between extent of Facebook use to connect with similar others and satisfaction with social support.

Invisible minorities who are “closeted” endure more stress associated with the cognitive and emotional energy involved in concealment (Frable, Platt, & Hoey, 1998; Goffman, 1963; Meyer, 2007; Pachankis, 2007; Smart & Wegner, 1999, 2000) and are less able to connect with similar others to gain support, strength, and helpful resources and information (Beatty & Kirby, 2004; Frable et al., 1998; McKenna & Bargh, 1998; Pachankis, 2007; Ragins, 2008). Closeted invisible minority individuals likely have relationships that are plagued by disconnection and a lack of closeness because they are hiding a key aspect of themselves in such relationships (Goffman, 1963; Herek, 1996; Pachankis, 2007; Ragins, 2008). Therefore, invisible minorities who are more closeted and less out have a greater need for a virtual network to fulfill the needs of the social system they are desperately lacking offline. It is likely then that invisible minority individuals who are less out would show a stronger relationship between Facebook use to

connect with similar others and satisfaction with social support than more out invisible minority individuals who might be able to access this support more effectively offline. Furthermore, level of general social support was controlled in order to rule out variance related to those individuals who are already skilled at accessing support across environments, offline and online, as well as variance related to time and energy spent on Facebook, in general, rather than Facebook use specifically with similar others.

Research Questions:

Research Question 1: Will level of self-esteem moderate the relationship between the extent one uses Facebook to connect with similar others and satisfaction with social support controlling for level of general social support and intensity of general Facebook use?

Research Question 2: Will level of depression moderate the relationship between the extent one uses Facebook to connect with similar others and satisfaction with social support controlling for level of general social support and intensity of general Facebook use?

Research Question 3: Will level of anxiety moderate the relationship between the extent one uses Facebook to connect with similar others and satisfaction with social support controlling from level of general social support and intensity of general Facebook use?

Research shows mixed results about the relationship between Facebook and internet use and various mental health outcomes. Some studies support the “rich get richer” or “social enhancement” hypothesis where people with better social skills and higher levels of self-esteem, extroversion, and life satisfaction and lower levels of depression and anxiety benefit the most in terms of social support and social capital from the internet and social networking sites (Kraut et al., 2002; Sheldon, 2008; Zywicki & Danowski, 2008). Related to the “rich get richer” hypothesis is the “poor get poorer”

hypothesis where those who have the lowest levels of life satisfaction, extroversion, and self-esteem as well as higher levels of depression and anxiety benefit the least from internet or social networking use and actually experience increased isolation, as found in Kraut et al. (2002) and Shen & Williams' (2011) work. Other studies support the "poor get richer" hypothesis, or the enhanced benefit of social networking use in expanding social capital and social support for groups that tend to have lower levels of self-esteem and life satisfaction and higher levels of mental health concerns (Bessiere et al., 2008; Burke, Kraut, & Marlow, 2011; Ellison, Steinfield, & Lampe, 2007; McKenna & Bargh, 2000; Valkenburg & Peter, 2005; Zywica & Danowski, 2008). Zywica and Danowski's (2008) work support both hypotheses.

Thus, mental health factors would likely moderate the relationship between Facebook use with similar others and satisfaction with social support because one's mental health and well-being (measured by self-esteem, anxiety, and depression in this study) would likely change the strength of the relationship between Facebook use with similar others and satisfaction with social support, or even change the direction of the relationship. This means, that for someone whose mental health and well-being is more sound (higher self-esteem and lower depression and anxiety), Facebook use with similar others might play a different role than for someone whose well-being and mental health are less sound (lower self-esteem and higher depression and anxiety). Specifically, the relationship between Facebook use with similar others and satisfaction with social support might be stronger for those with lower self-esteem and higher anxiety and depression because Facebook is providing a much-needed platform for social connection that is difficult to access elsewhere. Or, conversely, the relationship could be stronger for

those with higher self-esteem and lower anxiety and depression because those who are already stable and well-adjusted utilize Facebook as a springboard to further access fulfilling social support. Therefore, mental health factors such as self-esteem, depression, and anxiety likely would affect the relationship between use of Facebook to connect with similar others and satisfaction with social support, though the direction of this effect is unknown. Furthermore, level of general social support was controlled in order to rule out variance related to those individuals who are already skilled at accessing support across environments, offline and online, as well as variance related to time and energy spent on Facebook, in general, rather than Facebook use specifically with similar others.

Research Question 4: Will engagement in initiating behavior with similar others on Facebook predict/relate to Facebook bridging or bonding social capital after controlling for level of general social support and intensity of general Facebook use?

Research Question 5: Will engagement in information-seeking behavior with similar others on Facebook predict/relate to Facebook bridging or bonding social capital after controlling for level of general social support and intensity of general Facebook use?

Research Question 6: Will engagement in maintaining behavior with similar others on Facebook predict/relate to Facebook bridging or bonding social capital after controlling for level of general social support and intensity of general Facebook use?

Ellison et al. (2011) found that information-seeking behavior on Facebook was the only type of Facebook connection strategy associated with bridging and bonding social capital. This might be explained by the fact that information-seeking behavior is a type of behavior that social networking sites are most conducive for; to help transform latent ties into weak ties and possibly even into strong ties (Ellison et al., 2011). Unlike

information-seeking behavior, maintaining behavior with existing close friends on Facebook might not be seen as adding to one's perception of enhanced social capital beyond what would take place offline and initiating contact with total strangers is the most uncommon Facebook connection strategy and might feel unlikely to yield any significant connection (Ellison et al., 2011). Although it is likely that Ellison et al. (2011) findings from a general population would extend to the behavior and perceptions of invisible minorities as well, it was not certain given the unique role social media use might play for invisible minorities.

II. Literature Review

Invisible Minorities

Many terms are used to describe people with invisible minority identities including possessing an invisible minority status, a concealable stigma or mark, a concealable stigmatized identity, an invisible stigmatized disability, or an invisible minority identity. In this study, I will primarily use the term invisible minority status. Additionally, literature includes a vast number of identities and life experiences that might classify one as possessing an invisible minority status including religious beliefs, various types of chronic illness and conditions such as epilepsy and HIV/AIDS, disability status, mental illness, deafness, infertility, non-heterosexual sexual orientation, ambiguous racial identity, illiteracy, nonmainstream political or religious beliefs, being an adopted child or adoptive parent, unemployment status, being an immigrant having a working class background, and history of incarceration, abortion, domestic violence or sexual assault survivor, substance abuse, or other trauma (Beatty & Kirby, 2006; Cohen & Streuning, 1962; Corrigan & Penn, 1999; Crawford, 1996; Crocker, Major, & Steele, 1998; DeCecco, 1984; D'Emilio, 1983; Ellsworth, 1965; Farina, 1982; Fisher, 2003; Goffman, 1963; Herek, 1986; Itzkovitz, 2001; Jones et al., 1984; Levitt & Klassen, 1974; Major & Gramzow, 1999; March, 1995; McKenna & Bargh, 1998; McLaughlin, Bell, & Stringer, 2004; Nunnally, 1961; Pachankis, 2007; Quinn & Chaudoir, 2009; Scambler & Hopkins, 1986; Sevinc, 2010; Somer & Szwarcberg, 2001; Stone & Colella, 1996; Susman, 1994; Vickers, 1997; Weidner, 1983; Whiteford & Gonzalez, 1995). The length of this list demonstrates the breadth of people who might fall under the invisible minority category. This study aims to capture the experiences of the following invisible minority statuses or identities: following a non-dominant religious belief (as defined by those that fall outside of Christian affiliated religions or sects including atheists

and agnostics); possessing an invisible disability, mental illness, or chronic illness or condition such as epilepsy or HIV/AIDS; being infertile, lesbian, gay, bisexual, queer, asexual, non-heterosexual identified, transgender, gender-nonconforming/genderqueer, a person of color who can pass as white, or from a lower socioeconomic or working poor background.

The Effects of Stigma on Minority Groups

Psychologist Gordon Allport (1953) famously noted “to a considerable degree all minority groups suffer from the same state of marginality, with its haunting consequences of insecurity, conflict, and irritation” (p. 38). Additionally, people from stigmatized minority groups tend to report lower levels of self-esteem, perhaps because they are stuck in self-fulfilling prophecies in which they internalize and actualize society’s negative image of their group and they have less power to control and manipulate their environment as dominant groups do (Crocker & Major, 1989). The minority stress model underscores the extensiveness of stress associated with being a stigmatized minority (Meyer, 2003, 2007). The theory contends that minority stress is chronic, unique and additive to the stress that all people experience, and that it is socially based, emerging from social process, institutions, and structures (Meyer 2003, 2007). The model also distinguishes between distal stress, which includes objective, systemic and interpersonal forms of discrimination and prejudice external to an individual and proximal stress, which is subjective and internal and includes internalized hatred, depression, and anxiety about one’s minority status as well as concealment of one’s minority status (Meyer, 2003, 2007). What is key in this model is that minority groups are more exposed to distal stressors which intensify proximal stressors, and that this combination of chronic and extreme level of psychological stress leads to detrimental health outcomes (Meyer, 2003).

Meyer (2007) explains how minority stress goes from distal to proximal in the lives of

lesbian, gay, and bisexual (LGB) individuals in the following four steps: first, there is the presence of external objective stressful events or conditions which range from chronic to acute; second, a person develops a stance of vigilance because of the expectations of such events; third, this vigilance leads the individual to conceal his/her/their sexual orientation; and fourth, the individual internalizes negative societal messages about LGB identities. This process can be further complicated for some LGB individuals who possess multiple minority statuses (Meyer, 2007). While this theory is aimed at understanding LGB stress, it is transferable for explaining how stress might function for various invisible minority groups.

Most discrimination occurs when people recognize a visible difference and then categorize the person, which leads to stigmatization when members of the majority group hold negative beliefs, attitudes, and stereotypes towards the othered group (Crocker & Major, 1989). Additionally, these groups tend to “receive disproportionately poor interpersonal or economic outcomes relative to members of the society at large because of discrimination against members of the social category” (Crocker & Major, 1989, p. 609). The process of categorization, discrimination, and stigmatization is less understood and functions differently for invisible minorities as the identity is not easily visibly detectable or not detectable at all (Beatty & Kirby, 2006). In fact, concealable stigmas are largely understudied compared to visible stigmatized identities (Quinn & Chaudoir, 2009). Quinn and Chaudoir (2009) call for further study of invisible stigmatized identities because it is “crucial to understand how the psychological meaning of the identity works in tandem with stigma to make a person more or less vulnerable to distress” (p. 635).

A Taxonomy of Stigmas

Although all stigmas carry a unified negative connotation, different types of stigmas are associated with more or less discrimination and stress. Goffman is a sociologist whose book, *Stigma: Notes on the Management of Spoiled Identity* (1963), remains one of the most cited books on stigma and includes a lengthy discussion on concealable stigmas in his seminal text. Goffman (1963) outlines three kinds of stigma: (1) “abominations of the body” (p. 13) such as physical deformities, (2) “blemishes of individual character” (p. 13) such as non-heterosexual sexuality, mental illness, or addiction, and finally (3) “tribal stigmas” (p. 13), such as race, nationality, or religion. Falk (2001) also differentiated stigmas by dividing them into two possible categories: existential versus achieved. Existential stigma includes characteristics such as race, sex, and certain disabilities, similar to Goffman’s (1963) categories of “abominations of the body,” and “tribal stigmas,” that are seen as beyond one’s control and therefore, less stigmatized (Falk, 2001). Achieved stigma, on the other hand, such as sexual orientation or HIV/AIDS status, are more similar to Goffman’s (1963) “blemishes of individual character” and may yield higher levels of stigmatization because they are seen as resulting from one’s behavior and thus, avoidable (Falk, 2001).

Beatty and Kirby (2006) stray from Goffman and Falk’s classification and contend that it is the degree of permanency that determines how stigmatizing a characteristic is, with characteristics that are more immutable carrying more stigma. Some identity categories such as race were at one time fluid, but have become immutable (at least in the United States) due to historical events such as Jim Crow South where the “one drop rule” was implemented, dictating that a person with black ancestry was automatically considered black (Beatty & Kirby, 2006).

Other factors that might contribute to the degree of stigmatization of a characteristic can

include beliefs about the expected course of a stigma (Jones et al., 1984), time since acquisition of the stigma (Crocker & Major, 1989), and acceptance of the dominant majority's negative attitudes towards one's own stigmatized group (Crocker & Major, 1989; Quinn & Chaudoir, 2009). In terms of time, Crocker and Major (1989) contend that those who have carried a stigma for longer might suffer the consequences of stigmatization less because they have learned how to buffer against it. However, the way people's attitudes and beliefs about their stigma affect their subjective experience of stigmatization might be more complicated. Taking more responsibility for one's stigmatizing condition is associated with lower self-esteem, while incorporating one's stigma as a central part of one's self-concept is associated with higher self-esteem (Crocker & Major, 1984). This is because taking more responsibility for one's own stigma leads to a sense that one is to blame for possessing such stigma and in turn leads to lowered self-esteem. Incorporating a stigma into one's self-concept, rather than viewing it as an outside force, however, yields higher self-esteem because identifying with this stigma makes it possible to connect with others and learn more about how to buffer against the stigma (discussed further below). Quinn and Chaudoir (2009), however, found that the centrality of the stigma to one's identity, along with anticipated effects of stigma, its salience, and the degree of cultural stigmatization of the identity, all relate to greater psychological distress.

Interpersonal situational factors can also affect the degree of stigmatization a person might feel. In fact, Crocker, Major, and Steele (1998) noted that being socially devalued, in addition to being concealable, are the two key ingredients of possessing an invisible minority status. Goffman also emphasized the relational nature of stigmas, writing that we need "a language of relationships, not attributes" in discussing stigma (Goffman, 1963, p. 10). Because stigmas are relationally based, it is important to note that statuses are stigmatized depending on

social context (Ragins, 2008) and rely on the identification of a marker (Goffman, 1963; Jones et al., 1984; Sevinc, 2010). Social context determines whether the social and cultural makeup of the situation indeed renders a person stigmatized and identification of a marker occurs when a mark has been revealed or disclosed. For people with concealable stigmas, in particular, a situational factor can trigger certain cognitive, affective, behavioral, and self-esteem outcomes (Pachankis, 2007). These interpersonal situational factors include when a stigma is made salient because all or none in the social context shares the stigma, the situation challenges or calls into question one's status or identity so the stigma becomes likely to be discovered, or when the consequences of having the stigma revealed are high such as rejection, social isolation, abuse, violence, and discrimination (Pachankis, 2007).

Social Implications for Invisible Minorities

Isolation is a common experience reported by people with invisible minority identities (Frible et al., 1998). Isolation occurs because the concealability of a stigma makes it difficult for invisible minorities to identify others who are like them (Scotch, 1988). In fact, invisible minorities might be around similar others but not know (Webbick, 1981). While some groups may have "stigma symbols," such as having a wheelchair or darker skin (Goffman, 1963), for better or for worse, invisible minorities do not have such built-in ways of being recognized or recognizing each other. Strategies to find similar others might include congregating in certain areas, analyzing others' reactions, or wearing symbols or clothing to signify membership (Goffman, 1963). However, even if invisible minorities are able to find similar others, affiliating with them might make them more vulnerable to stigmatization (Scotch, 1988).

The literature is mixed about how concealability affects the degree of stigmatization. Initially, it would seem that those with invisible stigmas face less prejudice and fewer negative

interactions (Jones et al., 1984). However, people with visual stigmas are less likely to demonstrate negative self-perception patterns (Frable, Platt, & Hoey, 1998) and people with invisible stigmas are denied some of the buffers that those with conspicuous stigmas enjoy (Crocker & Major, 1989). Invisible stigmas might also be more stigmatized in certain ways because they pose more of a threat to the dominant culture and social order. Beatty and Kirby (2006) explain this threat further: “unlike the more absolute categories of race and gender, it is possible for an onlooker to adopt (voluntarily or not) the stigmatized identity. An able-bodied person could develop an illness, a person may adopt a religious identity, and a heterosexual person could become gay” (p. 37).

Effects of Disclosure and Non-disclosure

Because of this stigma, invisible minorities must weigh the costs and benefits of disclosing versus concealing in various situations, to specific people, and the degree of disclosure. Disclosure is not a binary concept (Beatty & Kirby, 2006) but more of a constant negotiation as Goffman (1963) describes: “To display or not to display; to tell or not to tell; to let on or not to let on; to lie or not to lie; and in each case, to whom, how, when, and where” (Goffman, 1963, p. 42).

A prime motivation of concealing or “passing” is to gain “the great rewards in being considered normal” (Goffman, 1963, p. 94). Concealing also helps one to escape potential rejection, loneliness, violence, or discrimination associated with being a stigmatized minority (Pachankis, 2007). Because of the significant social, psychological and physical risks involved in disclosure, it is clear why concealment is often a preferred option. In fact, those with concealable stigmas tend to be more competent in social exchanges where they believe their interaction partner does not know of their stigma (Comer & Piliavin, 1972; Farina, Gliha, Boudreau, Allen,

& Sherman, 1971).

How then do people go about concealing their invisible stigma? Several theories have been applied to discuss this negotiation process. Pachankis (2007) reviews a number of these theories that all fall under the information management theory umbrella. The first theory discussed is communication privacy management theory that focuses on interpersonal exchange after initial disclosure of sensitive information. An example given is the process of managing either concealing or disclosing one's HIV status. While communication privacy theory largely deals with the interpersonal logistical aspects of exchange, another theory discussed, strategic perception management, focuses on the psychological experience utilized when navigating interactions with others who are perceived to be nonstigmatized. Identity management is another theory that focuses on how people manage information related to their stigma in terms of their identity. A large part of identity management theory looks at how individual and contextual factors effect one's decision to disclose or conceal. Some identity management strategies often utilized by LGB employees include the counterfeiting strategies or "passing" as straight, "avoidance," evading certain questions and telling "half-truths," and finally, "integration," deciding to openly disclose one's sexual orientation (Woods, 1994).

Whichever strategy to manage information about one's concealed stigma is utilized, all of these processes require cognitive and emotional energy (Frable, Platt, & Hoey, 1998; Goffman, 1963; Meyer, 2007; Pachankis, 2007; Smart & Wegner, 1999, 2000). In addition to energy depletion, the constant attention required in information management strategies may cause people to become obsessively preoccupied with thoughts of their stigma (McKenna & Bargh, 1998; Pachankis, 2007; Smart & Wegner, 2000). Lane and Wegner (1995) describe this process as a vicious cycle where one becomes preoccupied with thoughts of the stigma in attempt to hide

it; this secrecy causes thoughts to be suppressed, suppression causes intrusions of thought, intrusion leads to increased effort to suppress and the cycle continues and intensifies (Lane & Wegner, 1995). Furthermore, despite these complex and comprehensive modes of concealment that are resource draining, ultimately people do not always have control over their disclosure process and sometimes they are outted before they are ready (Ragins, 2008). Outting can occur by being directly called out by another person or more indirectly when the person is assumed to be in the majority group and decides to correct this assumption, inevitably outting oneself (Ragins, 2008).

Another dire consequence of concealment is the inability to identify and connect with similar others to gain support, strength, helpful information, and camaraderie (Beatty & Kirby, 2004; Frable et al., 1998; McKenna & Bargh, 1998; Pachankis, 2007; Ragins, 2008).

Opportunities to find similar others are more difficult for invisible minorities than visible minorities because their stigmas are hidden. The consequences of mistakenly assuming one has found another person who shares the concealable stigma could be embarrassment or potentially danger (McKenna & Bargh, 1998). Additionally, the relationships that a person with a closeted concealed stigma might have are likely plagued by disconnection and a lack of closeness when they have to hide a part of themselves and always check their houses or bodies for signs of their stigma (Goffman, 1963; Herek, 1996; Pachankis, 2007; Ragins, 2008). This type of impression management has been linked to increased response latency, decreased eye contact, speaking in a higher pitch, displaying more hesitation, eye blinking, speech errors, and increased anxiety in interpersonal interactions (Pachankis, 2007).

Concealing one's stigma also has negative emotional and self-esteem implications. Concealment is associated with diminished self-efficacy, a fragmented self-concept, anxiety,

depression, and internalized views of society's negative devaluation of their stigma (Beatty & Kirby, 2004; Frable et al., 1998; Goffman, 1963, Moorhead, 1999; Pachankis, 2007; Woods, 1994; Woods & Harbeck, 1991). In fact, Frable et al. (1998) found that those with concealable stigmas had lower levels of self-esteem and higher levels of depression and anxiety than those with visible stigmas and those with no stigmas at all. A person who is passing as "normal" may develop an inconsistent view of self across situations because they are reaping the benefits of privilege associated with concealing but also might feel a sense of fraudulence, guilt, and betrayal (Pachankis, 2007). Particularly when shame or fear of rejection motivates secrecy, people with concealable stigmas suffer the most emotionally (Pachankis, 2007).

Given the comprehensiveness of these stressors, the fate of the closeted invisible minority seems destined for a lonely, depleted, and anxious life. However, there is hope for strategies to protect oneself from this stress and build resilience. Pachankis (2007) offers suggestions of how to break this vicious cycle of concealment. These strategies include: taking careful consideration in deciding to whom to disclose, selectively disclosing to those who seem safe and open-minded, participating in online message groups of people who share the same stigmatized minority status, and finding contact with similar others. Behaviors such as disclosing to safe others and participating in online message groups have been linked to increased self-acceptance and in turn, higher likelihood of coming out to additional family and friends (Pachankis, 2007). Miller and Major (2000) also recommend encouraging invisible minorities to reattribute negative psychological outcomes to the stress of concealment instead of to their own personal flaws.

Should a person decide to disclose, there are several anticipated positive consequences of disclosure. Some of these include: a sense of relief and renewed energy (Clair et al., 2005; Woods, 1994), the ability to identify and affiliate with similar others and foster closer stress-

buffering interpersonal relationships (Corrigan & Matthews, 2003; Meyer, 2003), and increased self-esteem (Corrigan & Matthews, 2003). These relationships are stress-buffering because they can decrease individual's subjective sense of isolation, foster a positive attitude about group membership, and teach one how to negotiate difficult interpersonal situations based on the stigma (Quinn & Chaudoir, 2009). Furthermore, if the stigmatized person is able to attribute negative evaluative feedback from others to prejudice held towards one's group membership this feedback does not have as deleterious of an effect (Crocker, Voelkl, Testa, & Major, 1991). However, if one's stigma is concealed, the person cannot utilize this same buffering technique.

Social Support

Social support refers to the resources and support one is able to garner through fluid connections with the individual's community (Bourdieu, 1985; Bourdieu and Wacquant, 1992; Coleman, 1988; Steinfield, Ellison, & Lampe, 2008). Social support has also been defined as the ability to stay connected with members of a previously inhabited community (Bargh, McKenna, & Fitzsimons, 2002). It is also noteworthy that the term "social capital" may be utilized by sociologists and political scientists, while psychologists tend to refer to it as "social support" (Burke, Kraut, & Marlow, 2011). I will primarily refer to the construct as social support in this dissertation.

Social support includes support and resources achieved through both close, intimate relationships and more casual acquaintances (Bourdieu, 1985; Coleman, 1988; Thoits, 2011). The social support literature distinguishes these types of relationships as either strong ties or weak ties that provide support via bridging or bonding (Granovetter, 1973, 1982; Kraut et al., 1998; Putnam, 2000; Wellman & Wortley, 1990). Sullivan (1953) also refers to these two groups as primary relationships and secondary relationships. Strong tie relationships or primary

relationships are associated with frequent contact and deep feelings of affection and obligation (Kraut et al., 1998; Sullivan, 1953). Strong ties offer support through a mechanism termed bonding, which involves specific reciprocity, emotional support, and companionship (Wellman & Wortley, 1990). These strong social ties generally safeguard people from life stressors and lead to better physiological and psychological outcomes (Cohen & Wills, 1985; Thoits, 2011; Umberson & Montez, 2010). Weak ties, on the other hand, are looser and possibly superficial and infrequent connections between people that generally do not provide emotional support but do offer support via bridging (Granovetter, 1973; Kraut et al., 1998). Support falling under bridging includes being provided with helpful information or a new perspective on a situation. Constant, Sproull, & Kiesler (1996) also note that many online relationships are forms of weak ties and are especially useful for linking people to information and social resources unavailable in local groups. Although we might think of all online relationships as weak, it is possible for both online and offline relationships to be strong or weak tie relationships (Bourdieu & Wacquant, 1992).

In addition to describing the strength and intensity of the relationship, the social support literature also offers two primary theories of how support assuages stress. The first model, the main or direct effect model, suggests that there is an overall beneficial effect of social support, in both the presence and absence of a specific stressor (Cohen & Wills, 1985). The steady support provides consistent affirmative experiences that lead to positive affect, a sense of predictability, stability, and self-worth in the life of the recipient of the support (Burke, Kraut, & Marolow, 2011). This support and consequential well-being makes the recipient more likely to avoid negative experiences such as cigarette smoking, alcohol use, and other risky behaviors, and more likely to seek medical help when necessary (Burke, Kraut, & Marolow, 2011).

The other model, the buffering model, suggests that stress occurs when people believe they do not have a sufficient coping response to handle a threatening situation (Cohen & Wills, 1985). When multiple problems accumulate, people's assessment of their problem solving skills and stress tolerance is even further strained (Lazarus & Folkman, 1984). This stress is associated with numerous health concerns including issues with the neuroendocrine system, immune system functioning, increased alcohol use, and poorer diet and exercise habits. The buffering model conceptualizes support serving as an intervention between a stressful event and the stress reaction by preventing a negative stress appraisal response. Specifically, social support intervenes after the experience of stress and before the onset of a pathological outcome by reducing the negative impact of the event (Lewandowski, Rosenberg, Parks, & Siegel, 2011) or reducing or eliminating a stress reaction or directly affecting a physiological processes, such as tranquilizing the neuroendocrine system (Burke, Kraut, & Marolow, 2011).

There are many types of social support including emotional support, informational support, advice, social companionship, and belongingness (Cohen & McKay, 1984; Cohen & Wills, 1985; House & Kahn, 1985; Thoits, 2011). Informational support is more likely to show buffering effects, regardless of the stressor, whereas informational support and social companionship together are helpful when they match specific coping requirements (Cohen & Wills, 1985). Despite the different varieties of support, overall, there is a causal relationship between social support and healthy well-being, mortality, and mental health (Cohen & Wills, 1985). In general, no matter the type of social support, when people have more social contact, they are happier and healthier, physically and mentally (Cohen & Wills, 1985; Gove & Geerken, 1977).

However, there is evidence that suggests that there are moderating factors or individual

differences that determine how social support relates to health and well-being (Berkman, 2001). The emotional support people received during childhood and their attachment style, as examples, likely modify the beneficial effects of social support (Berkman, 2001). Furthermore, social support can have mixed effects on an individual as it may promote self-efficacy and self-esteem or cause one to feel dependent or depleted (Berkman, 2001; Herbert & Dunkel-Schetter, 1992). Furthermore, close relationships with partners or family members, can cause strain and stress in addition to predicting well-being (Uchino, 2013; Walen & Lachman, 2000). One study showed that women report higher rates of psychological distress as a result of their social relationships because they tend to have more emotionally intimate relationships where they are more likely to take on a friend or family member's stress in a "contagious" fashion (Berkman, 2001). Furthermore, in many cases, people of lower socioeconomic statuses and other marginalized groups that are most in need of support from their social networks because of higher stress levels (see minority stress model) are the least likely to receive support and bear more of the costs of network involvement, such as feeling like a burden or an obligation to reciprocate when helped by others (Belle, 1983). These moderating factors do not suggest that stigmatized groups will not benefit from the aforementioned positive mental health and physical health consequences of receiving social support or the maladies associated with lacking such support, but that the relationship between social support and health may be different from majority groups and these differences are worth researching.

Expanding on the buffering model, Thoits (2011) theorizes that the helpfulness of receiving social support during a time of stress depends on who in one's social world is supplying what kind of support. The source could be from primary group members who have intimate and long-lasting relationship ties and tend to be "experientially dissimilar," having not

shared similar experiences as the recipient of support, or from secondary group members who have shorter, looser, and less personal ties and tend to be “experientially similar,” having shared similar experiences as the recipient of support (Thoits, 2011). Secondary support from “experientially similar others” might be found through one’s in-person immediate social network, through a friend of a friend, or identified groups in the geographical area, or the internet (Thoits, 2011) – the focus of this study. Thoits (2011) also notes that there are some lucky individuals whose primary support groups consists of “experientially similar others.” For many, however, this is not the case.

Support from primary and secondary networks can be in many different forms, as discussed above. Thoits (2011) argues that support is the most effective when primary support groups provide emotional support in the form of “demonstrations of caring and provisions of practical aid” (p. 156) and “experientially similar others,” generally in the secondary support group, provide “empathic understanding, tailored information and advice, and role modeling—actions grounded in supporters’ prior experience” (p. 156). In these times of distress, “experientially similar others” are especially adept at providing role modeling, information about how to navigate the issue, and empathic understanding as they have been through a similar situation and are now somewhat removed (Thoits, 2011). Members of the primary support group, however, are not as effective at providing this type of support as they, themselves have not undergone a similar experience, are often distressed themselves and might be distracted about how the issue might affect them or resort to problem-solving (Thoits, 2011). Likewise, members of the secondary support group will not provide as effective caring and immediate assistance with resources because they lack intimacy and frequent contact with the recipient of support (Thoits, 2011).

Lewandowski et al. (2011) make an important distinction between how social support's effects on well-being tends to be measured in research. In "computer-mediated social support" research, particularly, most research examines the effects of "formal, group-based support" such as "formally organized support groups that are convened with the explicit purpose of providing members with social support for specific issues (e.g., HIV/AIDS)" (Lewandowski et al., 2011, p. 1807). There is less research on "informal, inherent support" delivered through mechanisms other than face-to-face interaction (such as the telephone or the internet (Lewandowski et al., 2011)). This study will expand upon the limited research on the effects of informal or implicit support delivered through non face-to-face interaction, the internet, specifically Facebook. Research that focuses on the dynamics of informal support accessed through the internet is particularly important for invisible minority individuals who may not have similar others in their primary support group and may not be ready to seek more formalized support networks, in-person or online.

Cohesion, Belongingness, and Support in Minority Groups

Like social support, membership in a group and a sense of belongingness is essential for psychological well-being (Allport, 1953; Berkman, 2001; Brewer, 1991). A sense of belongingness is established through involvement in weak social interactions in a person's community (Berkman, 2001). Belongingness can also be understood as a feeling of deeper connection to a group and feeling special and valued by that group (Brewer, 1991). Allport (1953) wrote about belongingness by discussing it in terms of "in-groups" and "reference groups." An in-group is a group of people where people can use "we" with the same significance. A reference group is one that a person wants to be included into. Membership in an in-group is crucial for survival because always being on the "outside" makes one feel alone and

on guard when others question or threaten their way of life or a characteristic that puts them on the “outside” (Allport, 1953). In general, involvement in social group and a sense of belongingness boosts self-esteem, reduces uncertainty about oneself, and fulfills individuals’ basic need to belong (Allport, 1953). Because of the way political, cultural, and economic structures often privilege the dominant majority group, minority groups are forced to make the majority their reference group, thus feeling excluded and on guard (Allport, 1953). Like members of majority groups, individuals from minority groups need to find a group to feel understood and supported, perhaps even more so because of the unique stressors they face (Allport, 1953; Crocker & Major, 1989; Goffman, 1963; Jetten, Branscombe, Schmitt, & Spears, 2001).

Although possessing a minority status can be an exclusionary factor from many groups, it can also facilitate one’s membership into a very cohesive group of others (Berkman, 2001). In fact, in the face of perceived discrimination group identification increases because disadvantaged group members de-identify with standards of dominant group and identify more with minority characteristics (Jetten, Branscombe, Schmitt, & Spears, 2001). Group identification for marginalized minority individuals is related to a greater sense of well-being and protection from depression and other psychological concerns for members of disadvantaged groups (Berkman, 2001; Goffman, 1963; Jetten, Branscombe, Schmitt, & Spears, 2001). Stronger affiliations in a minority community and social support may buffer the impact of stress (Crocker & Major, 1989; Branscombe et al., 1999b; Brown et al., 1999). Joining a group of similar others can lead to feeling less isolated and different, disclosing a secret part of oneself, sharing one’s own experience and learning from those of others, and gaining emotional and motivational support (McKenna & Bargh, 1998). Goffman (1963) observed how stigmatized minority groups turn to

each other for support, coping, and resilience by joining self-help groups, creating group-specific magazines, attending conferences, and joining national associations and clubs (Goffman, 1963). Beyond the stigmatized group, support and connection with the broader community is also seen as helpful. For LBG youth, for example, self-acceptance along with family support together mediate the effects of victimization on mental health outcomes in the face of verbal abuse and threats of violence (Hershberger & D'Augelli, 1995).

Because invisible minorities, like all minorities, are more likely to feel better (elevate self-esteem and mood) around similar others (Frable, Platt, & Hoey, 1998), it may be beneficial to build and support systems that encourage affiliation between members of an invisible minority group (Goffman, 1963; Goodman & Mueller, 2009; Jetten, Branscombe, Schmitt, & Spears, 2001). Within the context of a university, these networks could be student organizations that highlight concerns of invisible minorities to “enhance visibility of similar others and create positive self-perceptions among group members” (Frable, Platt, & Hoey, 1998, p. 920). In addition to forming student organizations, some have also recommended encouraging use of technology and online networks, including Facebook, to help individuals connect to their broader invisible minority community for atheist students (Goodman & Mueller, 2009), LGBTQ youth (Roe, 2015; Rosario, Schrimshaw, & Hunter, 2004), and young people and men who have sex with men (Gold et al., 2012).

Relationships Between Facebook and Social Support and Social Capital

Researchers are divided on effects of social networking on mental health outcomes, but one thing that is certain is that the internet is a prime venue for social interaction (D'Amico, 1998). There is a strong association between use of Facebook and the three types of social capital (bridging, bonding, maintenance), with the strongest relationship being to bridging social capital

(Bargh, McKenna, & Fitzsimons, 2002; Ellison, Steinfield, & Lampe, 2007; Ellison et al., 2011; Ellison et al., 2014; Steinfield et al., 2008). Most people report using Facebook to keep in touch with friends (Ellison, Steinfield, & Lampe, 2007; Joinson, 2008; Lampe, Ellison, & Steinfield, 2006; Saleh, Jani, Marzouqi, Khajeh, & Rajan, 2011; Sheldon, 2008). Ellison, Steinfield, and Lampe (2007) found that people also report that they use Facebook to maintain or get closer to people with some offline connection (dorm, classmates). In other words, there was an offline-to-online direction in the movement of these latent ties to crystalize into weak ties. The directionality of these relationships in Ellison et al.'s (2007) study is similar to what has been found in other Facebook studies where offline relationships tend to lead to Facebook relationships, rather than the other way around (Lampe et al., 2006; Ross et al., 2009).

The study also found that less intense Facebook users with lower life satisfaction and self-esteem had lower bridging social capital than individuals with lower life satisfaction who used Facebook more. However, this relationship does not hold true for users with higher life satisfaction and self-esteem. These results along with others support the “poor get richer” hypothesis, or the potential benefits of Facebook use in expanding social capital/support for groups that tend to have lower levels of self-esteem and life satisfaction (Ellison, Steinfield, & Lampe, 2007; Bessiere et al., 2008; Burke, Kraut, & Marlow, 2011; McKenna & Bargh, 2000; Valkenburg & Peter, 2005; Zywica & Danowski, 2008). Grieve et al. (2013) also found that a construct termed “Facebook connectedness,” distinct from “offline social connectedness,” was associated with higher levels of life satisfaction and lower levels of depression and anxiety.

Many studies look at social activities on social media as monolithic, but there are actually several kinds of activities that may have different psychological and relational implications. For example, directed communication with individual friends such as sending messages, writing wall

posts, chatting, “liking,” and commenting on others’ status has the potential to help bonding and bridging capital (Burke et al., 2010; Burke, Kraut, & Marlow, 2011). Additionally, receiving messages, but not sending them, relates to increases in bridging social capital (Burke et al., 2010; Burke, Kraut, & Marlow, 2011). Passive consumption of social news such as reading others’ status updates and broadcasting, writing for others’ consumption, and updating one’s own profile is less likely to be specifically relationship-building (Burke, Kraut, & Marlow, 2011). Although passive consumption of friends’ Facebook content does not help people with higher than average social skills, it is associated with being helpful for those who are uncomfortable communicating in person (Burke, Kraut, & Marlow, 2011). Again, this finding supports the “poor get richer” hypothesis (Ellison, Steinfield, & Lampe, 2007).

Ellison et al. (2011) also found that different types of Facebook connection strategies, initiating, information-seeking, or maintaining, are engaged in at different rates and have various social capital implications. Neither, initiating, the least common, nor maintaining, the most common, were associated with bridging or bonding social capital, whereas information-seeking, the second most common, was associated with both bridging and bonding social capital (Ellison et al., 2011). Ellison et al. (2011) explain that initiating behavior does not relate to either type of social capital because it does not “exploit one of the true benefits of [Social Networking sites], learning information about latent ties...and that using Facebook to connect with strangers is not the norm on the site, and thus users may be less receptive to these advances” (p. 15).

Information-seeking behavior, on the other hand, clearly does exploit this benefit, helping to turn latent ties into weak or even strong ties, thus enhancing both types of social capital (Ellison et al., 2011). Ellison et al. (2011) also explain that using maintaining strategies to connect with close friends does not relate to perceptions of social capital because often there are several other

channels of communication already being utilized.

Other studies have shown more detrimental effects of Facebook, or the internet in general, such as declines in life-satisfaction, self-esteem, and subjective well-being (Kross et al., 2013). This decline was not moderated by the size of people's Facebook networks, their perceived supportiveness, motivation for using Facebook, gender, loneliness, self-esteem, or depression. A more recent study found that Facebook usage was only associated with depression if the user also experienced envy while viewing content on Facebook (Tandoc, Ferrucci, & Duffy, 2015). Another study found that greater use of Facebook was both associated with higher levels of connection and disconnection, however, use of Facebook, itself, did not reduce feelings of disconnection or more pervasive feelings of loneliness and social disconnection (Sheldon, Abad, & Hinsch, 2011).

A widely cited study by Kraut et al. in 1998 looked at the social and psychological effects of the internet as it began to become more a part of the daily lives of Americans. They found that greater use of the internet was associated with declines in people's communication with family members living in the household as well as declines in the size of their social circle, and increased levels in depression and loneliness. Kraut et al. termed this phenomenon the "internet paradox" because the internet, a social technology used for communication and other forms of interaction, should theoretically result in pro-social outcomes, but in practice was found to be associated with declines in social involvement and psychological well-being. Kraut et al. theorized this paradox could be due to the fact that the presence of the internet causes people to substitute poorer quality internet relationships with weak ties for better quality and stronger tie in-person relationships. However, a much less publicized follow-up study conducted by Kraut et al. in 2002 using the same sample from 1998 in addition to new participants, indicated that the

depression effect was not reliable and that internet users are not, in fact, unusually maladjusted (Kraut et al., 2002). In the more recent study, Kraut et al. found differences in the effects of internet use on social and psychological outcomes depending on extraversion/introversion and current level of social support. Their results fell in line with the “rich get richer” and “poor get poorer” model, where greater internet use predicted better outcomes for extraverts and those with more social support but worse outcomes for introverts and those with less support. Despite individual differences, however, the results suggest that the “internet may have become a more hospitable place over time” (Kraut et al., 2002, p. 23).

There is another debate in the literature and amongst popular opinion if online social networking profiles present idealized versions of the self (the idealized virtual-identity hypotheses) or that these profiles are rather extended presentations of the self (the extended real life hypothesis). Mounting evidence is supporting the extended real-life hypothesis, where profiles are found to be relatively accurate representations of offline identities with little indication of self-idealization (Back et al., 2010; Waggoner, Smith, & Collins, 2009; Pauker et al., 2009). Furthermore, Back et al. (2010) found profile accuracy was strongest for people scoring high on extraversion and openness measures and lowest for those scoring high on a neuroticism measure, indicating that the degree of profile accuracy varies based on personality characteristics. In addition to individual online profiles, there is also evidence that internet groups follow similar dynamics and principles as “real-life” groups (McKenna & Bargh, 1998). Because this evidence suggests that social media users’ profiles tend to be accurate presentations of their offline identities and that online behavior might have an effect on offline behavior and well-being, research on social media has both online and offline implications.

The Internet and Social Networking Sites for Marginalized Groups

There is ample support for the internet and social networking sites as potential counterspaces for marginalized groups. One study suggests that people who are members of a minority group, such as members of the LGBTQ community, are more likely to use the internet and social networking sites to access social connection and information (DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013). Another study found that racial ethnic minorities, African American, Latino, and Asian American college students create online content more frequently than white students and placed importance participating in online communities that allowed them to identify and connect with others who shared similar interests and values (Correa & Jeong, 2011). Virtual groups offer another platform where people join together online based around interest (McKenna & Bargh, 1998). LGBTQ friendships are often sought online because individuals are isolated and are not out or feel too shy to approach other individuals in person (DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013). The internet can also offer LGBTQ people support during their coming out process (Mustanski, Lyons, & Garcia, 2011).

Individuals might seek an online community to feel a sense of belonging, and to access information about navigating life with this identity, as well as explore what it is like to “try out” this identity in a relatively safe way online. Lonely people, in general, who are likely to be more socially inhibited, anxious, self-conscious, sensitive to rejection, and have poor social skills and difficulty making friends, prefer the internet to interact with others because they have more control over the interaction (Morahan-Martin & Schumacher, 2003). Furthermore, meeting someone online makes an individual more likely to approach that person offline (DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013). For many LGBTQ youth, the internet is used to compensate for perceived limitations in resources and relationships offline (DeHaan, Kuper,

Magee, Bigelow, & Mustanski, 2013). In fact, many LGBTQ youth report the internet would be unnecessary if trusted sexual and general health resources were available, but they used online resources because offline sources were unavailable or had high levels of stigma associated with accessing them (DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013).

The internet has been described as an “identity workshop” (Turkle, 1995) because it allows people to explore their identity in new ways, that are perhaps more risky or more stigmatizing in the offline world. For sexual minorities, this exploration could take the form of sexual experimentation as the internet offers a relatively safe and anonymous space that lowers inhibition (Crowson & Goulding, 2013). Anonymity is key as it allows for a safe way to begin experimenting with disclosure to one’s own self and others (Crowson & Goulding, 2013). The anonymous aspect of the internet makes it easier to self-disclose online and some people, particularly those who are lonely, find the anonymous aspect liberating (DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013; Morahan-Martin & Schumacher, 2003). Finally, the internet and social media sites offer an escape for users in the ability to live beyond the everyday self. For LGBTQ youth, this form of social escapism can be an opportunity to temporarily live free from heterocentric norms (Crowson & Goulding, 2013).

Moreno et al. (2011) have suggested that social networking sites might be a good way to identify college students at risk for depression. Specifically, these sites can be used as screening tools for family members or university staff to identify risk for suicidality. It is not the number of Facebook friends, but involvement on Facebook that affects the probability of a student disclosing symptoms of depression (Moreno et al., 2011). Therefore, for someone who does not have a large social circle, Facebook could be a prime venue to access help or support (Burke, Kraut, & Marlow, 2011; Ellison et al., 2007; Ellison et al., 2011; Ellison et al., 2014; Goodman

& Mueller, 2009; Moreno et al., 2011; Steinfield et al., 2008; Youn et al., 2013).

Although there are many draws to the internet for sexual and other invisible minorities, there are potential negative consequences of use for sexual minorities that might extend to other types of invisible minorities as well. Some of these negatives for sexual minorities include overexposure, openness to homophobic attacks, some sexual predation, an emphasis on sexual content, difficulty finding others of similar age, perceived sense that information exchanged is unreliable, susceptibility to internet addiction, and online-mood modification (Crowson & Goulding, 2013; DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013; Mustanski, Lyons, & Garcia, 2011). Furthermore, LGBTQ youth who disclosed their minority status online report decreased participation in their offline community and support system, social isolation and depression, and increased number of sexual partners (DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013). Additionally, many queer youth still found offline relationships more meaningful because of the interpersonal connection made possible by nonverbal cues and inflection in voice (DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013). There is also a stigma in the LGBTQ community, resulting in ambivalence about meeting sexual partners online (Mustanski, Lyons, & Garcia, 2011). Despite these negatives, many gay men report internet use as having an overall positive effect on their identity formation and felt encouraged to disclose their sexuality offline as a result of their online use (Crowson & Goulding, 2013).

Summary

Extensive literature has shown how visible minority groups continue to face increased stress due to discrimination and oppression. Additionally, research has shown that visible minority groups utilize a variety of strategies, including creating connections with similar others to survive such oppression and even more, to thrive in alternatively structured communities.

Some research has focused on the dynamics of discrimination and oppression faced by invisible minority groups, as well as strategies of resilience, but not as extensively as for visible minority groups. Furthermore, little research has looked at the collective experience of a variety of invisible minority groups.

While social connection and support might be especially important for stigmatized minority groups, research shows that such social exchange is crucial for the health and well-being of all people. The internet and social networking sites such as Facebook have been the focus of new research looking at if and how virtual spaces might facilitate relationship building to provide connection and support similar to offline relationships. This internet and social media research, still in its infancy, has shown varied results, with some findings supporting the idea of virtual space as connecting and healthy for users, others indicating use makes people more isolated and less connected, and still others suggesting that it depends on characteristics of the users.

Some research has shown promising results of the connecting and supportive potential of the internet and social media for minority groups, predominantly members of the LGBTQT community. This research suggests that unique qualities of social networking sites such as anonymity, privacy, opportunities for experimentation, and access to information and resources difficult to access offline, might make such virtual spaces more hospitable to stigmatized individuals, especially those who are not out in their community. Additionally, this study looks at how factors such as outness, self-esteem, depression, and anxiety might moderate the relationship between Facebook use with similar others and satisfaction with social support. It is important to note that general social support and general use of Facebook will be controlled for in this study in order to rule out variance related to how well individuals successfully access

support across environments, offline and online, and variance related to overall Facebook use, rather than Facebook use specifically with similar others. This dissertation aims to expand upon existing research on the social support implications of Facebook use for majority and minority groups and look at invisible minority groups in particular. Additionally, this dissertation explores various user factors that might shape social support implications of Facebook use.

III. Method

Design

This study was a correlational, descriptive study that used multiple regression analyses to explore the relationship between the extent of Facebook use to connect with similar others (predictor variable) and satisfaction with social support (outcome/criterion variable) for a variety of invisible minority groups. Because the study reflected an effort to evaluate whether Facebook use related to higher levels of perceived social support above and beyond general social support obtained online and offline, general social support was controlled for when evaluating study hypotheses related to satisfaction with social support. Additionally, general Facebook use was controlled for when evaluating study hypotheses related to Facebook use with similar others. The study also looked at how type of strategies implemented on Facebook to connect with similar others related to bridging versus bonding social capital. Finally, the study examined how factors such as outness, self-esteem, depression, and anxiety may have moderated the relationship between Facebook use and perceived social support.

Although other social network platforms have gained popularity in the last few years, a Pew Research Center's report based on data collected in September of 2014 shows that Facebook is still the most popular social media site with 71% of all online adults using Facebook (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). While sites such as Twitter, Instagram, LinkedIn, and Pinterest show more rapid growth in new users, Facebook is the site where frequency of engagement from existing users continues to grow (Duggan et al., 2015). Overall, the report demonstrates that Facebook remains a "home-base" for users of social media. These findings support the selection of Facebook in this study as an ideal site to examine a wide range of users.

Participants and Sample Characteristics

The study aimed to capture as many types of invisible minority identity experiences as possible. There are many identities and life experiences that might classify one as possessing an invisible minority status, but the focus of this study was the following: following a non-dominant religious belief (as defined by those that fall outside of Christian affiliated religions or sects including atheists and agnostics); possessing an invisible disability, mental illness, or chronic illness or condition such as epilepsy or HIV/AIDS; being infertile, lesbian, gay, bisexual, queer, asexual, non-heterosexual identified, transgender, gender-nonconforming/genderqueer, a person of color who can pass as white, or from a lower socioeconomic or working poor background. Certainly some of these identities can be visible, but the study only utilized data from those participants who indicated that they possessed at least one minority identity that was mostly invisible. The study looked at the overall relationship between Facebook use and perceived well-being for invisible minority groups as a whole.

An a priori power analysis was conducted to determine the sample size necessary to obtain adequate power (0.80) with a small expected effect size of 0.05 and to accommodate an alpha value of 0.05 for the hypotheses and 0.01 (from the Bonferroni correction, yielding an alpha value of 0.0083333) for the research questions. The power analysis indicated that at least 238 participants were needed to detect this effect. Therefore, participant recruitment continued until at least 238 participants completed the survey. In total, 242 participants completed the study in its entirety. Participants who discontinued the study before completion or those who did not indicate at least one invisible minority status that was “mostly invisible” (defined as “when a person who is meeting you for the first time would not know just by looking at you that you hold this identity”) were not included in the final analysis.

Of the total 242 participants, the invisible minority statuses most endorsed were religious minorities (55%) and people with mental illness (57.4%). The least number of participants identified being gay (2.5%) and transgender (5%) as their invisible minority statuses. Overall, the sample largely consisted of young/middle adult white, cisgender women, of a variety of sexual orientations and relationship statuses, who were well educated. The average age of participants was 30.1, with an age range of 18 to 67. For a complete breakdown of the demographics of the sample see Tables 1, 2, and 3.

Additionally, descriptive statistics were conducted to determine endorsement of overlapping invisible minority statuses (see Table 2). The two statuses that showed the most overlap of endorsement were those possessing a non-dominant religious belief as well as a mental illness (83 people or 34.30%). There were also a large number of participants who endorsed possessing a non-dominant religious belief and identifying as bisexual (50 people or 20.66%) as well as those who reported possessing a mental illness and identifying as bisexual (47 people or 19.42%). Identities that were related to health status showed some overlap with 28 people or 11.57% of the sample endorsed possessing a chronic illness and invisible disability and 30 people or 12.40 % of the sample endorsed possessing a chronic illness and mental illness. Finally, 34 people or 14.05% of the sample endorsed possessing an invisible disability and mental illness.

Procedure

Overview. The researcher obtained approval from the Institutional Review Board to proceed with the study before going forward with collecting all participant data electronically. As described further below, the researcher posted a link to the Qualtrics study on her own Facebook page as well as shared it with others to recruit participants. When interested

participants clicked on the link they were directed to the study, which was hosted on the Auburn University's Qualtrics page. There, participants were directed to a screen that provided a brief description of the study, serving as an informed consent form (see Appendix A). If they agreed to participate and checked a box indicating they understood and agreed to participate in the study based on the information provided in the information letter, they were directed to the subsequent screen to answer questions to assure that they met the eligibility requirements for participating in the study (see below). If they did not meet the requirements for eligibility, they were thanked and released from the study. If they did meet qualifications for eligibility, they were directed to the subsequent screen to begin answering questions on the survey.

Accessing and Completing the Study

Screening participants. Because the study focused on those invisible minority individuals who use Facebook, the participants were recruited via snowball sampling on Facebook itself (www.Facebook.com). The researcher posted a link to the Qualtrics survey on her own Facebook page as well as shared the link with others by posting it in Facebook groups and messages (see Appendix B).

On a demographic form (see Appendix C) participants indicated all the groups they identified with from a list of the following list of invisible minority statuses: non-dominant religious beliefs (as defined by those that fall outside of Christian affiliated religions or sects including atheists and agnostics), possessing a chronic illness or condition such as epilepsy and HIV/AIDS, possessing an invisible disability, having a mental illness, infertility, lesbian, gay, bisexual, queer, asexual, non-heterosexual identified, transgender, gender-nonconforming/genderqueer, lower socioeconomic background/working poor, and person of color who can pass as white. After making their selection, to confirm that at least one minority

identity was perceived as mostly invisible, participants were asked after each indicated identity: “Is your identity as a member of this group mostly visible or invisible to others?” Participants who did not select that at least one indicated minority identity was mostly invisible were dismissed from the study. In addition to this, participants answered additional demographic questions.

Completion of the study. Participants who qualified for the study and consented to participate proceeded to complete a series of measures which appeared in random order. Prior to beginning the measures, participants were provided with the following directions: “Please note while responding to the below items that ‘invisible minority’ includes mostly invisible as well as completely invisible identities.” Participants were also asked two final titled “Additional Questions” which included, “How important is Facebook to you in being able to connect with individuals who share your same invisible identity(s)?” and “How much have you been able to connect with individuals who share your same invisible identity(s) outside of social media?” These were both answered on a Likert scale. At the end of the study, participants were given the opportunity to take part in a raffle to win one of four \$25 Amazon e gift cards. If participants wanted to be involved in the raffle they were required to provide an email address in another survey accessible through a link at the end of the study so they could be contacted and provided the gift card electronically should they win. Participants were notified that their email and contact information would not be linked to the responses they provided in the survey.

Measures

Connection Strategies. The Connection Strategies measure was developed by Ellison et al. (2011) to assess individuals’ connection practices on Facebook, particularly focusing on the extent to which one uses Facebook to meet new people (initiating), learn more about

acquaintances (information-seeking), and strengthen relationships with existing close friends (maintaining). Items on the Connection Strategies measure are derived from items developed by Ellison et al. (2007) in creating the Facebook Intensity Scale. The scale consists of 13 items, five of which measure initiating behavior on Facebook, four that measure information-seeking behavior, and five measure maintaining behavior. In this study, only 12 items were used, omitting one item from the initiating subscale, "I use Facebook to meet new people." Participants indicate their responses on one of two 5-point Likert scales that range from "1, not likely at all" to "5, very likely." Each item corresponds to the indicated number of points from 1-5. The score for each subscale is calculated by adding up the corresponding scores of the items within each subscale. Higher scores indicate higher level of engagement for each subscale. The Cronbach's coefficient alpha for scores on each of the sub-scales of the Connection Strategies scales were found to be .82 for initiating, .76 for information-seeking, .83 for maintaining, and 0.84 for the total scale (Clayton et al., 2013).

For this study, the wording of the prompt for each subscale was revised to measure participants' engagement in Facebook use with similar others, rather than engagement with members of the general Michigan State Campus community (as was stated in the initial use of the scale in the study conducted by Ellison et al., 2007). As an example, the prompt for the first scale, the Initiating subscale, was changed from "Imagine an MSU student you've never met in real life or had a face-to-face conversation with. How likely are you to do the following?" to "Think of a person who you have never met in real life or had a face-to-face conversation with that you suspect or know has a similar invisible minority identity(s) as you. How likely are you to do the following?" Additionally, in testing Hypotheses 1 and 2 as well as Research Questions 1, 2, and 3 of the study, only the total score of the sum of all subscales were used in analysis to

get an understanding of the extent of participants' Facebook connection usage with similar others overall. In testing Research Questions 4, 5, and 6, the mean score for each subtest was examined and compared individually as conducted in Ellison et al. (2011) and Clayton et al. (2013).

The Social Support Questionnaire. The Social Support Questionnaire (SSQ) is a 27 item self-report questionnaire developed by Sarason et al. (1983) through factor analysis to measure functional aspects of social networks. Factor analysis showed the scale measured two distinct constructs (Sarason et al., 1983), number of supporters and support satisfaction. This study only focused on one of the constructs, satisfaction with social support. Additionally, this study omitted the last item of the questionnaire, "How satisfied are you with the support you get from others in the form of helping you feel better when you are very irritable, ready to get angry at almost anything?" The SSQ scale has an alpha of .94 and a four-week test-retest reliability score of .83 (Sarason et al., 1983). The Satisfaction scale demonstrates strong discriminant validity as it is negatively correlated to depression, anxiety, and neuroticism (Sarason et al., 1983). Additionally, the SSQ has not been found to be associated with a social desirability measure (Sarason et al., 1983).

The measure asks respondents to first indicate people in their life who provide support in the "manner described" and then to "circle how satisfied you are with the overall support you have" for the given item on a 6-point Likert scale from "6, very satisfied" to "1, very dissatisfied." The overall satisfaction score is calculated by taking the mean of all 27 satisfaction scores. Higher scores indicate greater satisfaction with social support.

As already stated, this study only assessed the second part for each item because satisfaction with social support was the construct of interest. Therefore, the instructions were changed to "The following questions ask about people in your life who provide you with help or

support. For each statement, think of a person or people in your life that might provide you with the indicated form of support. It is okay if you cannot think of anyone or think of many people. To report your answer for each item, circle how satisfied you are with the overall support you have, whether it is from one person, many, or nobody. Please answer all questions as best you can.” Additionally, a prompt was added to each item to clarify the meaning of the “how satisfied?” question for participants. For example, item one asks, “Think of the person or people you can really count on to listen to when you need to talk” with the follow-up question “how satisfied?” was changed to simply, “how satisfied are you with the support you get from others in the form of listening to you when you need to talk?” Finally, item 15, “Think of a person or people who will comfort you when you need it by holding you in their arms” was changed to “Think of a person or people who will comfort you when you need it by holding you in their arms or sending a caring message,” in order to account for sources of support from online or long-distance relationships as well as relationships to others close in proximity.

Nebraska Outness Scale. The Nebraska Outness Scale (NOS) was developed by Meidlinger and Hope (2014) to measure both the disclosure and concealment aspects of outness for sexual minorities. Two subscales make up the measure, a 5-item measure of concealment (NOS-C) and a 5-item measure of disclosure (NOS-D). Participants respond to each item on a 11-point Likert-type scale which on the NOS-C ranges from “0, Never avoid” to “10, Always avoid” and on the NOS-D scale, from “0, 0% or none” to “11, 100% or all.” The total score for each subscale is the mean of all items and higher scores on the NOS-C indicate greater concealment and higher scores on the NOS-D indicate greater disclosure. A total score for the NOS is calculated by reversing the NOS-C mean score averaged with the mean NOS-D, and higher scores indicate greater outness.

Overall, the NOS and subscales demonstrate solid internal reliability, discriminant, convergent, and predictive validity (Meidlinger, & Hope, 2014). Meidlinger and Hope (2014) developed items through reviewing relevant literature and data from the Outness Inventory, another scale that measures outness (Meidlinger, & Hope, 2014). Meidlinger and Hope's analysis revealed that concealment and disclosure are separate constructs and concealment is more likely related to minority stress processes for LGB individuals than disclosure (Meidlinger, & Hope, 2014). Strong convergent validity was found with correlations with the Outness Inventory (Mohr & Fassinger, 2000) as well as the Single Item Outness measure which consists of one face-valid item that asks participants to rate how out they are from 0% to 100%. Internal reliability was also strong with an alpha of .89 for the full scale NOS (ranging from .87-.92 across genders and sexual orientations), .80 for the NOS-C, and .82 for the NOS-D (Meidlinger, & Hope, 2014).

For the purposes of this study, the concept of outness for sexual minorities measured by the NOS was expanded to include outness for all invisible minority groups. The prompt for the items assessing disclosure was changed from "What percent of the people in this group do you think are aware of your sexual orientation (meaning they are aware of whether you consider yourself straight, gay, etc.)?" to "What percent of the people in this group do you think are aware of your invisible minority identity(s)?" The prompt for items assessing concealment was changed from "How often do you avoid talking about topics related to or otherwise indicating your sexual orientation (e.g., not talking about your significant other, changing your mannerisms) when interacting with members of these groups?" to "How often do you avoid talking about topics related to or otherwise indicating your invisible minority identity(s) when interacting with members of these groups?" Additionally, a numerical scale from "1, Never," to "11, Always"

was added to the NOS-C subscale to ease participants' ability to rank their responses.

The Rosenberg Self-Esteem Scale. The Rosenberg Self-Esteem scale was developed by Rosenberg in 1965 and includes 10 items that measure global self-worth by looking at positive and negative feelings towards the self. It is one of the most commonly used measures to assess self-esteem (Robins, Hendin, & Trzesniewski, 2001). The measure uses a 4-point Likert scale format from "Strongly disagree" to "Strongly agree." For items 1, 3, 4, 7, and 10, "strongly agree" is 4 points, "agree" is 3 points, "disagree" is 2 points, and "strongly disagree" is 1 point. Items 2,5,6,8, and 9 are reversed scored. The total score is calculated by summing up the scores from each item. Higher scores indicate higher self-esteem. The Rosenberg Self-Esteem scale has a reliability estimate and coefficient alpha of .88 (Robins et al., 2001). The scale has also shown strong convergent validity for men, women, and various ethnic groups (Robins et al., 2001). The Rosenberg Self-Esteem scale has been used in a number of studies investigating the relationships between Facebook use and social capital or social support constructs (Ellison et al., 2007; Ellison et al., 2011; Ellison et al., 2014; Steinfield et al., 2008).

Center for Epidemiologic Studies Depression Scale-Revised. The Center for Epidemiologic Studies Depression Scale-Revised (CESD-R) was, revised by Eaton, et al. (2004) from Radloff's original (1977) version. The CESD-R is a 20 item self-report assessment that measures depressive symptomology. Participants respond to each item by indicating how frequently they have experienced a listed symptom in the past out of one of five options from "0, Not at all or Less than 1 day" to "4, Nearly every day for two weeks." An overall CESD symptom score is calculated by summing up the scores that correspond to each item response. Higher scores indicate higher levels of depression. The scale has a coefficient alpha of .89 (Eaton et al., 2004).

The Penn State Worry Questionnaire. The Penn State Worry Questionnaire (PSWQ) was developed by Meyer et al. (1990) to measure state worry. Fresco et al. (2003) contend the PSWQ is an ideal instrument to measure anxiety and identify generalized anxiety disorder because chronic, excessive and uncontrollable worry is the hallmark of generalized anxiety disorder (GAD) as outlined in the DSM-V (American Psychiatric Association, 2013). The PSWQ consists of 16 items where participants self-report their agreement with each statement on a scale of 1-5 from “1, Not at all typical of me” to “5, very typical of me.” To score the PSWQ, a total score is compiled by adding together each item response that corresponds to a score of 1, 2, 3, 4, or 5, depending on whether the item is phrased negatively or positively. Items 1,3,8,10, and 11 are worded positively and items 2, 4, 5, 6, 7, 9, 12, 13, 14, 15, and 16 are worded negatively. Higher scores indicate higher degrees of worry. Van Rijsoort et al. (1999) noted that in a review of various studies assessing the reliability of the PSWQ, the measure had high internal consistency in non-clinical and clinical populations, Cronbach's alpha of .90 to .95 for nonclinical populations, and 0.86 to 0.93 for clinical populations.

The Internet Social Capital Scales. The Internet Social Capital Scales (ISCS) was developed by Williams (2006) based on the Putnam's (2000) understanding of bridging and bonding social capital. Williams (2006) developed the ISCS due to an absence of a measure examining social capital in the age of the internet (Williams, 2006). The ISCS consist of two subscales, the Bonding Subscale and the Bridging Subscale, which can be each used to assess online or offline social capital by substituting the words “online” or “offline” in all 20 items of the measure. Furthermore, Williams indicated that the measure can “be used for more specific social internet activities” (p. 611) as was conducted in this study where “Facebook” substituted “Online.” As an example, the first item in the Bonding Subscale, “There are several people

online I trust to help solve my problems” was changed to “There are several people on Facebook I trust to help solve my problems.” The offline version of the measure was not used. The item “If I needed an emergency loan of \$500, I know someone on Facebook I can turn to” on the bonding subscale was also changed to “If I needed an emergency loan of \$100, I know someone on Facebook I can turn to.” Participants indicate their response on a 5-point Likert scale from “1, strongly disagree” to “5, strongly agree.” Each ISCS subscale, bridging and bonding, is scored separately. The total score of each subscale is comprised of the sum of the item responses with items 3 and 9 being reversed on the Bonding subscale. Higher scores indicate higher levels of bridging or bonding social capital.

Williams (2006) developed items measuring bridging social capital by examining the following components from Putnam (2000), “(1) outward looking, (2) contact with a broader range of people, (3) a view of oneself as part of a broader group, and (4) diffuse reciprocity with a broader community” (p. 598) and for bonding social capital, “(1) emotional support, (2) access to scarce or limited resources, (3) ability to mobilize solidarity, and (4) out-group antagonism” (p. 601), also from Putnam’s (2000) articulation. The alpha for the full online bridging and bonding scale was .90 (Williams, 2006). Finally, construct validity was established for the online bridging subscale with its positive correlations with “other measures of outward thinking and behaviors, including the extent of contact with people unlike oneself, links to information and assets outside one’s daily routine, and behaviors such as meeting new people or visiting chat rooms” (Williams, 2006, p. 606). Similarly, construct validity was established for the online bonding subscale with its positive correlations with “other measures of online closeness, trust, support, and community, including using the Internet to keep in touch with someone geographically distant, having a strong sense of online community, trusting others online, and

being able to get help online for a personal problem” (Williams, 2006, p. 606).

Inventory of Socially Supportive Behaviors (ISSB) Short Form. The ISSB short form was developed by Barrera (1990) and adapted from the original 40-item inventory (Barrera, 1981), and the ISSB short form measures actual or available social support as opposed to perceived social support. The inventory consists of 19 items where respondents indicate on a 5-point Likert scale, ranging from “1, Not at all” to “5, About every day,” how frequently “other people do these activities for you, to you, or with you” in the past month (Barrera, 1990). A total score is calculated by summing up the scores which correspond to each item. Higher scores indicate higher levels of general social support. The internal consistency of the short form measure has been found to be .84 (Barrera & Baca, 1990). Additionally, the ISSB’s validity has been established by its strong correlation with the Cohesion subscale of the Family Environment Questionnaire and with the Arizona Social Support Interview Schedules (ASSIS).

The ISSB Short Form was used to account for participants’ general social support so it could be controlled in the analysis. General support needed to be controlled for in order to draw inferences about associations between Facebook use with similar others and perceptions of social support over and above general support received. Essentially, because it was hypothesized that Facebook use for invisible minorities would predict satisfaction with social support after controlling for more general levels of social support, the ISSB Short Form was used as a control variable.

Facebook Intensity. The Facebook Intensity (FBI) scale, developed by Ellison et al. (2007), measures Facebook usage in terms of frequency, duration, connection to the site, and integration into users’ daily life. The scale is made up of 6 items where respondents rate how much they endorse a statement based on a 5-point Likert scale from “1, strongly disagree” to “5,

strongly agree” as well as two remaining questions that can be asked in an open-ended format (as in Ellison et al., 2007) or closed-ended format (as in Steinfield et al., 2008). In this study the two final questions, “(7) Approximately how many TOTAL Facebook friends do you have?” and “(8) In the past week, on average, approximately how much time PER DAY have you spent actively using Facebook?”) were asked in the closed-ended format on an ordinal 5-point Likert scale. The total score is calculated by finding the mean of all item scores in the scale.

The FBI has demonstrated strong reliability with a coefficient alpha of .83 (Ellison et al., 2007). Solid construct validity has been established for the FBI (Ellison et al., 2007; Ross et al., 2009). Specifically, Ellison et al. (2007) found that scores on the FBI Scale showed positive correlations with the actual number of Facebook friends and amount of time participants spent on Facebook. Beane (2012) also noted findings from Ellison et al. (2007) and Ross et al. (2007) research that showed that in multiple factor analyses of the FBI scale, all six Likert-scale items load on one factor. As greater use of Facebook to connect with similar others was hypothesized to predict greater satisfaction with social support, the FBI was used to control for intensity of general use of Facebook. This is so results and implications are based on use of Facebook to connect with similar others specifically, rather than overall use.

Statistical Analysis

The following statistical analysis were conducted to test the hypotheses and research questions below:

Hypothesis 1: Greater use of Facebook to connect with similar others will predict higher satisfaction with social support after controlling for level of general social support and intensity of general Facebook use.

A hierarchical regression analysis was conducted to determine if use of Facebook to

connect with similar others would predict satisfaction with social support above and beyond general social support and general Facebook use. Level of general social support and general Facebook use were entered into the first step of the model, thus removing or controlling for variance accounted for by general social support and intensity of general Facebook use. Next, extent of Facebook use to connect with similar others was added into the model to see if it contributed significantly to the variance accounted for in the satisfaction with social support scores.

Hypothesis 2: Degree of outness will moderate the relationship between the extent one uses Facebook to connect with similar others and satisfaction with social support controlling for level of general social support and intensity of general Facebook use. Specifically, it was hypothesized that less outness will be associated with a stronger relationship between extent of Facebook use to connect with similar others and satisfaction with social support.

To determine whether outness moderated the relationship between connection with similar others on Facebook and satisfaction with social support, the interaction of the effects of the predictor variable (connection with similar others) and moderator (outness) was examined after controlling for extraneous variables (general social support and general Facebook use). The main effects of both Facebook use to connect with similar others and outness were entered into the second step of the hierarchical regression model after control variables. Finally, the interaction term between Facebook use to connect with similar others and outness was entered into the third step of the regression model. Although not needed, I planned to use post hoc analyses to understand any significant interaction.

Research Question 1: Will level of self-esteem moderate the relationship between the extent one uses Facebook to connect with similar others and satisfaction with social support controlling

for level of general social support and intensity of general Facebook use?

Research Question 2: Will level of depression moderate the relationship between the extent one uses Facebook to connect with similar others and satisfaction with social support controlling for level of general social support and intensity of general Facebook use?

Research Question 3: Will level of anxiety moderate the relationship between the extent one uses Facebook to connect with similar others and satisfaction with social support controlling for level of general social support and intensity of general Facebook use?

To determine whether self-esteem, depression, or anxiety moderated the effects of connection with similar others on Facebook on satisfaction with social support, hierarchical regression was used and the interaction of the effects of the predictor variable (connection with similar others) and moderators (self-esteem/depression/anxiety) were examined after controlling for extraneous variables (general social support and general Facebook use). Because the research questions were exploratory in nature, the increase in familywise alpha was controlled within the research questions. Specifically, a Bonferroni correction was used. This correction resulted in a new alpha level of 0.0083333 for the statistical analyses used to evaluate the research questions.

Research Question 4: Will engagement in initiating behavior with similar others on Facebook predict/relate to Facebook bridging or bonding social capital after controlling for level of general social support and intensity of general Facebook use?

Research Question 5: Will engagement in information-seeking behavior with similar others on Facebook predict/relate to Facebook bridging or bonding social capital after controlling for level of general social support and intensity of general Facebook use?

Research Question 6: Will engagement in maintaining behavior with similar others on Facebook predict/relate to Facebook bridging or bonding social capital after controlling for level

of general social support and intensity of general Facebook use?

A set of hierarchical regression analyses were conducted to determine if engagement in initiating behavior, information-seeking behavior, or maintaining behavior on Facebook with similar others would predict Facebook bridging or bonding social capital above and beyond total social support and overall Facebook use. Level of general social support and general Facebook use were entered into the first step of the model, thus removing or controlling for variance accounted for by general social support and intensity of general Facebook use. Then, depending on the variable of interest, engagement in initiating, information-seeking, or maintain behavior was added into the model to see if it contributed significantly to the variance accounted for in bridging or bonding social capital scores.

Table 1

Invisible Minority Status Endorsement of Sample

Invisible Minority Identity	Total % of Sample	n
Non-dominant religion	55.0	133
Chronic illness	24.4	59
Invisible disability	24.8	60
Mental illness	57.4	139
Infertile	10.7	26
Lesbian	6.6	16
Gay	2.5	6
Bisexual	30.6	74
Queer	18.6	45
Asexual	7.4	18
Non-heterosexual	14.9	36
Transgender	5.0	12
Gender non-conforming or genderqueer	11.2	27
Lower socioeconomic background or working poor	20.2	49
Person of color who can pass as white	7.9	19

Table 2

Frequency of the Number of Participants With Overlapping Endorsement of Invisible Minority Status

Invisible Minority Identity	Non-dominant religion	Chronic illness	Invisible Disability	Mental Illness	Infertile	Lesbian	Gay	Bisexual	Queer	Asexual	Non-heterosexual	Transgender	Gender non-conforming or genderqueer	Lower socioeconomic background or working	Person of color who can pass as white
Non-dominant religion	-	29	27	83	15	8	4	50	29	11	27	8	21	28	10
Chronic illness		-	28	30	5	2	0	15	8	5	7	3	5	11	5
Invisible Disability			-	34	6	1	0	18	13	8	7	5	8	17	8
Mental Illness				-	11	5	3	47	27	12	23	9	17	32	11
Infertile					-	0	0	8	2	1	3	2	3	7	5
Lesbian						-	2	1	4	1	4	0	0	1	0
Gay							-	1	4	0	2	0	0	1	0

Table 2 Continued

Invisible Minority Identity	Non-dominant religion	Chronic illness	Invisible Disability	Mental Illness	Infertile	Lesbian	Gay	Bisexual	Queer	Asexual	Non-heterosexual	Transgender	Gender non-conforming or genderqueer	Lower socioeconomic background or working poor	Person of color who can pass as white
Bisexual								-	18	7	15	3	9	12	6
Queer									-	5	20	2	12	13	4
Asexual										-	7	1	5	3	2
Non- heterosexual											-	4	8	9	3
Transgender												-	5	3	3
Gender non- conforming or genderqueer													-	8	4
Lower socioeconomic background or working poor														-	5

Table 3

Demographic Characteristics of Sample

Demographic Variable	Total % of Sample	n
Gender Identity		
Woman	71.5	173
Man	10.7	26
Trans woman	1.2	3
Trans man	1.7	4
Bigender	0.8	2
Gender- nonconforming/genderqueer	12.0	29
Other	2.1	5
Race or Ethnic Identification		
American Indian or Native American	2.1	5
Asian, Asian American, or Pacific Islander	3.0	1.2
Black or African American	8.0	3.3
White (non-Hispanic or Latino)	199.0	82.2
Hispanic or Latino	4.0	1.7
Multiracial	16.0	6.6
Other	7.0	2.9

Table 3 Continued

Demographic Variable	Total % of Sample	n
Sexual Orientation		
Heterosexual/straight	33.9	82
Lesbian	7.9	19
Gay	2.9	7
Bisexual	23.1	56
Queer	13.2	32
Asexual	3.3	8
Pansexual	9.5	23
Questioning or unsure	5.0	12
Other	1.2	3
Partner Status		
Single/no-partner	26.4	26.4
One dating partner	24.0	24.0
More than one dating partner	2.5	2.5
Married or long term partner	41.7	41.7
More than one long term partner	1.7	1.7
Divorced	2.1	2.1
Widowed	0.4	0.4
Other	1.2	1.2

Table 3 Continued

Demographic Variable	Total % of Sample	n
Highest Level of Education		
Less than high school diploma	2.5	6
High school diploma	2.5	6
Associate's degree	5.8	14
Some college	25.6	62
Bachelor's degree	32.2	78
Post Bachelor's degree	5.8	14
Graduate/Professional degree	25.6	62

IV. Results

This chapter reports results obtained by completing the above discussed statistical analysis to test hypotheses 1 and 2 as well as research questions 1 through 6.

Descriptives and Testing of Assumptions

Descriptive statistics including means, standard deviations, reliabilities, and intercorrelations among variables were examined for all measures used in this study (see Tables 4, 5, and 6). All measures, with the exception of the Nebraska Outness Scale (NOS) met traditional standards of acceptability for internal consistency.

General support was positively correlated with satisfaction with social support, however, general Facebook use was not related to satisfaction or general support. Correlations between variables of related constructs tended to be significant in the expected direction. For example, Facebook use in general and use to connect to similar others were positively related. Concerns with depression and anxiety were also positively related and both were negatively related to self-esteem. In addition, social support satisfaction showed the expected relationships with these mental health variables including being positively related to self-esteem and negatively related to depression and anxiety; however, social support itself was only significantly related to increased self-esteem. Facebook use in general and use to connect with similar others were both positively correlated to Facebook bridging and bonding social capital. Finally, Facebook engagement strategies such as, initiating, information seeking, and maintaining behaviors, were all positively correlated with use of Facebook to connect with similar others.

Preliminary analyses verified there were no violations of the assumptions of homoscedasticity. A test of normality showed a slightly skewed distribution for some variables, but this skew was not large enough to correct (Kim, 2013). However, preliminary analysis

showed that the assumption of linearity could not be demonstrated. Additional exploratory analysis using transformations of variables also failed to show evidence of an inverse or quadratic relationship. Due to a lack of finding of a relationship other than linear, hypotheses and research questions were tested using the linear relationships.

Connection With Similar Others on Facebook and Satisfaction with Social Support

Hierarchical regression was used to determine if use of Facebook to connect with similar others predicted satisfaction with social support above and beyond total social support and overall Facebook use. Level of general social support and general Facebook use were entered into the first step of the model to control for variance in satisfaction with social support accounted for by general social support and general Facebook use. Then, extent of Facebook use to connect with similar others was added into the model to determine if it contributed significantly to the variance accounted for in the satisfaction with social support scores. Table 7 shows the variables entered at each step of the regression model and the increase in variance explained by the predictor variables added at each step. Results showed that general social support did contribute significantly to the prediction model ($sr = .54, p < .001$). However, connecting with similar others on Facebook did not contribute significantly to the variance ($sr = -.10, p = .069$) above and beyond general social support and general Facebook use. This means that connecting with similar others on Facebook did not add significantly to the prediction model.

Connection With Similar Others on Facebook as a Function of Outness on Satisfaction With Social Support

To determine whether outness moderated the effects of connection with similar others on Facebook on satisfaction with social support, the interaction of the effects of the predictor

variable (connection with similar others) and moderator (outness) were examined after controlling for extraneous variables (general social support and general Facebook use). The main effect of outness was entered into the regression model after the control variables and predictor. Then, the interaction term between Facebook use to connect with similar others and outness was entered into the final step of the regression model. Table 7 shows the variables entered at each step of the regression model and the increase in variance explained by the predictor variables added at each step. The results showed that outness did not account for unique variance in the model ($sr = .09$ $p = .075$) and outness did not moderate the relationship between connection with similar others on Facebook and satisfaction with social support ($sr = -.07$, $p = .205$) after controlling for general level of social support and general level of Facebook use. Post hoc analyses were not conducted due to the lack of significant interaction.

Connection With Similar Others on Facebook as a Function of Self-Esteem on Satisfaction With Social Support

To determine whether self-esteem moderated the effects of connection with similar others on Facebook on satisfaction with social support, the interaction of the effects of the predictor variable (connection with similar others) and moderator (self-esteem) were examined after controlling for extraneous variables (general social support and general Facebook use). Following the strategy for testing the two hypotheses, the control variables of general social support and general Facebook use were entered into the first step of the model. Next, the main effects of both Facebook use to connect with similar others and self-esteem were entered into the second step of the regression model. Finally, the interaction term between Facebook use to connect with similar others and self-esteem was entered into the third step of the regression model. Table 8 shows the variables entered at each step of the regression model and the increase

in variance explained by the predictor variables added at each step. The results showed that self-esteem did account for unique variance in the model ($sr = .30, p < .001$), but self-esteem did not moderate the relationship between connection with similar others on Facebook and satisfaction with social support ($sr = .05, p = .284$) after controlling for general level of social support and general level of Facebook use. Post hoc analyses were not conducted due to the lack of significant interaction.

Connection With Similar Others on Facebook as a Function of Depression on Satisfaction With Social Support

To determine whether depression moderated the effects of connection with similar others on Facebook on satisfaction with social support, the interaction of the effects of the predictor variable (connection with similar others) and moderator (depression) were examined after controlling for extraneous variables (general social support and general Facebook use). Again, the control variables of general social support and general Facebook use were entered into the model. Next, the main effects of both Facebook use to connect with similar others and depression were entered into the second step of the regression model. Finally, the interaction term between Facebook use to connect with similar others and depression was entered into the third step of the regression model. Table 9 shows the variables entered at each step of the regression model and the increase in variance explained by the predictor variables added at each step. The results showed that depression did account for unique variance in the model ($sr = -.33, p < .001$), but depression did not moderate the relationship between connection with similar others on Facebook and satisfaction with social support ($sr = -.00, p = .963$) after controlling for general level of social support and general level of Facebook use. Post hoc analyses were not conducted due to the lack of significant interaction.

Connection With Similar Others on Facebook as a Function of Anxiety on Satisfaction With Social Support

To determine whether anxiety moderated the effects of connection with similar others on Facebook on satisfaction with social support, the interaction of the effects of the predictor variable (connection with similar others) and moderator (anxiety) were examined after controlling for extraneous variables (general social support and general Facebook use). After entering the control variables of general social support and general Facebook into the first step of the model, the main effects of both Facebook use to connect with similar others and anxiety were entered into the second step of the regression model. Finally, the interaction term between Facebook use to connect with similar others and anxiety was entered into the third step of the regression model. Table 10 shows the variables entered at each step of the regression model and the increase in variance explained by the predictor variables added at each step. The results showed that anxiety did account for unique variance in the model ($sr = -.23, p < .001$), but anxiety did not moderate the relationship between connection with similar others on Facebook and satisfaction with social support ($sr = .03, p = .534$) after controlling for general level of social support and general level of Facebook use. Post hoc analyses were not conducted due to the lack of significant interaction.

Engagement in Initiating Behavior With Similar Others on Facebook and Facebook Bridging and Bonding Social Capital

A set of hierarchical regression analyses were conducted to determine if engagement- of initiating behavior on Facebook with similar others would predict Facebook bridging or bonding social capital above and beyond total social support and overall Facebook use. As was true with the previous analyses, level of general social support and general Facebook use were entered into

the first step of the models, thus removing or controlling for variance accounted for by general social support and intensity of general Facebook use. Next, extent of initiating behavior on Facebook with similar others was added into the model to see if it contributed significantly to the variance accounted for in the Facebook bridging or bonding capital scores. Table 11 shows the variables entered at each step of the regression model predicting bridging social capital and the increase in variance explained by the predictor variables added at each step. The results showed that engagement in initiating behavior with similar others on Facebook did contribute significantly to the variance in Facebook bridging social capital ($sr = .20, p < .001$), above and beyond general social support and general Facebook use. This means that engagement in initiating behavior with similar others on Facebook did add significantly to the prediction model and so related to social capital independently of overall Facebook use and general social support. Table 12 shows the variables entered at each step of the regression model predicting bonding social capital and the increase in variance explained by the predictor variables added at each step. The results showed that engagement in initiating behavior with similar others on Facebook did not contribute significantly to the variance in Facebook bonding social capital ($sr = .06, p = .316$), above and beyond general social support and general Facebook use. This means that engagement in initiating behavior with similar others on Facebook did not add significantly to the prediction model and so does not predict bonding social capital.

Engagement in Information-Seeking Behavior With Similar Others on Facebook and Facebook Bridging and Bonding Social Capital

A set of hierarchical regression analyses were conducted to determine if engagement in information-seeking behavior on Facebook with similar others would predict Facebook bridging or bonding social capital above and beyond total social support and overall Facebook use. Again,

level of general social support and general Facebook use were entered into the first step of the model to control for variance accounted for by general social support and intensity of general Facebook use. Next, extent of information-seeking behavior on Facebook with similar others was added into the model to see if it contributed significantly to the variance accounted for in the Facebook bridging capital scores. Table 13 shows the variables entered at each step of the regression model and the increase in variance explained by the predictor variables added at each step. The results showed that engagement in information-seeking behavior with similar others on Facebook did contribute significantly to the variance in Facebook bridging social capital ($sr = .14, p = .007$), above and beyond general social support and general Facebook use. This means that engagement in information-seeking behavior with similar others on Facebook did add significantly to the prediction model and so does predict bridging social capital. Table 14 shows the variables entered at each step of the regression model predicting bonding social capital and the increase in variance explained by the predictor variables added at each step. The results showed that engagement in information-seeking behavior with similar others on Facebook did not contribute significantly to the variance in Facebook bonding social capital ($sr = .08, p = .171$), above and beyond general social support and general Facebook use. This means that engagement in information-seeking behavior with similar others on Facebook did not add significantly to the prediction model and so does not predict bonding social capital.

Engagement in Maintaining Behavior With Similar Others on Facebook and Facebook Bridging and Bonding Social Capital

A set of hierarchical regression analyses were conducted to determine if engagement of maintaining behavior on Facebook with similar others would predict Facebook bridging or bonding social capital above and beyond total social support and overall Facebook use. Like in

other analyses described above, level of general social support and general Facebook were controlled. Next, extent of maintaining behavior on Facebook with similar others was added into the model to see if it contributed significantly to the variance accounted for in the Facebook bridging capital scores. Table 15 shows the variables entered at each step of the regression model and the increase in variance explained by the predictor variables added at each step. The results showed that engagement in maintaining behavior with similar others on Facebook did not contribute significantly to the variance Facebook in bridging social capital ($sr = .00, p = .947$), above and beyond general social support and general Facebook use. This means that engagement in maintaining behavior with similar others on Facebook did not add significantly to the prediction model and so uniquely relate to bridging social capital. Table 16 shows the variables entered at each step of the regression model predicting bonding social capital and the increase in variance explained by the predictor variables added at each step. The results showed that engagement in maintaining behavior with similar others on Facebook did not contribute significantly to the variance in Facebook bonding social capital ($sr = .15, p = .010$) above and beyond general social support and general Facebook use, using the adjusted cutoff (however, it should be noted that it met traditional cutoffs for significance). This means that engagement in maintaining behavior with similar others on Facebook did not add significantly to the prediction model and so does not predict bonding social capital.

Additional Questions

Participants were also asked two additional questions regarding their use online and offline efforts to connect with similar others. Participants' responses for these additional questions were analyzed using descriptive statistics (see Table 17). For the first question, "How important is Facebook to you in being able to connect with individuals who share at least one of

your invisible minority identity(s)?”, results indicated a mean response of 3.00 with a standard deviation of 1.47, where an endorsement of 2 indicates “Important,” 3 indicates “moderately important,” and 4 indicates “Slightly important.” For the second question, “How much have you been able to connect with individuals who share at least one of your invisible identity(s) outside of social media?”, the mean response was a 3.02 and a standard deviation of 1.35, where 2 indicates a response of “Frequently”, 3 indicates “Occasionally,” and 4 of “Frequently.”

Additional analysis of the correlation between these two self-report items and other primary variables of interest was conducted (see Table 17). Both additional questions were scored so that lower scores indicated greater importance on Facebook use to similar others (AQ1) or greater frequency in ability to connect with similar others outside of social media (AQ2). Therefore, many relationships showed an expected negative correlation.

For example, AQ1 was negatively correlated with Facebook use with similar others, suggesting that there is a positive relationship between importance placed on using Facebook to connect with similar others and engagement with that behavior. There was also a negative correlation for both AQ1 and AQ2 with general Facebook use and Facebook bridging and bonding social capital. This indicates that general Facebook use and bridging and bonding social capital relate positively to importance placed on connecting with similar others on Facebook and frequency of engagement with similar others beyond social media. Finally, there was a negative relationship between AQ2 and outness, suggesting that there is a positive relationship between outness and frequency of engagement with similar others outside of social media.

Table 4

Descriptive Statistics

Measure	Mean	SD
FBCON	42.93	8.04
SSQ	4.54	1.03
FBI	3.74	0.70
ISSB	47.81	12.64
OUT	5.58	1.83
SLFSTM	26.75	5.04
DEP	24.46	17.15
ANX	58.05	15.34
FB INT	2.82	0.98
FB INFSK	3.21	0.97
FB MNTNG	4.70	0.56
FB BRDGNG	36.76	8.19
FB BDNG	35.29	8.17

Note: FBCON = Facebook connection with similar others; SSQ = satisfaction with social support; FBI = general Facebook use; ISSB = general social support; OUT=level of outness; SLFSTM= level of self-esteem; DEP = level of depression; ANX = level of anxiety; FB INT = initiating behavior with similar others on Facebook; FB INFOSK = information-seeking behavior with similar others on Facebook; FB MTNG = maintaining behavior on Facebook with similar others; FB BRDGNG = Facebook bridging social capital; FB BNDING = Facebook bonding social capital.

Table 5

Reliability for Scales in Current Study Compared to Established Reliability

Measure	Current Sample	Established Reliability*****
FBCON	.86	.84*
FB INT	.79	.82*
FB INFOSK	.84	.76*
FB MNTNG	.88	.83*
SSQ	.97	.94**
OUT	.51	.87-.92***
SLFSTM	.80	.88
DEP	.94	.89
ANX	.95	.86-.95
FB BNDING	.87	.90****
FB BRDGING	.89	.90****
FBI	.80	.83
ISSB	.87	.84

Note: All measures in this study showed acceptable reliability with the exception of the OUT scale. FBCON = Facebook connection with similar others; FB INT = initiating behavior with similar others on Facebook; FB INFOSK = information-seeking behavior with similar others on Facebook; FB MTNG = maintain behavior on Facebook with similar others; SSQ = satisfaction with social support; OUT=level of outness; SLFSTM= level of self-esteem; DEP = level of depression; ANX = level of anxiety; FB BNDING = Facebook bonding social capital; FB Bridging = Facebook bridging social capital; FBI = general Facebook use; ISSB = general social support. The wording of the prompt for each subscale was revised to measure participants' engagement in Facebook use with similar others, rather than engagement with members of the general Michigan State Campus community as was used in the initial scale.**Measure items and directions were adapted to only assess support satisfaction rather than satisfaction in addition to number of supporters.***The wording of this measure was changed to expand the concept of "outness" for sexual minorities to all invisible minority groups.****The word "online" was substituted for "Facebook." ***** See Barrera & Baca, 1990; Clayton et al., 2013; Eaton et al., 2004; Ellison et al., 2007; Meidlinger, & Hope, 2014; Robins et al., 2001; Sarason et al., 1983; Van Rijsoort et al., 1999; Williams, 2006.

Table 6

Correlation Matrix

Measure	SSQ	FBI	ISSB	OUT	SLFSTM	DEP	ANX	FB INT	FB INFSK	FB MTNG	FB BRDGNG	FB BDNG
FBCON	.09	.36**	.03	-.04	-.07	.10	.12	.85**	.89**	.57**	.37**	.22*
SSQ	-	.06	.55**	.17**	.38**	-.37**	-.21**	-.14*	-.08	.06	.04	.42*
FBI		-	-.05	.00	-.10	.04	.16*	.33**	.30**	.15*	.62**	.29*
ISSB			-	.14*	.15*	-.06	.04	-.04	.03	.12	.04	.38**
OUT				-	.21**	-.19**	-.16*	-.04	.00	-.09	.02	.17*
SLFSTM					-	-.62**	-.51**	-.09	-.08	.05	.02	.20*
DEP						-	.49**	.16*	.06	-.02	.01	-.08

Table 6 Continued

Measure	SSQ	FBI	ISSB	OUT	SLFSTM	DEP	ANX	FB INT	FB INFSK	FB MTNG	FB BRDGNG	FB BDNG
ANX							-	.08	.08	.14*	-.02	-.05
FB INT								-	.62**	.23*	.39**	.14*
FB INFSK									-	.37**	.32**	.18**
FB MNTNG										-	.10	.24**
FB BRDGNG											-	.39**
FB BDNG												-

Descriptive Statistics and Correlation Matrix for Variables Examined in This Study Note. FB CON = Facebook connection with similar others; SSQ = satisfaction with social support; FBI = general Facebook use; ISSB = general social support; OUT = level of outness; SLFSTM = level of self-esteem; DEP = level of depression; ANX = level of anxiety; FB INT = initiating behavior with similar others on Facebook; FB INFSK = information-seeking behavior with similar others on Facebook; FB MTNG = maintaining behavior on Facebook with similar others; FB BRDGNG = Facebook bridging social capital; FB BNDING = Facebook bonding social capital. * $p < .05$; ** $p < .01$; N = 242

Table 7

Hierarchical Regression Analysis for Moderating Effect of Connection With Similar Others on Facebook by Outness, in Predicting Social Support Satisfaction

Predictor	ΔR^2	β	<i>sr</i>	<i>p</i>
Step 1	.30			
FBI		.04	-.04	.499
ISSB		.55	.54	< .001
Step 2	.01			
FBI		.00	.00	.999
ISSB		.55	.59	< .001
FBCON		-.11	-.01	.069
Step 3	.02			
FBI		-.00	-.00	.966
ISSB		.54	.53	< .001
FBCON		-.10	-.09	.082
OUT		.09	.09	.101
Step 4	.01			
FBI		-.01	-.01	.862
ISSB		.54	.53	< .001
FBCON		-.10	-.10	.071
OUT		.10	.10	.075
OUT X FBCON		-.07	-.07	.205

Note: FBI = general Facebook use; ISSB = general social support; FBCON = Facebook connection with similar others; OUT=level of outness. FBCON and OUT were centered.

Table 8

Hierarchical Regression Analysis for Moderating Effect of Connection With Similar Others on Facebook by Self-Esteem in Predicting Social Support Satisfaction

Predictor	ΔR^2	β	<i>sr</i>	<i>p</i>
Step 1	.30			
FBI		-.04	-.04	.499
ISSB		.55	.54	< .001
Step 2	.10			
FBI		.02	.02	.659
ISSB		.51	.50	< .001
SLFSTM		.31	.30	< .001
FBCON		.09	.09	.087
Step 3	.00			
FBI		.02	.02	.658
ISSB		.50	.48	< .001
SLFSTM		.31	.30	< .001
FBCON		.09	.08	.102
SLFSTM X FBCON		.06	.05	.284
Total R ²	.40			

Note: FBI = general Facebook use; ISSB = general social support; SLFSTM=level of self-esteem; FBCON = Facebook connection with similar others. FBCON and SLFSTM were centered.

Table 9

Hierarchical Regression Analysis for Moderating Effect of Connection With Similar Others on Facebook by Depression, in Predicting Social Support Satisfaction

Predictor	ΔR^2	β	<i>sr</i>	<i>p</i>
Step 1	.30			
FBI		-.04	-.04	.499
ISSB		.55	.54	< .001
Step 2	.12			
FBI		.00	.00	.969
ISSB		.53	.53	< .001
DEP		-.33	-.33	< .001
FBCON		.07	.07	.176
Step 3	.00			
FBI		.00	.00	.970
ISSB		.53	.52	< .001
DEP		-.33	-.33	< .001
FBCON		.07	.07	.179
DEP X FBCON		-.00	-.00	.963
Total R ²	.42			

Note: FBI = general Facebook use; ISSB = general social support; DEP=level of depression; FBCON = Facebook connection with similar others. FBCON and DEP were centered.

Table 10

Hierarchical Regression Analysis for Moderating Effect of Connection With Similar Others on Facebook by Anxiety, in Predicting Social Support Satisfaction

Predictor	ΔR^2	β	<i>sr</i>	<i>p</i>
Step 1	.30			
FBI		-.04	-.04	.499
ISSB		.55	.54	< .001
Step 2	.06			
FBI		.03	.03	.579
ISSB		.56	.56	< .001
ANX		-.23	-.22	< .001
FBCON		.09	.08	.109
Step 3	.00			
FBI		.03	.03	.616
ISSB		.56	.56	< .001
ANX		-.23	-.23	< .001
FBCON		.10	.09	.091
ANX X FBCON		.03	.03	.534
Total R ²	.36			

Note: FBI = general Facebook use; ISSB = general social support; ANX=level of anxiety; FBCON = Facebook connection with similar others. FBCON and ANX were centered.

Table 11

Hierarchical Regression Analysis for Initiating Behavior With Similar Others on Facebook in Predicting Facebook Bridging Social Capital

Predictor	ΔR^2	β	<i>sr</i>	<i>p</i>
Step 1	.39			
FBI		.63	.63	< .001
ISSB		.07	.07	.181
Step 2	.04			
FBI		.56	.53	< .001
ISSB		.07	.07	.134
FB INT		.21	.20	< .001
Total R ²	.43			

Note: FBI = general Facebook use; ISSB = general social support; FB INT = initiating behavior on Facebook with similar others.

Table 12

Hierarchical Regression Analysis for Initiating Behavior With Similar Others on Facebook in Predicting Facebook Bonding Social Capital

Predictor	ΔR^2	β	<i>sr</i>	<i>p</i>
Step 1	.24			
FBI		.31	.31	< .001
ISSB		.39	.39	< .001
Step 2	.00			
FBI		.29	.27	< .001
ISSB		.40	.40	< .001
FB INT		.06	.06	.316
Total R ²	.24			

Note: FBI = general Facebook use; ISSB = general social support; FB INT = initiating behavior on Facebook with similar others.

Table 13

Hierarchical Regression Analysis for Information-Seeking Behavior With Similar Others on Facebook in Predicting Facebook Bridging Social Capital

Predictor	ΔR^2	β	<i>sr</i>	<i>p</i>
Step 1	.39			
FBI		.63	.63	< .001
ISSB		.07	.07	.181
Step 2	.02			
FBI		.58	.56	< .001
ISSB		.06	.06	.214
FB INFOSK		.14	.14	.007
Total R ²	.41			

Note: FBI = general Facebook use; ISSB = general social support; FB INFOSK = information-seeking behavior on Facebook with similar others.

Table 14

Hierarchical Regression Analysis for Information-Seeking Behavior With Similar Others on Facebook in Predicting Facebook Bonding Social Capital

Predictor	ΔR^2	β	<i>sr</i>	<i>p</i>
Step 1	.24			
FBI		.31	.31	< .001
ISSB		.39	.39	< .001
Step 2	.01			
FBI		.28	.27	< .001
ISSB		.39	.39	< .001
FB INFOSK		.08	.08	.171
Total R ²	.24			

Note: FBI = general Facebook use; ISSB = general social support; FB INFOSK = information-seeking behavior on Facebook with similar others.

Table 15

*Hierarchical Regression Analysis for Maintaining Behavior With Similar Others on Facebook
in Predicting Facebook Bridging Social Capital*

Predictor	ΔR^2	B	<i>sr</i>	<i>p</i>
Step 1	.39			
FBI		.63	.63	< .001
ISSB		.07	.07	.181
Step 2	.00			
FBI		.63	.62	< .001
ISSB		.07	.07	.118
FB MNTNG		.00	.00	.947
Total R ²	.39			

Note: FBI = general Facebook use; ISSB = general social support; FB MNTNG = maintaining behavior on Facebook with similar others.

Table 16

*Hierarchical Regression Analysis for Maintaining Behavior With Similar Others on Facebook
in Predicting Facebook Bonding Social Capital*

Predictor	ΔR^2	β	<i>sr</i>	<i>p</i>
Step 1	.24			
FBI		.31	.31	< .001
ISSB		.39	.39	< .001
Step 2	.02			
FBI		.28	.28	< .001
ISSB		.38	.37	< .001
FB MNTNG		.15	.15	.010
Total R ²	.25			

Note: Note: FBI = general Facebook use; ISSB = general social support; FB MNTNG = maintaining behavior on Facebook with similar others.

Table 17

Descriptive Statistics of Additional Questions

Question	Mean	SD
AQ1	3.00	1.47
AQ2	3.02	1.35

Note. AQ1= additional question (1), “How important is Facebook to you in being able to connect with individuals who share at least one of your invisible minority identity(s)?”; AQ2= additional question (2), “How much have you been able to connect with individuals who share at least one of your invisible identity(s) outside of social media?”

Table 18

Correlations Between Additional Questions and Other Variables

Variable	AQ1	AQ2
FBCON	-.44**	-.10
FBI	-.47**	-.15*
SSQ	.07	-.19**
ISSB	.03	-.17*
FB BRDGNG	-.53**	-.20**
FB BNDNG	-.30**	-.22**
OUT	-.07	-.19**

Note. AQ1= additional question (1), “How important is Facebook to you in being able to connect with individuals who share at least one of your invisible minority identity(s)?”; AQ2= additional question (2), “How much have you been able to connect with individuals who share at least one of your invisible identity(s) outside of social media?; FBCON = Facebook connection with similar others; FBI = general Facebook use; SSQ = satisfaction with social support; ISSB = general social support; FB BRDGNG = Facebook bridging social capital; FB BNDING = Facebook bonding social capital; OUT=level of outness. * $p < .05$; ** $p < .01$; N =242

V. Discussion

Overview

This chapter unpacks the findings reported in chapter 4. Additionally, this chapter includes limitations of this study and explores implications for practice as well as future directions for research in this area.

Summary of Findings

Connection with similar others on Facebook and satisfaction with social support.

Study results did not support a significant relationship between general Facebook use or connecting with similar others on Facebook and satisfaction with social support above and beyond general social support. However, results suggest that general social support alone does have a significant relationship with satisfaction with social support for invisible minorities. In fact, findings indicated that general social support accounted for 29% of the variance, suggesting that a substantial amount of satisfaction with social support can be explained by general social support. These results imply that for invisible minority individuals, the amount of generalized social support available in their life does indeed relate to how pleased they are with such support. Generalized social support refers to the available support people receive from any individual online or offline, including similar others with the same invisible minority status as well as those without the same invisible minority status.

This finding is promising because it implies that invisible minority individuals might have the capacity to feel supported in a number of ways from people who are similar and different from them, rather than only from people who are like them online. Additionally, this finding suggests that actual social support available does, indeed, become internalized by invisible minority individuals as satisfaction with felt, or perceived, support. Satisfaction with

social support is critical for all people, particularly those subjected to increased minority stress, because it is linked to a number of positive health and well-being outcomes (Cohen & Wills, 1985; Gove & Geerken, 1977).

These results could also suggest that the benefits of Facebook use to connect with similar others is limited to those who are already adept at finding and reaping satisfaction with social support from a variety of sources online and offline (Kraut et al., 2002; Sheldon, 2008; Zywicki & Danowski, 2008). However, the lack of significant relationship between Facebook use to connect with similar others and satisfaction with social support suggests that this is likely not the reason. Instead, this could imply that aspects of the internet and social networking sites that have been shown to make online space more amenable for invisible minorities (Crowson et al., 2013; DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013; Morahan-Martin & Schumacher, 2003), are not actually different enough from offline spaces to propel people to connect who would not otherwise offline.

Moderating factors on the relationship between connection with similar others on Facebook and satisfaction with social support. Due to findings from prior research, it was hypothesized that various trait factors such as outness, self-esteem, depression, and anxiety would affect the relationship between use of Facebook to connect with similar others and satisfaction with social support. More specifically, some past research supports the “rich get richer” hypothesis where those with better social skills and higher levels of self-esteem, extroversion, and life satisfaction and lower levels of depression and anxiety obtain the most increase in social support and social capital in using the internet and social networking sites (Kraut et al., 2002; Sheldon, 2008; Zywicki & Danowski, 2008). Other studies support the “poor get richer” hypothesis, where the largest increase in social capital and social support is seen in

groups that have lower levels of self-esteem and life satisfaction and higher levels of mental health concerns (Bessiere et al., 2008; Burke, Kraut, & Marlow, 2011; Ellison, Steinfield, & Lampe, 2007; McKenna & Bargh, 2000; Valkenburg & Peter, 2005; Zywicki & Danowski, 2008). It is important to note that the present study did not test the overall hypotheses of the “rich get richer” or “poor get richer” related to overall Facebook use. Instead, the focus was specifically related to Facebook use to connect with similar others and the evaluation of overall Facebook use was not the focus of the study.

This study did not show that any of these factors, outness, self-esteem, depression, or anxiety, moderated the relationship between use of Facebook to connect with similar others and satisfaction with social support. Additionally, no significant relationship between outness and satisfaction with social support was found. This finding might be explained by the low reliability coefficient found for the revised measure used in this sample. This finding could also be explained by the myriad costs and benefits of being out. Although greater outness might make people more able to find and connect with similar others, feel more authentic, and spend less cognitive energy on concealing a part of themselves (Frable, Platt, & Hoey, 1998; Goffman, 1963; Meyer, 2007; Pachankis, 2007; Smart & Wegner, 1999, 2000), more outness can also increase vulnerability to discrimination, ostracization, rejection, and hostility (Goffman, 1963; Pachankis, 2007). Additionally, prior research has primarily examined the construct of outness in regards to sexual orientation, while this study used the construct in a broader sense such that there could be differences in the function and implication of outness depending on the identification (the particular invisible minority status). Therefore, the mixed implications of outness fit with the study’s finding that a significant relationship between outness and satisfaction with social support cannot be determined.

Importantly, study findings do suggest a significant relationship between self-esteem, depression, and anxiety with satisfaction with social support. Specifically, high level of self-esteem was positively correlated with satisfaction with social support. Self-esteem accounted for 9% of the variance in satisfaction with social support, suggesting that a modest portion of satisfaction with social support can be explained by one's self-esteem. This finding is congruent with prior research that trust and respect of one's own sense of worth is positively related to the quality and satisfaction of the support one feels from others (Berkman, 2001).

Level of depression and anxiety, however were negatively correlated with satisfaction with social support. Depression accounted for 11% of the variance in satisfaction with social support and anxiety accounted for 5% of the variance, suggesting that a modest portion of satisfaction with social support can also be explained by one's level of depression and anxiety. These findings are also consistent with prior research that suggests that greater affiliation with a group covaries with more positive mental health outcomes, namely lower levels of depression and anxiety, and conversely, less affiliation and support covaries with more negative mental health outcomes (Berkman, 2001; Goffman, 1963; Jetten, Branscombe, Schmitt, & Spears, 2001).

Type of Facebook behavior and Facebook bridging and bonding social capital. It was predicted that there would be a relationship between various types of Facebook behavior with similar others including, initiating, information-seeking, and maintaining behavior, and Facebook bridging or bonding social capital. Results showed that there was a positive correlation between engagement in initiating behavior with similar others on Facebook and bridging social capital. Similarly, results demonstrated that there was a positive correlation between engagement in information-seeking behavior and bridging social capital, which is consistent with prior

research (Ellison et al., 2011). Initiating behavior accounted for 4% of the variance and information-seeking behavior accounted for 2% of the variance, suggesting that a small portion of Facebook bridging social capital can be explained by engagement in initiating and information-seeking behavior with similar others on Facebook. However, findings did not support a significant relationship between initiating or information-seeking behavior and Facebook bonding social capital.

These results can be explained by the fact that bridging social capital is garnered through distant and infrequent contact with others (Granovetter, 1973; Kraut et al., 1998) that is characteristic of both initiating and information-seeking behavior. Initiating behavior involves use of Facebook to meet new people by browsing their profiles, contacting them using Facebook, adding them as a Facebook Friend, or meeting them face-to-face (Ellison et al., 2007), while information-seeking behavior implies engaging in these same behaviors with acquaintances that are already known to learn more about them (Ellison et al., 2007).

These findings differ from Ellison et al. (2011) results that found that information-seeking behavior was the only type of Facebook connection strategy associated with bridging and bonding social capital. The finding that initiating behavior was associated with bridging social capital in this study might be due to the fact that invisible minorities are different than the general sample from the Ellison et al. (2011) study in that they may be more likely to initiate and benefit from contact with strangers who have a minority identity status in common that could serve as a starting point for connection.

Additionally, information-seeking behavior was not associated with bonding social capital in this study as it was in Ellison et al. (2011). This difference could relate to the fact that the sample from the Ellison et al. (2011) study were college students who were geographically

close whereas the sample from this study were older than normatively college aged students living in a variety of geographic locations. It could be that for younger, college students living in close proximity to each other, engaging in information-seeking behavior might relate to bonding social capital because the relationships formed online to people in one's college community can more easily become offline relationships. Additionally, younger college age people might have more space or need to garner bonding social capital, which is more personal and emotional support obtained from closer and more intimate relationships (Wellman & Wortley, 1990), than for their older counterparts who already have such support offline from friends or family.

The study findings did not reveal a significant relationship between maintaining behavior on Facebook with similar others and Facebook bridging or bonding social capital. The finding that maintaining behavior, which includes using Facebook to strengthen ties with existing close friends by browsing their profiles, contacting them using Facebook, adding them as a Facebook friend, or meeting them face-to-face (Ellison et al., 2007) does not relate to bridging capital makes sense given the less intimate nature of bridging social capital. However, it is surprising that a significant relationship between maintaining behavior and bonding social capital was not found because it would seem that the type of intimate and connection-fostering exchanges possible via maintaining behavior would indeed relate to reciprocity, emotional support, and companionship implied in bonding social capital (Wellman & Wortley, 1990). However, this finding could be explained by the limitations of Facebook as an online medium that might not allow for the delivery and receipt of the intimacy suggested in bonding social capital and may raise important implications about the value of connection with similar others, as well as generally supportive others, offline. Additionally, like the lack of relationship between information-seeking behavior and bonding social capital, this lack of relationship could be due to

the average age of participants who might already be receiving the kind of support offered in bonding social capital from friends or family. Also, because general Facebook use showed a significant relationship with bonding social capital, perhaps this kind of generalized use is more important for gains in Facebook bonding social capital than specific Facebook engagement with similar others.

Additional questions. Participants' responses on the additional questions in the survey are consistent with other findings in this investigation. The mean response to the first question, "How important is Facebook to you in being able to connect with individuals who share at least one of your invisible minority identity(s)?" was in the "moderately important" range. This suggests that invisible minorities likely somewhat value using Facebook to connect with similar others, but the benefits and costs of this use is unclear. Similarly, the mean response to the second question, "How much have you been able to connect with individuals who share at least one of your invisible identity(s) outside of social media?" was in the "Occasionally" range. Again, this suggests that many invisible minorities are connecting with similar others at least minimally offline.

Limitations

There are several limitations to acknowledge in this study. Firstly, because this study was correlational, without an experimental manipulation, no causality can be inferred. Therefore, for findings such as initiating and information-seeking behavior that show a positive significant relationship with bridging social capital, we cannot infer that engaging in initiating and information-seeking behavior on Facebook with similar others causes increases in Facebook bridging social capital. It is possible that engaging in initiating and information-seeking with similar others could, in fact, increase one's Facebook bridging social capital, or support that

offers informational support and advice or perspective (Granovetter, 1973; Kraut et al., 1998). Conversely, it is also possible that possessing greater Facebook bridging social capital, makes one more likely to engage in Facebook initiating or information-seeking behaviors with similar others. Therefore, the directionality of this relationship is unknown and could be bidirectional. Similarly, some other, unmeasured, variable such as extroversion or resourcefulness could cause both.

Secondly, many of the measures in this study have been revised, which changes their psychometric properties. Because the research on invisible minority experience is scarce and research on the implications of social media use is new, there were few established measures that met the measurement needs of this study. Therefore, measures such as Connection Strategies (Ellingson et al., 2011), the Social Support Questionnaire, (Sarason et al., 1983), and the Nebraska Outness Scale (Meidlinger & Hope, 2014) were all revised to capture the perspectives of interest in this study. While these measures are psychometrically sound in their original form, it is unclear how these properties change when revised. For example, the majority of measures used in this study showed similar reliability estimates as seen in past research, but the Nebraska Outness Scale showed a lower reliability estimate in this study (see Table 4). The revisions to the Nebraska Outness Scale might have proven more problematic than revisions to other measures in the study because there could be something theoretically unique to the concept of outness for sexual minorities that does not transfer to other diverse invisible minority groups included in this sample. Perhaps outness is more salient for sexual minorities as it can affect life in a more pervasive and global way such as being open about one's partner than for other invisible minority groups where implications might be more minimal.

Thirdly, as discussed in chapter 4, the assumptions of linearity were violated for two

primary variables, connection with similar others on Facebook and satisfaction with social support. Transformation of the data or curvilinear analyses did not resolve or explain the violation of linearity. This violation necessitates caution in interpreting results because it is unclear if there is a genuine lack of relationship or something else atypical about the study results. Additionally, some tests showed a slightly skewed distribution, but still fell within an acceptable range (Kim, 2013), so overall the assumption of normality was largely maintained.

Fourthly, the study's focus on capturing the experience of many types of invisible minority individuals as a whole, overlooks the exploration of between-group differences. The types of invisible minority identities included in this study are extensive including identities that involve facets of oneself that are quite different such as race or ethnicity, sexuality, socioeconomic status, religious orientation, health status, and gender. Not all of these identities were equally represented in the sample. For example, 57.4% of the sample identified as possessing a mental illness and 55% identified as affiliating with a non-dominant religion, while only 5% identified as trans and 2.5% as gay. This could suggest that the findings of the study might not be representative of all invisible minority groups included, but rather have more meaning for groups that are more largely represented in the sample.

Fifthly, the snowball sampling and self-selection method of recruitment might be problematic in creating an unrepresentative sample. Snowball sampling makes it so participants are likely similar in a variety of ways and so characteristics such as personal or professional interests, geographical location, social class, education status, and other factors, might skew the variance in ways outside of the variables of interest. For example, if a significant portion of the sample is located in the Southeastern region of the United States where the study originated, results could be influenced by social, cultural, and political dynamics unique to the region. Thus,

these findings would not be generalizable for other regions. Similarly, because participants self-select to participate in the study, there could be unique characteristics of such individuals that influence results. For example, someone who willingly participates in a study about Facebook use and invisible minority experience, might have a more positive perspective about identifying as an invisible minority and using Facebook than other individuals. Therefore, the results of this study may not be generalizable for all Facebook users who identify as one or more of the invisible minority identities included in this study.

Practice Implications

The chief finding in this study is that invisible minority engagement with initiating and information-seeking behavior on Facebook with similar others relates to Facebook bridging social capital. Facebook bridging social capital refers to the support achieved through distant and infrequent connections to others that often provide informational support, advice, or perspective (Granovetter, 1973; Kraut et al., 1998). Although bridging social capital was not related to level of social support or satisfaction with social support in this study, bridging social capital is important because it allows people to successfully access support in the form of information, resources, and advice. The finding that connection with similar others on Facebook relates to bridging social capital suggests that invisible minority individuals are likely to benefit the most from using Facebook with similar others when they are engaging in initiating or information-seeking behavior with them. These behaviors include meeting new people or learning more about acquaintances by browsing their profiles, contacting them using Facebook, adding them as a Facebook Friend, or cautiously and thoughtfully meeting them face-to-face (Ellison et al., 2007). Cohen and Wills (1985) found that informational support, specifically, is most likely to show buffering effects in alleviating stress. Buffering effects assuage stress by intervening between a

taxing event and the stress reaction by preventing a negative stress appraisal response.

(Lewandowski, Rosenberg, Parks, & Siegel, 2011). Therefore, for invisible minorities, engaging in initiating and information-seeking behavior with the pursuit of obtaining new information, advice, or resources, could be especially helpful after a stressful event.

These findings underscore the importance of type of behavior on Facebook in determining potential benefits of use. Specifically, it appears to be the most fruitful for invisible minorities to use Facebook to establish new relationships or learn more about acquaintances, rather than develop further connection with existing close friends. It could be that gaining more intimate support from close friends is best achieved offline. In addition, the lack of relationship between measures of Facebook use and social support variables (both level of and satisfaction with) indicates that Facebook may not be the most efficient way for an individual to increase their experience of or satisfaction with social support. Therefore, it is recommended to educators, program administrators, psychotherapists, and invisible minorities themselves who wish to enhance the support systems available to invisible minority individuals, to advocate for using Facebook to gain perspective, normalize an experience, or access informational support or advice. However, for more personal and intimate support, such as bonding social capital, in-person mentorship, support groups, or time with supportive family or close friends might be more conducive for achieving this type of support.

Although the scale utilized to measure social capital has a focus on Facebook as the source of the social capital (or “online” in the original Williams (2006) version), the items in the bridging social capital subscale suggest both an increased connection to the internal Facebook world, as well as an increased sense of connection outward to community beyond Facebook. Items that demonstrate this more internal connection are ones like item (8), “I am willing to

spend time to support general Facebook community activities” or item (9), “Interacting with people on Facebook gives me new people to talk to.” And items that focus on increased connection outward are items such as item (1), “Interacting with people on Facebook makes me interested in things that happen outside of my town” or item (5), “Interacting with people on Facebook makes me feel like part of a larger community.” The inclusion of both inwardly-Facebook oriented items as well as the outwardly beyond-Facebook-oriented items that comprise the Facebook bridging capital scale support the notion that this form of social capital is illustrative of a more global measure of one’s connection to a community beyond online life. Therefore, the finding that increased engagement in initiating or information-seeking behavior on Facebook with similar others relates to increased Facebook bridging social capital suggests that using Facebook in a specific way might predict overall increases in social connectedness.

Given these findings, when used in a certain way, Facebook can indeed be considered a “counterspace” in line with Case and Hunter’s (2012) definition of the term: “settings, which promote positive self-concepts among marginalized individuals [e.g., racial and sexual minority individuals, persons with disabilities, etc.] through the challenging of deficit-oriented dominant cultural narratives and representations concerning these individuals” (Case & Hunter, 2012, p. 261). The social benefits associated with invisible minorities’ use of Facebook to initiate connection or seek information with similar others suggests that there could be benefits to one’s self concept as their bridging social capital increases. Additionally, receiving or providing similar others with support, mentoring, and advice, challenges the deficit-oriented dominant cultural narrative that one’s invisible minority status makes a person inept, inadequate, or undesirable to others.

Implications for Future Research

This study explored the relationship between invisible minority use of Facebook to connect with similar others and satisfaction with social support as well as types of behavior on Facebook and bridging and bonding social capital. While this study contributed to our understanding of areas of two budding topics, online social networking and invisible minority experience, there is still a great deal to investigate in these areas. A qualitative study exploring the strategies invisible minorities use to find similar others would provide a deeper understanding of the ways these groups access social support on and offline and how supported they feel by these efforts. This would also provide insight on how invisible minorities understand this social support is helping them to feel more supported or adept at navigating life as a member of a stigmatized minority group.

For developing practice implications, it would be helpful to study the implications of various Facebook behavior in a more comprehensive way. Previous study findings indicate that type of Facebook use matters in predicting bridging or bonding social capital (Ellison et al., 2011) and in this study, only bridging social capital was found to be predicted by certain behaviors on Facebook. As Facebook continues to grow in use and complexity in terms of its interface, so do options for engagement. Future studies might look at the differences and implications amongst a variety of behaviors beyond simply initiating, information-seeking, and maintaining such as direct messaging, posting in specific groups or page, “liking” others’ posts, posting pictures or graphics, or creating an event and inviting friends. Additionally, future studies could also examine the implications of using a variety of social networking sites beyond Facebook that allow for even more types of connection.

This study did not look at the difference between various invisible minority identity

experiences. Given what we know about the differing degrees of stigmatization posed to various invisible minority statuses, future studies would benefit from looking at between group differences amongst invisible minority identities in accessing support on social networking sites. It could be that certain invisible minority identities, such as sexual or religious minorities, benefit more from social engagement online than other invisible minority identities. As an example, some religious minorities may have access to others who are similar through places where they practice religious activities and others who do not practice religious activities may not have access to that benefit. Additionally, it seems that some invisible minority statuses included in the study might feel more attacked or targeted than others such as sexual minorities compared to people with chronic illness. It would be helpful to study how the perception that one's minority status is targeted by dominant society might change the experience of an individual's pursuit of support. Furthermore, people with visible minority identities who also have one or more invisible minority identities likely face unique challenges and experiences in accessing satisfactory social support. For example, non-heterosexual identified people of color who cannot pass as white or who have physical disabilities might have an especially challenging time accessing adequate support as they navigate discrimination due to racism or ableism triggered by visual cues while also facing heterosexism based on their decision to disclose. Thus, it would be beneficial to further investigate the research questions posed in this study for individuals who identify as possessing both an invisible and visible minority status.

Finally, it is critical that future research prioritizes exploration of the experiences and needs of people with invisible minority identities. These experiences are largely understudied compared to the experiences of people with visible minority identities (Quinn & Chaudoir, 2009). In addition to further studies investigating invisible minority experiences accessing social

support online, it would also be useful to study the needs and experiences of invisible minority individuals in a number of other realms including education, work, romantic relationships, and healthcare.

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Appendix A

Information Letter to Enable Informed Consent

You are invited to participate in a research study because you are at least 19 years old, use Facebook, and identify as a person from a group whose minority status is invisible to others. The purpose of this study is to better understand the ways people who are members of these groups use Facebook and how this influences their life and relationships. The study is being conducted by Emily Kerzin, a doctoral student in the Auburn University Department of Special Education, Rehabilitation and Counseling, under the supervision of Annette Kluck, Ph.D., Associate Professor and Training Director in the Auburn University Department of Special Education, Rehabilitation and Counseling.

Your participation in this study is voluntary and you are free to discontinue your participation at any point without penalty. If you decide to participate in this study, you will be asked a series of questions about your behavior, thoughts, and feelings. Some questions may seem similar, but each question is important and it is crucial that you answer each honestly and thoughtfully. There are no correct or incorrect ways to answer a question. If you have difficulty answering a question, select which answer feels the most true to you. The entire study should take approximately 15-20 minutes to complete.

There are minimal risks involved in participation in this study. You may experience slight discomfort while answering personal questions that are sensitive in nature. There are some potential benefits in participating in this study including increased self-awareness, contribution to scientific understanding of an understudied group of people, and an opportunity to take part in a raffle to win one of four \$25 Amazon gift cards. If you would like to be involved in the raffle you must provide an email address at the end of the survey so you can be contacted and provided the gift card electronically should you win. Your email and contact information will not be linked responses provided in the survey.

All data obtained from this study will remain anonymous and you will not be asked to provide your name or any other identifying information (the information for the drawing will be collected in a separate survey so that your email address cannot be linked with your responses). Results and implications from this study will be presented and discussed as a whole, rather than presented in terms of unique responses tied to any identifying information.

If you have any questions about this study, please contact the principle investigator, Emily Kerzin, at ebk0002@auburn.edu. If you have any questions about your rights as a research participant, please contact the Auburn University Office of Human Subjects Research or the Institutional Review Board at hsubjec@auburn.edu or IRBChair@auburn.edu or by phone at (334)- 844-5966.

Thank you for your time and participation with this research. By clicking the link below, you acknowledge that you have read this information and give your consent to participate in this study. Please remember that you may discontinue the study at any point without penalty.

Appendix B

Facebook Post

This text was posted on primary investigator's Facebook wall:

“Are you at least 19 years old, use Facebook, and identify as a member of a group whose minority status is invisible to others (e.g. LGBTQ, chronic disease, infertility, religious minority, lower SES background, etc.)? If so, you are invited to participate in a research study exploring Facebook use among individuals with invisible minority identity(s) and have a chance to win one of four \$25 Amazon e gift cards. This study is being conducted by Emily Kerzin, a doctoral student at Auburn University. Regardless of whether you qualify or participate, please repost this on your own Facebook page. Thank you very much for your time and participation.”

Appendix C

Demographic Form

1. Please select all groups with which you identify from the following:

- Non-dominant religious beliefs (as defined by those that fall outside of Christian affiliated religions or sects including atheists and agnostics)
- Possessing a chronic illness or condition such as epilepsy and HIV/AIDS
- Possessing an invisible disability
- Having a mental illness
- Infertile
- Lesbian
- Gay
- Bisexual
- Queer
- Asexual
- Non-heterosexual identified
- Transgender
- Gender-nonconforming/genderqueer
- Lower socioeconomic background/ working poor
- Person of color who can pass as white

2. Is your identity as a member of this group mostly visible or invisible to others?

Mostly visible	Mostly invisible
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3. What is your gender identity?

- A. Woman
- B. Man
- C. Trans woman (M-F)
- D. Trans man (F-M)
- E. Bigender
- F. Gender-nonconforming/genderqueer
- G. Other

4. What is your racial or ethnic identification?

- A. American Indian or Native American
- B. Asian, Asian American, or Pacific Islander
- C. Black or African American
- D. White (non-Hispanic or Latino)
- E. Hispanic or Latino
- F. Multiracial
- G. Other

5. Which of the following best describes your sexual orientation?

- A. Heterosexual or straight

- B. Lesbian
- C. Gay
- D. Bisexual
- E. Queer
- F. Asexual
- G. Pansexual
- H. Questioning or unsure
- I. Other

6. What is your age _____

7. Partner status

- A. Single-no partner
- B. One dating partner
- C. More than one dating partner
- D. Married or long term partner
- E. More than one long term partner
- F. Divorced
- G. Widowed
- H. Other

8. Highest level of education

- A. Less than high school diploma
- B. High school diploma
- C. Associate's degree
- D. Some college
- E. Bachelor's degree
- F. Post Bachelor's degree
- G. Graduate/Professional degree