DEVELOPMENT AND VALIDATION OF THE PERCEIVED PARENTAL SOCIAL SUPPORT SCALE-LESBIAN GAY (PPSS-LG)

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Approval Page

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ABSTRACT

The purpose of this study was to create a scale to measure parental social support from the perspective of lesbians and gay men. Previous research that has assessed the affects of parental social support for lesbians and gay men have used or adapted general assessments of social support rather than employing scales that take in to consideration the unique aspects of the lesbian and gay experience. Thus, it was suggested that a social support scale inclusive of specific LG experiences would be a better assessment for use in research investigating the effects of social support for LG individuals. Items were generated based on typologies of general social support as well as incorporating behaviors that were thought to display support and acceptance to lesbian and gay children. Following item generation a total of 221 respondents were used to investigate the factor structure through an Exploratory Factor Analysis. After careful evaluation of the factor loadings, communalities and correlations among potential factors it was decided that a one-factor solution was the most parsimonious. Convergent and discriminant validity suggests that the scale accounts for similar variance as other social support scales previously adapted for use with lesbian and gay samples. Additionally, some evidence suggests that

the PPSS-LG accounts for variance that other social support scales did not. Suggestions are made for further development and validation of the PPSS-LG including examining the stability of the scale over time. Other implications for future research and scale development as well as the continued validation of the present scale are discussed.

CHAPTER 1: OVERVIEW

Lesbians and gay men (LG[1]) frequently face a great deal of hostility, prejudice and discrimination (from verbal assaults to overt violent attacks) and may experience difficulties that have an impact on the quality of their lives (Black & Stevenson, 1984; Herek, 1984). These difficulties are often exacerbated and/or blocked by the presence and/or absence of social support perceived from others in their lives (e.g., parents, friends, community). Because of the effect perceptions of social support appears to have for LG individuals it is important to assess social support qualities that are important for their experiences. However, research that focuses on social support from the perspective of LG individuals often uses measures that assess general aspects of social support and do not include the unique aspects of the LG experience. Because of this measurement concern, conclusions made about social support may not accurately reflect the perceptions of LG individuals and how they may assess the support they receive from others. Therefore, the development of a more specific assessment of social support (especially from parents) is necessary in order to better understand this construct.

[1] For simplicity, lesbians and gay men will be referred to as LG unless a more specific term is needed. LGBT is not used because it is believed that the experiences of bisexual and transgender individuals are somewhat different than those of lesbian and gay individuals. Creating a scale to accurately measure the perception of support from a bisexual and/or transgender perspective is beyond the scope of the current study.

The importance of a more precise assessment of social support is dictated by the potential implications social support has for LG individuals. Specifically, perceiving acceptance and support from one's parents has the potential to decrease the affects of living in a hostile environment. The experiences of LG individuals and the emotional costs of living in a homophobic society increases the need to accurately measure social support more. Furthermore, parental social support (or any specific aspect of social support) may function differently in buffering some of these affects for LG individuals when compared to other (more general) sources of social support. These aspects of living in a hostile environment (one that includes possible verbal and physical assaults) that may increase the chances of emotional distress for LG individuals are important to understand when developing a parental social support scale for LG individuals.

For many LG individuals, part of living in a homophobic society means learning to hide their identity in order to avoid overt repercussions (Berger, 1992; D'Augelli, Herschberger, & Pilkington, 1998; Hetrick & Martin, 1987; Troiden, 1988). Also, many experience increased isolation from their social support groups, which may lead to additional emotional distress including feelings of low self-esteem and alienation. Lower self-esteem and isolation to one's social support group can increase the chances for risky behaviors (Grossman & Kerner, 1998). In order to remain mentally healthy, LG individuals must find ways to compensate for the heterosexist and homophobic attitudes experienced in their

daily lives. The lack of identity validation for LG individuals from society and institutions perpetuates the need to compensate (Smith & Brown, 1997). A strong social support network (including parental social support) is one of the major ways to compensate for these adverse conditions.

Again, perceiving a supportive environment, especially from one's parents, may help buffer the affects of these negative attitudes. Specifically, in order to deal with the pervasive nature of these negative attitudes (e.g., it is morally wrong, abnormal deviant), without adequate social support many LG individuals turn to risky behavior to cope (Grossman & Kerner, 1998). Some researchers have found that LG individuals report higher rates of substance abuse (Mercier & Berger, 1989; Shifrin & Solis, 1992) and higher rates of suicide attempts (Hammelman, 1992; Mercier & Berger, 1989; Morrow, 1993). It is important to understand parental social support more clearly in this context in order to accurately predict how parental social support can actively buffer against these issues.

Social support has been defined as an interaction among individuals including nurturance, warmth and approval toward others (Ellis, Thomas & Rollins, 1976) in relation to a problem or in response to general or specific stressors (House, 1981). The sources of support appear to be varied in scope and nature. They range from sources close to the individual (e.g., parents, siblings, peers) to those that may have a more indirect influence on the individual (e.g., dominant society, culture, social services). These formal and informal sources of

support are believed to affect the individual differently depending on the individual's needs and the nature of the problem (Cassel, 1976; Cobb, 1976; House, 1981). Informal sources of support[2] (e.g., parents, siblings, peers) are the most common (Berger, 1992; Gottlieb, 1978).

There is growing evidence that a person's appraisal of social support is more important than the specific actions involved in the interactions they have with social support providers (Antonucci & Israel, 1986; Felson and Zielinski, 1989; Sarason, Sarason, Shearin, & Pierce, 1987; Savin-Williams, 1989). The method of examining perceived social support for individuals appears to be the most critical because it is believed that the persons own view of the support has the greatest impact on mental health (House, 1981). In other words, the actions are less important in describing the influence social support has on an individual. Thus, the influence of social support appears to go beyond the identification of support networks and includes the evaluation of and satisfaction with the support provided. Further, any influences due to social support will be the result of these evaluations and not on the interaction themselves.

Given that perceptions of social support influence the individual, research that includes more specific understandings of social support for LG individuals will elucidate the role these perceptions have. It has been found that people who perceive adequate social support are able to cope better with adversity and

[2] Informal sources of social support are defined as less formal and organized and are subjective in nature (House, 1981).

difficult life situations (Vincke & Van Heeringen, 2002). Additionally, high levels of social support have been related to lower rates of depression (Dean, Kolody & Wood, 1990; Dew & Bromet, 1991; Folkman, Chesney, Pollack, & Coates, 1993; Wethington & Kessler, 1991), higher levels of self-esteem (Felson & Zielinski, 1989), and lower levels of hopelessness (Biggam & Power, 1997). These findings point to the importance of social support for individuals, especially for LG individuals who may experience difficulties in exploring and expressing their LG identity.

Parental Social Support and LG Individuals

For LG individuals, social support may not always be perceived as positive, especially social support from one's parents. However, perceived positive social support from the parents is crucial for the mental health of LG individuals. When surveying gay men, lesbians and bisexuals ranging from ages 15 to 21 Hershberger and D'Augelli (1995) found that mental health was preserved through supportiveness and sexual orientation identity acceptance from parents. This seems to suggest that supportiveness alone would not result in higher feelings of mental health, but that the combination of supportiveness and acceptance of the child's identity is important. In addition, those who perceive themselves to be isolated from their social environment report higher levels of depression. This might be due to the lack of individuals to provide a buffer to the negative affects of homophobia and heterosexism. Parental social support appears to affect the feelings of emotional distress for LG individuals.

Some writers (Berger, 1992; Berger & Mallon, 1993; D'Augelli, 1989) believe that social support from family, friends and the LG community create a buffer between LG individuals and homonegative reactions. Berger (1992) specifically highlights that self-esteem is moderately correlated with the supportiveness of important others about one's sexual orientation. In addition, Savin-Williams (1989) found that self-esteem for gay men was associated with positive relationships with the parents. Therefore, a decrease in the barriers to creating a positive view of one's identity will be related to social support especially social support from one's parents. However, previous research findings that focus on social support for LG individuals may be somewhat inaccurate because they tend to assess social support with inadequate or adapted measures. Specifically, these measures are not normed on LG populations and do not address important components of the LG experience. These issues should be resolved before research on this population with regard to their perceived social support should take place: the inclusion of LG specific criteria in defining the construct of social support and creating measures that accurately assess this construct.

The necessity of including LG specific criteria when operationalizing social support is important because the experiences of LG individuals are often different from their heterosexual counterparts. When these pieces are absent from the definition of perceived parental support for LG individuals, any conclusions drawn about the effects of perceived parental support may not be

valid. Specifically, if we define perceived parental support in a way that does not identify key components in the perception of support from an LG perspective (e.g., affirmation of identity and relationship) then we may be denying the importance of those pieces in the LG individual's life. Thus, it is important to create a definition of social support form the LG perspective in order to adequately measure this construct.

The second major issue in studying parental social support and its affects on LG individuals is the way it has been measured. What seems to be lacking from many studies examining parental support for LG individuals is a scale that adequately assesses parental social support for LG individuals. The assumption that a scale used to measure social support in general is appropriate to use with LG individuals may not be true. In trying to assess the influences, parental social support has on mental health, many researchers (see Elizur, 2001; Elizur & Mintzer, 2001; Goldfried & Goldfreid, 2001) have used social support scales that omit important components of the LG experience or have used heterosexist scales. Therefore, the development of a scale to measure perceptions of parental supportiveness, which includes the unique aspects of the LG experience, should be created.

Social support, as it has been previously defined and measured (House, 1981; Sarason, Levine, Basham & Sarason, 1983), often includes the domains of emotional support (e.g., affection, caring behaviors), informational support (e.g., advice), instrumental support (e.g., providing physical aid). However, these

measures clearly lack specifics to the unique experiences of lesbian and gay individuals. Specifically, Smith and Brown (1997) suggest that affirmation is a key component of the perceptions of social support. Therefore, a measure developed to assess perceived parental support for LG individuals should include: a) The acceptance and validation of the individuals life including acknowledgment, acceptance and support of the individual's LG identity within and outside the immediate family; b) information seeking behaviors, including learning about the important issues related to the LGBT community; and c) acceptance and validation of the child's relationships and partner.

Assessing Perceived Parental Social Support for LG Individuals

The purpose of this dissertation is to develop and validate a measure of parental social support that will accurately reflect the LG experience. Aspects from both House's (1981) and Barrera & Ainlay's (1983) model of social support in combination with Procidano & Heller's (1983) social support scale will be used to develop this measure. This measure will better reflect the LG experience and will allow for a better understanding of the importance of parental social support for LG individuals. Rather than assume social support appraisals are similar for heterosexual and LG individuals this scale will help identify the important distinctions. Results from this type of assessment may aid researchers in the study of parental support and its effects on LG individuals. In addition to these implications, knowledge about the effects of parental social support can aid

therapists in understanding and conceptualizing the difficulties LG clients may present in session.

The Perceived Parental Support Scale-LG (PPSS-LG) is being developed as a self-report measure used to assess an LG individuals perception of social support from one's parents. The items will reference the domains that appear to be important to social support (House, 1981; Barrera & Ainlay, 1983) and affirming behaviors. Respondents will be asked to rate the degree to which they believe the statements provided reflect their experiences with their parents.

The development and validation of the PPSS-LG will include two studies. Study 1 will provide the scale construction, factor analysis and internal consistency estimates. Study 2 will provide estimates of convergent and discriminant validity of the instrument with previously validated parental social support scales and scales used to assess social desirability and negative affectivity. The following chapters will describe these studies in detail beginning with a review of the salient literature on social support, the affects of social support for LG individuals and the previous scales used to measure social support. Chapter Three will describe the methods used to develop and validate the PPSS-LG. Chapter Four will describe the results from the analyses performed in both studies. Finally, Chapter Five will review the findings in terms of 1) statistical interpretation, 2) limitations to the present study, and 3) important implications for future research.

CHAPTER 2: REVIEW OF THE LITERATURE

For the purposes of this project, the concept and research on social support will be reviewed in the context of the LG experience. Furthermore, because there is a convergence of concepts for this project (LG issues and social support) it is necessary to discuss these separately first and follow with a description of how they are related. Therefore, the following review will focus on 1) the definitions and typology of social support, 2) parental social support 3) LG issues that relate to social support, 4) the available research on the affects social support provides individuals both in general and for LG populations and 5) a critique of the previous measures used to assess social support and their lack of adequate LG specific criteria.

Social Support

For the last two decades it has been well documented that social support from significant others allows for better coping during stressful events (Lakey & Cassady, 1990). However, one difficulty in examining how social support affects individuals is the diversity of ways this construct has been conceptualized. Although there exists general definitions to describe social support (see Barrera & Ainlay, 1983; Ellis, Thomas & Rollins, 1976; House, 1981; Sarason, Levine, Basham & Sarason, 1983; Smith & Brown, 1997) these attempts appear to be somewhat broad in scope. In other words, they may describe a general theme of

social support, but they do not necessarily address specific issues for individuals. This lack of specificity would make it difficult to apply these conceptualizations to groups (e.g., LG individuals) where some behaviors would be more important than others (e.g., acceptance, affirmation). Therefore, this section will begin with a discussion of the general definitions of social support, followed by discussions of parental social support (PSS) specifically and how PSS is connected to the LG experience. Using the typologies of House (1981) and Barrera & Ainlay (1983) as a guide, this section will outline a more LG specific social support framework, which will guide the creation of a measure to assess the perceptions of support from the perspective of the LG individual.

In an attempt to better conceptualize social support and to make sense of the theoretical contradictions, researchers have attempted to define this construct via the actions and behaviors of others, the functions these actions serve (*functional approach*) and how the individual perceives this (Barrera & Ainlay, 1983; House, 1981; Pierce, Sarason, Sarason, Joseph & Henderson, 1996; Sarason, Levine, Basham & Sarason, 1983). Some have suggested that social support cannot be viewed as a holistic phenomenon but as a typology describing behaviors one engages in to express and provide social support. Specifically, House (1981) uses a model that consists of four separate types of support: *emotional support, informational support, instrumental support* and *appraisal support*. Barrera & Ainlay (1983) describe four types of support: *directive guidance, nondirective support, positive social interaction* and *tangible assistance*. These

typologies will be discussed in order to better understand and connect the concept of social support to that of LG individuals.

What seems to be the most consistent element across theories of social support is the inclusion of an emotional support category to describe certain supportive behaviors (Barrera & Ainlay, 1983). Both House (1981) and Barrera & Ainlay, (1983) identify emotional support as an important component of perceptions of social support from others (Barrera and Ainlay label this Nondirective Support). Specifically, emotional support refers to a range of behaviors that indicate caring and understanding that stem from the interactions of others. Burleson and Kunkel (1996) provide examples of emotional support behaviors, which include affection, intimacy, enhancement of worth, comfort, guidance and empathy. Others tend to focus solely on the comforting function of emotional support and Cutrona and Russell (1990) describe this as "the ability to turn to others for comfort and security during times of stress" (p. 322). This comforting function helps the individual feel cared for by others especially in times of high stress and leads to the alleviation of distressed emotional states (Burleson & Russell, 1996).

Informational support refers to information that is provided to help the individual cope with personal or environmental distress. This information is not a means of support in of itself, but a way to help the individual help him/herself (House, 1981). This support comes in the form of advice, suggestions or direct information. Barrera and Ainlay (1983) state that this occurs through directive

guidance and includes teaching skills and providing feedback as behavioral demonstrations of this. Additionally these behaviors can demonstrate practical ways to increase the individual's performance through increased understanding and skill. Finally, informational support does appear to have some relatedness to emotional support in that it can imply caring through the appraisal of the transaction of support (Pierce, et al., 1996).

To help others with tangible tasks such as giving money, paying bills or providing physical aid is referred to by House (1981) as Instrumental Support and Tangible Assistance by Barrera and Ainlay (1983). These behaviors seem to be the most identifiable because they are the most visible signs of supportive behavior. Again, the appraisal of these behaviors is important to the receiver through the transaction of these behaviors. The recipient is also more likely to accept the behavior as support if the assistance is more helpful than an order (Pierce et al., 1996). Thus, the act of helping someone out is only one step in the perception of how a specific tangible act may demonstrate support.

House (1981) describes Appraisal support as the process of providing information that implies affirmation of the individual and his/her identity. Appraisal support includes information and is delivered via feedback, explicitly or implicitly, through direct verbal interactions or actions of others. The information transmitted from others is used to evaluate the self and one's own behavior, thoughts and feelings. For example, if positive feedback about performance, an interaction or behavior is provided then individuals will

evaluate themselves based on this experience. Depending on the feedback provided this could lead to positive or negative self-appraisals. Appraisal support seems to have the most significance for LG individuals because of the changes that occur in the parents' perceptions of their child (discussed later) and how this can be a barrier to acceptance and affirmation of the child's sexual identity.

Parental Social Support

Social support has been defined as the availability of individuals who are willing to provide emotional, material and social resources (Smith & Brown, 1997). Additionally, affirmation or validation of an individual's life has been suggested as a key component of social support (Smith & Brown, 1997). Other researchers (Ellis, Thomas & Rollins, 1976) define parental social support as the "interaction characterized by nurturance, warmth, approval and other positive sentiments from the parent to the child" (p. 713). For the purposes of this study, social support will focus on the acceptance and validation of one's life by one's parents. More specifically, this is defined as the child's perception of the parents' ability to provide nurturance, warmth, acceptance, approval (and/or validation) of their child's life, and to provide help for their child when assistance is required. The key to defining support from the parents seems to be the perceptions the child has of the support provided by this specific relationship (Pierce, Sarason & Sarason, 1991).

Although the perceptions of specific social support relationships (e.g., the parents) are important, it has been hypothesized that these account for only part of the individuals' view of their global support system. In other words, the individual's global perception of support can be explained as a summation of domain-specific experiences of support, and global perceptions of support will vary depending on the particular domains the individual accesses (Davis, Morris & Kraus, 1998). However, evidence has emerged that defines domain specific social support as distinct from global perceptions of social support. Pierce, Sarason and Sarason (1991), have proposed that people "develop sets of expectations about the availability of social support for each of their significant relationships." (p. 1028). Findings suggest that relationship specific support does not account for all the variation in global support due to the low correlations among them (Bolger & Eckenrode, 1991; Brock, Sarason, Sarason, & Pierce 199; Pierce et al., 1991). Therefore, it has been suggested that domain-specific support may be separate from one's sense of overall support, and contributes differently to well being. The development of perceptions of these domain-specific social support systems is related to individual experiences and how one appraises these experiences.

The process in which an individual develops the perception that his/her parents are providing a supportive environment is related to the concepts of supportive schemata and the cognitive processes associated with this construct (Lakey and Cassady, 1990; Pierce, et al., 1996). Through these cognitive

processes, the individual is able to perceive a relationship as supportive or not based on prior experience with supportive behavior. Thus, this process involves individuals experience with support from their parents as a mechanism of developing a scheme of support.

Supportive schemata are structures of knowledge that include the expectations that the parents will provide a supportive environment. This schemata is based on previous experiences with support and the ability to perceive an adequate supportive environment in the past. Children whose previous interactions with their parents were caring, nurturing and supportive will develop positive expectations about the willingness of the parents to provide this support later. Those who experience a lack of support develop a more global belief that others will not meet their supportive needs (Pierce, et al., 1996). Thus, earlier experiences with parents provide a foundation for the child's ability to distinguish and expect supportive environments as adolescents and adults. Furthermore, the ability to predict future supportive environments from these earlier experiences relies on the appraisals one makes about these experiences. Regardless of the objective view of the support provided the child's subjective view would dictate in what way these experiences will be influential.

Lakey and Cassady (1990) state that perceived support "operates in part as a cognitive personality variable in which stable, organized beliefs about the quality of one's interpersonal relationships leads to biased interpretation and recall of social interactions" (p. 337). If low social support is perceived, then prior

beliefs about the availability and quality of social support would influence the present belief. In other words the previous experience of inadequate social support would make it more likely for the individual to label current experiences as unsupportive whether they are truly helpful or not. This is due to taking what was learned from previous experiences and attributing it to the current experience thus leading to the expectation of unsupportive interactions.

Parental Social Support for LG Individuals.

In order to understand the importance of PSS in the lives of LG individuals, how parents react to their child's LG identity, issues related to identity, and the coming out process are important to discuss. These three concepts should shed light on the difficulties and barriers that may inhibit the child to perceive a positive, supportive and affirming environment. This is especially important within the microsystem of the family and more specifically the parents. Without this understanding and inclusion of these concepts in the conceptualization of social support for the LG individual, it is unlikely that a measure used to assess social support would accurately assess the experiences of LG individuals.

Parental reactions. What appears to predict, at least initially, the perceptions of parental supportiveness is the reactions from parents to the news that their child is lesbian or gay and the resulting effects on the parent-child relationship. Nesmith, Burton, and Crosgrove (1999) found that many of their respondents experienced negative reactions to their disclosure, with parental

rejection being the most frequently described response. It is through these initial reactions as well as continued reactions from parents and caregivers that may lead to LG individuals perceiving their social environment as unsupportive and/or unaccepting. Additionally, this seems to be related to how individuals cognitively assess past experiences with supportive behaviors from their significant others (Lakey & Cassady, 1990; Pierce, et al., 1996).

Parental reactions can range from positive and supportive to negative and rejecting. Because it is somewhat uncertain how parents will react, the irreversibility of what the revelation may bring appears to be a barrier to disclosure (Ben-Ari, 1995; Williamson, 1998). It is thought that fear of these initial reactions and those that follow may lead to many LG individuals choosing not to disclose to their parents (Ben-Ari, 1995). From their study of 96 gay men, Cramer and Roach (1988) indicate that following disclosure, many parent-child relationships become strained followed by a period of stress and turmoil. This lends support to the notion that LG individuals may fear these immediate reactions. In other words, to avoid this turmoil, the child may avoid disclosure. Additionally, this lack of disclosure limits the possibility of receiving social support and acceptance from the parents for the individual's identity.

Denial of a child's identity is one reaction described in the literature that may lead to difficulties for the LG individual in perceiving social support from one's parents. Denial is typically used as a buffer so the parents will not have to deal with their child's sexual orientation. The child's LG identity may be

dismissed as a phase that he/she will likely grow out of. In a review of previous studies, Savin-Williams and Dube (1998) discuss the findings from a 1995 study conducted by Savin-Williams. Savin-Williams found that half of the mothers and fathers of gay youths responded with denial or disbelief to disclosure. It was also discovered that several parents responded with intolerance and attempts to convert the child to heterosexuality. Boxer et al., (1991) found that many of the parents in their study of parent-child relations among gay and lesbian youth "went through a protracted phase of denial after self-disclosure" (p. 85). They attributed this experience of denial to the age of disclosure reported by their sample. In essence, the older the child is, the more likely the parents will remain in denial due to the already established view of their child's identity. Therefore, an established view of the child's identity might make it much easier to deny that the child is different than before (Robinson et al., 1989). For the younger child, denial may be less likely because the perception and expectations for the child are not fully set (Boxer, et al., 1991).

Negative reactions can often be extremely hurtful when children disclose their sexual orientation to their family and may result in a strained relationship and loss of social support. Because these reactions are typically unpredictable, (Bohrek, 1983) it is difficult to gauge whether the parent will act punitively or positively. One of the most salient aspects of post-disclosure is that the parent-child relationship will be different than before (Robinson et al., 1989; Savin-Williams & Dube, 1998; Strommen, 1989). If the family has expectations for the

child that the new identity does not compliment, then the family (especially the parents) will have to create a new view and outlook about the child (Robinson et al., 1989). This may be difficult for the parents to do because they may lack the adequate resources to do so. In addition, if children do not have adequate resources for themselves, or to share with their parents, then it may exacerbate these difficulties. Although there exists speculation and empirical support for the negative changes immediately following disclosure, there are equally strong findings that suggest most parent-child relationships become more satisfying after disclosure (Boxer et al., 1991; Robinson et al., 1989; Strommen, 1989).

These reactions seem to make it difficult for the child to perceive positive social support from the family. The perception of parental supportiveness would seem contingent on how the parents react to the children's disclosure of their sexual orientation. If the parents react negatively then the children may perceive little or no social support from the parents. These perceptions may stem from the lack of acceptance and approval of children's sexual orientation (or affirmation). Therefore, it is possible that the reactions, which create strained relationships, will affect the level of supportiveness, which may then cause emotional distress for the child.

*Identity formation***.** Erikson (1968) suggested that identity development is the major crisis of adolescence. For LG individuals this is even more critical due to the exposure to homophobic and heterosexist environments that make the development of a sexual identity difficult. Furthermore, identity formation may

affect the perception and availability of social support because lack of self-awareness and self-acceptance of an LG identity may decrease any possible affirmative behaviors about one's LG identity to occur. To underscore the development of LG identity models of LG identity have been developed to explain how individuals come to explore and accept their sexual identity (Cass, 1979; Coleman, 1982; Fassinger and Miller, 1996; McCarn and Fassinger, 1996; Plummer, 1975; Troiden, 1988/89). Early models described the development of sexual identity as a linear process where an individual moves through stages and must complete one before moving on to the next (Troiden, 1989). However, the process has become seen as more flexible and fluid with possible transitions between phases and experiences occur (Fassinger & Miller, 1996).

One of the most recent attempts to describe the process of LG identity development comes from McCarn and Fassinger (1996). In their model they describe three attitude areas related to identity: Individual's views toward the self, other LG individuals and non-gay individuals. Unlike previous models of identity, disclosure is not used as a milestone for the progression through the different phases and identity achievement. The process of disclosing one's identity is believed to be routed in the contextual negative environment that LG individuals live in that includes possible discrimination and prejudice.

The first phase in this model is Awareness and involves the initial awareness of difference from heterosexual others Feelings related to this phase are confusion and fear related to this growing awareness. Next, Exploration

includes feelings of longing and wonders about same-sex others as well as experimentation with same-sex attractions. In Deepening/Commitment individuals begin to solidify their LG identity and deepen their self-knowledge of what it means to be lesbian or gay. The development of self-knowledge includes a greater understanding of sexual identity within a heterosexist and/or homophobic society. In the last phase, Internalization/Synthesis individuals internalize their feelings of same-sex attraction as a part of their overall identity. Reluctance to change one's identity and feelings of contentment and pride toward an LG identity are hallmarks of this last phase. Although disclosure of one's identity may occur in this phase, it is not necessary for achievement. The act disclosure, however, includes the possible consequences to the availability and perception of social support.

*Coming out***.** For many gay men and lesbians, the most difficult decision to make is informing their parents of their sexual orientation. Additionally, the perception of social support from one's parents as it relates and connects to an individual's sexual identity presumes the knowledge of the parents. This "coming out" (or the process in which a person declares his/her sexual orientation) reveals a non-traditional way of life that is incongruent with the heterosexual dreams of many parents (Savin-Williams, 1989). What makes it so difficult to disclose a sexual orientation that is different from the majority? Borhek (1983) suggests that the unpredictable nature of parental reactions is one of the main reasons this task is so problematic. Parental reactions can range from

anger to happiness and it is impossible to guess how parents will react when children disclose their sexual identity. This unpredictable nature also makes it difficult for the child to gauge when it is appropriate to tell the parents. Thus, perceptions of parental reactions would seem a key component in whether or when children disclose their sexual orientation as well as how they may perceive the social support from their parents.

For many adolescents the realization that they may be gay or lesbian creates extreme confusion and fear. Feelings of marginality and difference from same-sex peers are often the first reactions in the process of coming out. During this time, gay children can feel alone and distant from their parents and peers (Troiden, 1988). Adolescence is a pivotal developmental period that includes the establishing of an identity, sexual development, and future planning. Having to deal with confusing feelings that one may be gay or lesbian only complicates these developmental challenges and may make it more difficult to perceive a supportive environment especially from the parents.

Despite increasing acceptance of gays and lesbians, negative attitudes toward this group remain strong barriers to revealing one's sexual orientation (Herek, 1995). In addition to these attitudes, many gays and lesbians experience violence or abuse (from friends, family, and community) after their disclosure (D'Augelli, Herschberger, & Pilkington, 1998). Thus, the knowledge of these potential reactions may deter gay men and lesbians from disclosing to their parents. It seems safer and easier to keep their sexual orientation hidden from

their parents (or others) than to risk ridicule or rejection. Feeling an unsafe environment in of itself would suggest a lack of support from the parents, but as this may deter the individual from coming out to parents then it is likely that the parents would never be a source of affirmation or support.

However, many young gay men and lesbians do choose to disclose their sexual orientation to others. Although empirical research on the timing of coming out is limited, research in the late 1960's suggested that the age of coming out was about 19 years old. More recently, research reveals the age of disclosure as much younger (D'Augelli et al., 1998; Waldner & Magruder, 1999), and it is estimated that the average age for gay men is 16 and for lesbians the age is somewhat older (Troiden and Goode, 1980; Waldner & Magruder, 1999). However many choose to tell only one parent (usually the mother) before the other and D'Augelli et al., (1998) in their study of 195 LG youth found that 65% had told only their mother but a few (9%) had told only their father. Additionally, most had told both of their parents by the age of 17 (79% of gay men and 70% of lesbians). These earlier ages seem to suggest that expecting and perceiving a supportive environment would be crucial to the well-being of adolescents because there exists a range of developmental tasks to complete.

The motivations for coming out to the parents are multidimensional (Boxer, Cook, & Herdt, 1991). Vargo (1998) suggests that most young gay men and lesbians disclose in order to be honest with their parents. Once individuals accept their sexual orientation they feel it is important to disclose this to others,

so their parents can accept them for who they are. Not telling those who are loved and respected may cause harm to their relationship and make it difficult to perceive adequate social support. The connection to the other person may feel unreal, deceitful or disjointed and there may be a lack of emotional support and affirmation of the child's identity and/or their relationship (Harry, 1993; de Monteflores & Schultz, 1978; Troiden, 1988; Vargo, 1998).

The fear of losing support form the parents seems to be the most salient reason that LG individual may not disclose their identity. Because the emotional support they do receive appears to be adequate the loss of that support may be too great of a risk, even though they do not receive affirmation about their identity and relationship. Harry (1993) suggests that those who perceive the greatest possible loss will be more likely to remain closeted. If individuals perceive more repercussions than acceptance, then they may feel safer not disclosing their sexual orientation. To these individuals the costs far outweigh the benefits and to come out means risking everything they have. Relationship with parents, home, and support systems are all things that may be considered when making the choice to disclose (Hetrick & Martin, 1987; Troiden, 1988). The unpredictable nature of parental reactions and the reactions of society make it complicated for individuals to gauge the appropriateness of when to disclose their sexual orientation (Bohrek, 1983). These also make it difficult for parents to be affirming in their reactions and interactions with their children.

Affirmation. One of the key components to appraisal support defined by House (1981) is the inclusion of affirming children's identity. Appraisal support extends passive acceptance of the individual and relies on actively affirming individuals for who they are. Much of the affirmation literature has focused the attention on counseling lesbian and gay clients. However, the components are adaptable to general affirmation of LG individuals. Defined more specifically affirmative behavior includes actions that demonstrate acceptance, inclusion and celebration of the LG experience. This occurs in the form of acknowledging and challenging heterosexism, seeking out additional information and knowledge about lesbian and gay issues, attending LG events and functions and normalization of LG identity and same-sex relationship (Shrier, 1993; Worthington, Savoy, Dillon & Vernaglia, 2002).

Effects of Social Support

In general, parental social support has been to shown to affect self-esteem and emotional distress in children (Felson & Zielinski, 1989; Hoelter and Harper, 1987). Felson and Zielinski (1989) suggest that parental social support may affect self-esteem through self-appraisal and the way individuals perceive how others view them. In other words, "if children perceive behavior as reflecting positive appraisals, and if parents are highly significant others, then parental social support should be a critical variable in the development of self-esteem" (p. 727). Therefore, children may have higher levels of self-esteem if they perceive positive supportive behavior from their parents.

Savin-Williams (1989) sought to examine how social support would affect gay men and lesbians, and he found that, for lesbians, the greater the mother and father accepted the child's identity the more likely she would feel comfortable being lesbian. However, for gay males, this was only true if the parents were perceived as important components to the child's self-worth.

Social support may not always be perceived as positive, especially social support from the family. However, some researchers have found that perceived positive social support from the parents is crucial for the mental health of LG individuals. When surveying gay men, lesbians and bisexuals ranging from ages 15 to 21 Hershberger and D'Augelli (1995) found that mental health was preserved through supportiveness and self-acceptance from parents. Their research seems to suggest that supportiveness alone would not result in higher feelings of mental health, but that supportiveness coupled with acceptance of the child's identity is more important. In addition, those who perceive themselves to be isolated from their social environment report higher levels of depression due to the lack of individuals to provide a buffer to the negative affects of homophobia and heterosexism. These findings appear to imply that at some level, parental social support may affect the feelings of emotional distress for LG individuals.

In D'Augelli et al's (1998) study of 194 gay and lesbians, 51% of the mothers (27% of fathers) reported accepting the child's sexual identity. However, about one-third were tolerant but not accepting. Although most of the mothers

reported acceptance of their children, a large portion of the fathers did not. Therefore, the possibility of negative reactions (at least from the fathers) is significant. One positive finding though, is that only a small portion (26% of the fathers and 10% of the mothers) expressed rejection of their child. Although these numbers are small, their existence is still alarming and warrants further study of these occurrences.

Social Support Measurement

Although substantial findings exist to suggest the importance of social support from parents for LG individuals, an adequate measure to assess the important factors relating to the LG experience is not available. An overview of recent research on supportiveness and its affects on LG individuals found the use of two scales developed to assess domain-specific support from parents and or family (see Elizur, 2001; Hays, Turner, & Coates, 1992; Kurdek & Schmitt, 1987; Smith & Brown, 1997; Turner, Hays & Coates, 1993). These include the Perceived Social Support from Family scale (Procidano & Heller, 1983), which is often adapted to the perceptions of parental support only and The Social Support Questionnaire (Sarason, Levine, Basham & Sarason, 1983). Although these scales have high psychometric properties, they may not account for all of the variance present for LG individuals. Additionally, inclusion of LG specific criteria in the assessment of social support may help explain the differences in variance accountability between domain-specific support and global support (Davis, Morris & Kraus, 1998).

Research Questions and Hypotheses

The development and validation of the PPSS-LG included two studies. Study 1 provided the scale construction and the factor structure. Study 2 provided preliminary estimates of convergent validity for the PPSS-LG. In Study 1, using the theories of social support described above (Barrera & Ainlay 1983; House, 1981), items were generated to assess perceptions of parental social support for LG individuals. The initial pool of items were pilot-tested to determine clarity, comprehension and content analysis. Exploratory factor analysis (EFA) was used to explore the initial factor structure of the PPSS-LG.

Study 2 focused on estimating validity and reliability for the PPSS-LG. Specifically, Study 2 explored convergent and discriminant validity estimates for the PPSS-LG. It was hypothesized that the PPSS-LG would positively correlate with the Perceived Social Support from Family ([PSS-Fa]; Procidano & Heller, 1983) and The Social Support Questionnaire ([SSQ]; Sarason, Levine, Basham & Sarason, 1983). Additionally, it was hypothesized that the PPSS-LG would demonstrate no relation or minimal relations with the Balanced Inventory of Desirable Responding, impression management scale ([BIDR-IM]; Paulhus, 1984) and the Positive and Negative Affect Schedule ([PANAS]; Watson, Clark, & Tellegen, 1988).

CHAPTER 3: METHOD

This chapter is divided into two sections outlining the two separate studies conducted to develop, validate, and assess the reliability of the Perceived Parental Support Scale-LG (PPSS-LG). Study 1 focused on the development and factor structure for the Perceived Parental Support Scale-LG (PPSS-LG). Study 2 focused on examining the completed PPSS-LG convergent validity with two previously established social support scales and discriminant validity with two constructs assumed not to be associated with perceived parental social support. The scales used in study 2 to assess convergent validity were the Perceived Social Support from Family (PSS-Fa) and the Social Support Questionnaire (SSQ6). In order to assess discriminant validity the Impression Management subscale of the Balanced Inventory of Desired Responding (BIDR-IM) and the Positive and Negative Affect Schedule (PANAS) were utilized. In order to assure a large enough sample, solicitation of participation and procedures for data collection for studies one and two utilized web-based data collection methods as well as paper and pencil methods. Next, each study will be described in succession including the instruments, the procedures, and the analyses.

Study 1: Scale Construction and Exploratory Factor Analysis

The first study examined the factor structure of the PPSS-LG. Items were generated based on the theories of House (1981) and Barrera and Ainlay (1983)

described in previous chapters. Specifically, the groups of items were generated from the domains described by House and Barrera and Ainlay targeting *emotional support, informational support, instrumental support* and *appraisal support* (see chapter two for more detailed descriptions of these constructs). Additionally, items were generated based on the PSS-Fa addressing common behaviors associated with general parental social support. An initial pool of 42 items were generated based on these frameworks and issues related specifically to lesbian and gay experiences (e.g., identity and relationship acceptance, coming out). After the initial development of the items, the PPSS-LG was presented to experts in the field of LG psychology, research and advocacy as well as experts in scale construction in order to establish content validity. Ten experts were asked to assess the items for readability, clarity and match to the construct of perceived parental social support being assessed. The decision to retain items was based on a majority of respondents agreeing that an individual item was acceptable. A total of six items were removed based on these parameters leaving a total of 36 items retained for the purposes of assessing the factor structure (see Appendix B)

All items, together, were edited into a web-page formatted online survey and a paper-and-pencil form. This included the demographic forms, the items generated for the exploratory factor analysis and the informed consent form (See Appendixes A-C). The informed consent described the study as seeking to examine the dynamics and qualities of parental social support from the perspective of lesbian and gay children. Following the completion of the web-

pages, each portion was examined for ease and clarity before the official data collection. A pilot study to assess the accuracy of the web-page in collecting the appropriate responses when chosen (Kraut, et al., 2004) was also conducted. Participants were asked to complete the surveys to check for flaws in the informed consent process, clarity of instructions, time for completion, file set-up, and transfer of data from the web-pages to the database. Based on feedback given revisions to the content, language and readability of the web-pages before officially collecting data occurred. This included changing the tense of some words and changing some statements to conjecture rather than actual statements to respond to (e.g., My parents would never encourage me to change my gay/lesbian identity).

Participants

A total of 271 participants were recruited from the online and live participant solicitation. However, after checking the responses, a total of 10 responses were not included in exploratory factor analysis due to scale confusion and invalid responses. A total of 16 responses were removed because of duplicate Internet Protocol[3] (IP) addresses posted close together in time suggesting that a respondent selected submit more than once. Other responses were removed because the respondent identified that he/she was not out to either parent (n=8), identified as bisexual (n=6), transgender (n=5), declared that

[3] An Internet Protocol (IP) Address is a numerical code indicating the location of the computer a given web-page was accessed from.

their parents were deceased (n=2) or because the survey was not completed (n=3). Data from the remaining 221 respondents were used to conduct the exploratory factor analysis. Of the remaining respondents used in the EFA 111 (50.2%) identified as gay and 110 (49.8%) identified as lesbian. A total of 186 (84.1%) of the respondents were out to both parents, 1 (0.5%) was only out to their father and 34 (15.3%) were out only to their mother. The mean age for the respondents was 32.06 (SD 10.13) and the majority of participants reported post-secondary educational experiences and degrees (89.1%). Finally, the respondents indicated their race/ethnicity by filling in their own labels for their identity. A total of 175 (79.2%) individuals identified as White/Caucasian/Euro American, 16 (7.2%) as Black/African American, 6 (2.7%) as Asian/Asian American/Pacific Islander, 8 (3.6%) as Latino/Latina/Hispanic, 1 (<1%) as Indian, 12 (5.4%) as biracial/Multiracial and 3 (1.3%)did not respond to the question.

Instruments

*Demographics***.** Demographic questions were created to assess participant characteristics**.** This included information about racial and ethnic identity, gender, sexual identity, age, and religious background (see Appendix A for the demographic questionnaire and Table 1 for the demographic data for Study 1).

Perceived Parental Support Scale-Lesbian Gay. Based on the typologies of House (1981) and Barrera and Ainlay (1983), as well as from the *Perceived Social Support From Family* (Procidano & Heller, 1983) items were generated to fit the categories of social support described. Internal consistency estimates for Study 1

were .96. See Appendix B for initial scale items and Appendix E for final scale items.

Maternal/Paternal Support. Perceptions of general social support from each parent were assessed using a one-item Likert-type question. Respondents were asked to rate the supportiveness of their mother and/or father separately based on a 5 point Likert-type scale with 5 being the most supportive, and 1 being the most unsupportive.

Procedures

Study 1 used two forms of participant solicitation. The first procedure employed the use of the Internet as a means to diversify the sample and to gain access to participants from locations beyond the Midwest. Following the completion and selection of the items to be used in the EFA E-mail notices were sent to LGBT resource center directors requesting assistance (see Appendix I). The E-mails described the goals of the research project and each director was asked to forward an e-mail about the research project to the listserv at their college or university (see Appendix K for the participant email). It was also indicated in the e-mail that participation in this research was voluntary and anonymous. Upon choosing to participate the respondent clicked on the URL within the text of the e-mail to link to the online survey informed consent page (see Appendix C). The informed consent described the study as assessing the effects of parental support of LG children on the children's experience as an LG

individual. Data collection was completed within two weeks of the original e-mail request for participation.

Phase two of the data collection utilized paper-and-pencil surveys to gain access to individuals not available through the listserves used and described above. The primary researcher and a research assistant attended an LGBT pride celebration in a metropolitan city approximately 120 miles from this university. Respondents were randomly approached and asked to participate in the research study. Each individual was give a brief synopsis of the research project and were asked if they would like to participate. After agreeing to participate, the researchers gave each participant the questionnaires with the informed consent to review and fill out (see Appendix D for the paper version of the Informed Consent). Following this, the researcher and research assistant allowed the respondent privacy and time to complete the survey. Each survey was then collected once they were finished and placed in a secure location.

Study 2: Validity Tests of the PPSS-LG

The purpose of the second study was to examine the convergent and discriminant validity estimates for the PPSS-LG based on the hypotheses that this scale would demonstrate moderate positive correlations with previously validated scales used to examine the affects of perceived parental social support for lesbians and gay men in previous scholarship. Specifically, it was predicted that the total score of the PPSS-LG would positively correlate to the total score of the Perceived Social Support from Family (Procidano & Heller, 1983) in order to

establish convergent validity for the PPSS-LG. Additional convergent validity estimates were established by examining the relations of the PPSS-LG to The Social Support Questionnaire (Sarason, Levine, Basham & Sarason, 1983). Discriminant validity was expected to be supported by the absence of a significant correlation with scale assessing social desirability and negative affect as measured by the Impression Management subscale of the Balanced Inventory of Desirable Responding ([BIDR-IM]; Paulhus, 1984) and the Positive and Negative Affect Schedule ([PANAS]; Watson, Clark, & Tellegen, 1988) respectively. See Appendixes E-I for all scales used in Study 2.

Participants

A total of 103 participants were recruited from the online and live participant solicitation. After carefully scrutiny of these responses data cleaning involved removing responses that were not used in the convergent and discriminant validity analysis. A total of 10 responses were removed because of duplicate IP addresses posted close together in time suggesting that a respondent selected submit more than once. Other responses were removed because the respondent identified that he/she was not out to either parent (n=9), identified as bisexual (n=8) or transgender (n=8), and because the survey was not completed (n=4). Data from the remaining respondents were used to conduct the analysis of convergent and discriminant validity.

The total number of respondents included in the analysis of convergent and discriminant validity was 64, with an average age of 30. Participants were

instructed to identify their gender and sexual orientation with 29 identifying as female and lesbian (45.3%) and 35 (54.7%) identifying as male (and gay). Respondents also indicated their race and ethnicity as African American/Black (1.5%), Asian/Pacific Islander (3.1%), Multiracial (1.5%), Latino/Latina (6.2%), and 85.9% identified as White/Caucasian. Eight respondents reported that they had disclosed their lesbian or gay identity to their mother only, one to their father only, and 55 had disclosed to both parents. See Table 2 for demographic data and scores by demographic categories for Study 2.

Instruments

*Demographics***.** Demographic questions were created to assess participant characteristics**.** This included information about racial and ethnic identity, gender, sexual identity, age, and religious background See Table 2 for demographic results and Appendix A for demographic questionnaire.

Maternal/Paternal Support. Perceptions of general social support from each parent were assessed using a one-item Likert-type question. Respondents were asked to rate the supportiveness of their mother and/or father separately based on a 5 point Likert-type scale with 5 being the most supportive, and 1 being the most unsupportive.

Perceived Parental Support Scale-Lesbian Gay PPSS-LG. The revised version of the original PPSS-LG used in study 1 was given to participants. The scale included 22 Likert-type items rated on a 5-point scale ranging from strongly

disagree (1) to strongly agree (5). The scale is a one-dimensional assessment of perceived parental support from the perspective of the gay and lesbian person. The instructions remained the same as in study 1 and each participant was asked to address their parents a whole unit regardless if they had disclosed their sexual identity to only one or both parents. The scale was scored as an average of the total scores rated by each individual. The internal consistency estimate for the PPSS-LG in the current study was .95 (See Appendix E).

Perceived Social Support from Family (Procidano & Heller, 1983). This scale is a 20-item self-report scale that assesses an individual's perception of support from his/her family. The scale consists of statements that respondents must answer "Yes," "No," or "Don't Know," and each item is scored based on responses that indicate perceived support ("No" or "Yes" depending on the wording of the statement). Each yes or no is scored as +1 (the "Don't know" category is not scored), and scores range from 0, which indicates a perception of no support, to 20, indicating the maximum perceived support possible. Internal consistency for the scale has been found to be high (α=.90) suggesting that each item measures the same construct. This scale was also found to be negatively correlated with the Langer 22-item screening instrument (r= -.29). This finding suggests that higher perceived support will be associated with lower levels of negative psychological symptoms which indicates some construct validity (See Appendix F). Internal consistency estimates for the PSS-Fa in study 2 was .86.

The Social Support Questionnaire (Sarason, Levine, Basham & Sarason, 1983). The adapted form of this scale is a 6-item self-report measure asking respondents to rate the number of people they can "count on" for different supportive tasks and rate the overall satisfaction of these tasks. Respondents rate their satisfaction along a 6-point scale ranging from 6= very satisfied to 1= not at all satisfied. For this study the respondents had three categories already assigned to respond to: Father, Mother and Both Parents. Internal consistency has been reported between .90 to .93. For study 2 internal consistency was at .92 for the SSQ6. This scale also has demonstrated construct validity (See Appendix G).

Balanced Inventory of Desirable Responding-Impression management. The BIDR (Paulhus, 1984) measures two constructs, self-deceptive positivity and impression management. The impression management subscale contains 20 items describing socially desirable but statistically infrequent behaviors (e.g., "I have never dropped litter on the street," "I never take things that don't belong to me"). Respondents rate each item in terms of "how much you agree with it" on a 7-point scale ranging from 1= not true to 7= very true. The scoring for responses of 6 and 7 should be weighted. That is, if an item is responded as 6, it should be scored 7 on this item; if an item is responded as 7, then it should be scored as 8 on the item. Therefore, possible scores range from 20 to 160, in which the higher the score, the higher level of impression management. Paulhus (1984) reported that alpha coefficients of this subscale range from .72 to .75, and that sufficient construct validity was indicated by significant correlations with several measures

of social desirability (See Appendix H). Internal Consistency estimates for the BIDR-IM in study 2 was .64

Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988). The PANAS is a 20-item scale used to measure two dimensions of an individual's mood-positive affect (10-items) and negative affect (10-items). Respondents are presented with 20 words associated with 10 negative and 10 positive affective states and are instructed to rate how they feel at the time. Respondents rate each item in terms of how much they feel each affect described on a 5-point scale ranging from 1= very slightly or not at all to 5= extremely. The PANAS has demonstrated good stability over time (8-week interval) and test-retest reliability coefficients for the PANAS PA (in the moment) were reported as .54 and for the PANAS NA (in the moment) as .45. The PANAS Also demonstrated good validity when compared to other affective scales. Specifically, the PANAS was found to have good discriminant validity and high convergent correlations between .76 and .92 when compared to other brief measures of positive and negative affect (See Appendix I). Internal consistency estimates for study 2 of this project was .86.

Procedures

Study 2 investigated the convergent and discriminant validity of the PPSS-LG by examining the relationship between the PPSS-LG the SSQ and PSS-Fa commonly used with LGBT samples to assess the affects of social support on

psychological well-being. Data was collected via the Internet through email solicitation and asking individuals to access web-pages by typing in the URL. Internet data collection was used to diversify the sample and to gain access to participants from locations beyond the Midwest. The data collection methods employed in Study 2 were similar to the methods used in Study 1. However, due to computer and security upgrades, data was collected on two separate occasions. Participants were asked to complete a total of three social support scales as well as a demographic survey.

Following the completion and selection of the items to be use in the EFA E-mail notices were sent to LGBT resource center directors requesting assistance (see Appendix J and K). The E-mails described the goals of the research project and each director was asked to forward an e-mail about the research project to the listserv at their college or university. It was also indicated in the e-mail that participation in this research was voluntary and anonymous. Upon choosing to participant, the respondent clicked on the URL within the text of the e-mail to link to the online survey informed consent page (see Appendix A). The informed consent described the study as assessing the effects of parental support of LG children on the children's experience as an LG individual. Data collection was completed within two weeks of the original e-mail request for participation.

CHAPTER 4: RESULTS

Study 1: Scale Construction and Exploratory Factor Analysis

This section will describe in detail the process of factor analyzing the data set. Decisions for limiting the factors, removal and retention of items are discussed in order to provide a thorough explanation of all decisions. See Appendix L for the SPSS output for all EFA's conducted.

Using a total of 221 cases the responses from the final sample were analyzed to test the factor structure of the PPSS-LG. After examining the items for any flaws in the data collection including assessing the range of possible answers given and reverse scoring the appropriate items, the responses were analyzed. A total of 36 items were used in the EFA through a principal-axis factor analysis. However, before proceeding with the principal-axis factor analysis, the Bartlett's test of sphericity (1954) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974) were examined. Bartlett's test of sphericity was significant ($p < .0001$), which indicates that the factor matrix is adequate for analysis. The KMO yielded a value of .952 indicating that the sample size was large enough to evaluate the factor structure. Decisions regarding the number factors to retain for the final scale were based on examining the eigenvalues of each factor, variance accounted for by each factor, and the number of items loading on each factor. Review of the correlation

between factors was also used to determine the number of factors with high correlations (>.5) suggesting that the factors might measure similar constructs. Additionally, retention of items were based on communalities (<.300), cross-loadings (when the factor loading differences were < .15), and conceptual cohesion. The factor analysis process is discussed below.

A principal axis factor analysis was then performed on the 36 items of the preliminary PPSS-LG (see Appendix B). Eigen-values were set at one to assess the initial factor structure of the data. The original examination of the scree-plot and the amount of variance accounted for by the items suggested the possibility of five factors. The eigenvalues for each of the factors were 17.98 (factor 1), 2.16 (factor 2), 1.60 (factor 3), 1.18 (factor 4) and 1.11 (factor 5). The amount of variance accounted for by each factor was 48.96% (factor 1), 5.19% (factor 2), 3.25% (factor 3), 2.14% (factor 4) and 1.96% (factor 5). The eigenvalues, communalities and amount of variance accounted for by each factor was examined to determine the next step in the EFA. Additionally, the pattern matrix was examined for item cross-loadings and the number items loading on each factor. After careful examination of these it was determined that there was no strong evidence to keep a five-factor solution. Specifically, the amount of variance accounted for by factor one was more than the other factors combined, and factor five was reduced to one item after eliminating item cross-loadings. Following this a new EFA was performed specifying a four-factor solution. See Appendix L-1 for the statistical output.

The data was then reanalyzed specifying a four-factor solution with an oblique rotation. This rotation method was chosen because it was believed that the factors would be correlated due to the common underlying construct. The eigenvalues for each of the factors were 17.98 (factor 1), 2.16 (factor 2), 1.60 (factor 3), and 1.18 (factor 4). The amount of variance accounted for by each factor was 48.89% (factor 1), 5.14% (factor 2), 3.23% (factor 3), and 2.03% (factor 4). The eigenvalues, communalities and amount of variance accounted for by each factor was examined to determine the next step in the EFA. Additionally, the pattern matrix was examined for item cross-loadings and the number items loading on each factor. Similarly to the first EFA and after examination of the output it was determined that there was no strong evidence to keep a four-factor solution. Specifically, the amount of variance accounted for by factor one was more than the other factors combined, factor four included one item and factor one was highly correlated with factor three (α =.61). Following this analysis a new EFA was performed specifying a three-factor solution. See Appendix L-2 for the statistical output.

Following the examination of a four-factor solution a third EFA was performed specifying a three-factor solution. Again, an oblique rotation was specified because it was believed that the factors would be correlated due to the common underlying construct. The eigenvalues for each of the factors were 17.58 (factor 1), 1.81 (factor 2), and 1.15 (factor 3). The amount of variance accounted for by each factor was 48.84% (factor 1), 5.02% (factor 2), and 3.20% (factor 3).

After reviewing the pattern matrix it was decided to remove item number eight due to it loading on factor one and factor three within the specified criteria for removal (the difference between factor loadings was < .15). Additionally, item 26 was removed for a communality below the specified criteria (.173). Following the removal of these items the EFA specifying a three-factor solution was performed again. See Appendix L-3 for the statistical output.

With 34 items remaining an EFA was performed using an oblique rotation and specifying three factors. The eigenvalues, communalities and amount of variance accounted for by each factor was examined to determine the next step in the EFA. The eigenvalues for each of the factors were 17.48 (factor 1), 2.16 (factor 2), and 1.47 (factor 3). The amount of variance accounted for by each factor was 50.24% (factor 1), 5.34% (factor 2), and 3.15% (factor 3). After reviewing the pattern matrix it was decided to remove item number nine due to it loading on factor one and factor three within the specified criteria for removal (the difference between factor loadings was <.15). Following the removal of this item the EFA specifying a three-factor solution was performed again. See Appendix L-4 for the statistical output.

With 33 items remaining an EFA was performed using an oblique rotation and specifying three factors. The eigenvalues, communalities and amount of variance accounted for by each factor was examined to determine the next step in the EFA. The eigenvalues for each of the factors were 17.03 (factor 1), 2.15 (factor 2), and 1.42 (factor 3). The amount of variance accounted for by each factor was

50.41% (factor 1), 5.48% (factor 2), and 3.06% (factor 3). After reviewing the pattern matrix and the items that loaded on each factor it was decided to remove item number 32 because it did not conceptually fit with the other items that loaded on that factor. See Appendix L-5 for the statistical output.

With 32 items remaining an EFA was performed again using an oblique rotation and specifying three factors. The eigenvalues, communalities and amount of variance accounted for by each factor was examined to determine the next step in the EFA. The eigenvalues for each of the factors were 16.75 (factor 1), 2.14 (factor 2), and 1.33 (factor 3). The amount of variance accounted for by each factor was 51.14% (factor 1), 5.65% (factor 2), and 2.95% (factor 3). After reviewing the pattern matrix and factor correlation matrix it was decided to limit the next EFA to two factors. Specifically, the low number of items that remained in factor three, the amount of variance it accounted for and the high correlation between it and factor one strongly supported a factor solution with less than three factors. Therefore, a sixth EFA was performed specifying a two-factor solution. See Appendix L-6 for the statistical output.

After the removal of four items an EFA with the remaining 32 items was performed specifying a two-factor structure and oblique rotation. The eigenvalues for each of the factors were 16.75 (factor 1) and 2.14 (factor 2). The amount of variance accounted for by each factor was 51.07% (factor 1) and 5.52% (factor 2). After reviewing the pattern matrix and the items that loaded on each factor it was decided to remove items number two, 11 and 13 because they did

not conceptually fit with the other items that loaded on that factor (assessed general social support while all other items assessed LG specific social support). See Appendix L-7 for the statistical output and Appendix B for the items.

After the removal of these seven items through the course of the EFA's described above a new analysis was performed on the remaining 29 items using an oblique rotation and specifying a two-factor solution. Before proceeding with the principal-axis factor analysis, the Bartlett's test of sphericity (1954) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974) were examined again. Bartlett's test of sphericity was significant ($p < .0001$), indicating that the factor matrix is adequate for analysis. The KMO yielded a value of .953 indicating that the sample size was still large enough to evaluate the factor structure. The eigenvalues, communalities and amount of variance accounted for by each factor was examined to determine the next step in the EFA. The eigenvalues for each of the factors were 15.77 (factor 1) and 2.12 (factor 2). The amount of variance accounted for by each factor was 53.04% (factor 1) and 6.08% (factor 2). After reviewing the pattern matrix and the items that loaded on each factor it was decided to conduct a comprehensive conceptual analysis of the items to determine if the two-factor solution would be adequate. See Appendix L-8 for the statistical output.

A total of five items were removed leaving a total of 24 items to analyze. The following items (a) "My partner would always be welcome to family functions and celebrations" and (b) "It is clear that my partner would be

considered part of my family" were removed due to redundancy of language with other items. One item was removed because it did not conceptually fit with the other items ("When I confide in my parents, I get the idea that it makes them uncomfortable). Three items ("My relationship would be talked about openly with my parent(s)," "My parent(s) would identify my partner and I as a couple rather than individually," and "My relationship would be talked about openly with my parent(s)") were removed due to awkward wording. Following the removal of these five items a new EFA was performed specifying a three-factor solution and oblique rotation. The Bartlett's test of sphericity (1954) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974) were examined again and were found to be adequate to continue with the analysis ($p < .0001$, and .942 respectively). Eigen-values were set at one to assess the initial factor structure of the remaining items. The examination of the scree-plot and the amount of variance accounted for by the items suggested the possibility of three factors. The eigenvalues for each of the factors were 12.63 (factor 1), 1.98 (factor 2), and 1.08 (factor 3). The amount of variance accounted for by each factor was 51.04% (factor 1), 6.82% (factor 2), and 2.81% (factor 3). See Appendix L-9 for the statistical output.

The eigenvalues, communalities and amount of variance accounted for by each factor was examined to determine the next step in the EFA. Additionally, the pattern matrix was examined for item cross-loadings and the number items loading on each factor. Similarly to the first EFA and after examination of the

output it was determined that there was no strong evidence to keep a three-factor solution. Specifically, the amount of variance accounted for by factor one was more than the other factors combined, and factor one was highly correlated with factor two (.55) and factor three (.68). Following this new EFA was performed specifying a two-factor solution. See Appendix L-9 for the statistical output.

With 24 items remaining an EFA was performed again using an oblique rotation and specifying two factors. The eigenvalues, communalities and amount of variance accounted for by each factor was examined to determine the next step in the EFA. The eigenvalues for each of the factors were 12.63 (factor 1) and 1.98 (factor 2). The amount of variance accounted for by each factor was 50.93% (factor 1) and 6.80% (factor 2). After reviewing the pattern matrix and factor correlation matrix another comprehensive conceptual analysis of the items to determine if the two-factor solution would be adequate was performed. Two items were removed because they did not appear to assess social support and assessed outness ("I would not feel comfortable talking about my gay/lesbian identity with my parents" and "I do not feel I would have to hide my identity from my parents"). The removal of the items associated with outness were also removed because it is assumed that the respondent had disclosed their identity previously to administration of this measure. Following the removal of these items a new EFA was performed specifying a two-factor solution. See Appendix L-10 for the statistical output.

An EFA with the final 22 items was performed specifying a two-factor solution with an oblique rotation. The eigenvalues, communalities and amount of variance accounted for by each factor was examined to determine the next step in the EFA. The eigenvalues for each of the factors were 11.58 (factor 1) and 1.58 (factor 2). The amount of variance accounted for by each factor was 52.67% (factor 1) and 7.23% (factor 2). After reviewing the pattern matrix and factor correlation matrix it was determined that a one-factor solution would be the most parsimonious solution. Specifically, the high amount of variance accounted for by factor one compared to factor two, the high correlation between factor one and two, and the conceptual cohesiveness of items suggested the one factor solution (See Appendix L-11 for the statistical output).

Following the extensive evaluation of the data described above a final EFA was performed specifying a one-factor solution. The final factor structure accounted for 52.41% of the variance and was chosen over the other solutions because it resulted in the most parsimonious factor structure, stronger factor loadings and less cross loadings than the other solutions. Additionally, a one-factor solution was chosen due to the high correlations among the factors when two, three or four factors were chosen in the EFA. The one factor solution had factor loadings ranging from .53 to .86 for all 22 items that remained in the PPSS-LG. For the final step of Study 1, the scale's internal consistency was assessed using Cronbach's alpha. The reliability coefficient for the final PPSS-LG was .96 (See Appendix L-12 for the statistical output).

Preliminary Analyses

In order to determine if significant differences in participants' view of parental social support across gender (and sexual orientation), race and ethnicity, and age, a between-subjects analyses of variance (ANOVA) were performed (see Table 4). Results indicated that scores on the PPSS-LG were not significantly different across the demographic variables of race and age. Significant differences were found on the PPSS-LG for gender and sexual orientation.

Descriptive Statistics

Respondents were also asked to rate the social support they experienced from their parents on a 5-point Likert-type scale. The mean for the perceived support from mothers was 3.72 and 3.37 for fathers (SD= 1.26 & 1.25 respectively). Additionally, the mean calculated from the one-factor solution was 3.13 (SD=.985). Internal consistency estimates were also obtained from the final one-factor PPSS-LG scale and the scale demonstrated high reliability (.96). See Table 5 for the means, standard deviations and range for Study 1.

Study 2: Reliability and Validity Tests of the LGB-CSI

Preliminary Analyses

In order to determine if significant differences in participants' view of parental social support across gender (and sexual orientation), race and ethnicity,

and age, a between-subjects analyses of variance (ANOVA) was performed (see Table 6). Results indicated that scores on the PPSS-LG were not significantly different across the demographic variables of gender, sexual orientation, race and age. Results also indicated that scores on the SSQ6, Pss-Fa, the BIDR-IM and PANAS-PA were not significantly different across gender, sexual orientation, race and age. Scores on the PANAS-NA were not significantly different across the variables of gender, sexual orientation and age. Race was the only significant difference found for the PANAS-PA.

Descriptive Statistics

The mean for the PPSS-LG indicated that the participants reported moderate levels of social support from their parents (M=3.15; SD=.89). Additionally, respondents rated their perception of support of each parent on a 5-point Likert-type scale at moderate levels as well (fathers M=3.28, SD=1.25; Mothers M=3.60, SD=1.18) See Table 4 for demographic results.

Reliability Estimates

A high internal consistency estimate was obtained for the full PPSS-LG (.95).

Convergent Validity

To investigate the convergent validity of the PPSS-LG, bivariate correlations were calculated between the PPSS-LG and two social support scales frequently used to assess the affects of social support with lesbians and gay men. Scores on the SSQR and the PPS-FA were correlated with the scores of the PPSS-

LG in order to examine the strength of the PPSS-LG as a measure of perceived parental social support specifically geared toward lesbians and gay men's experiences. Results indicate that the PPSS-LG demonstrated significant moderate correlation with both the SSQR and the PSS-Fa (.66 & .57 respectively). Bivariate correlations were also calculated between the PPSS-LG and the expressed level of support from parents based on a 5-point Likert-type scale (5= being the most supportive, and 1=being the most unsupportive). Results indicate a significant correlation between each of theses expressed levels of support and the perception of parental support as indicated by scores on the PPSS-LG (.76 for mother's support and .74 for father's support). See Table 7 for all correlations calculated.

Fisher z-transformations were performed to evaluate whether there were significant differences between the correlations among the scales used in Study 2. Specifically, the correlations between the social support scales and negative affect as well as between each social support scale and respondents appraisal of maternal/paternal support were compared using fisher z-transformations. The correlation coefficients between PANAS-NA and the PPSS-LG were -.32, the PANAS-NA and the PSS-fa .33 and the PANAS-NA and the SSQ6 were -.42 ($p<.01$). The correlation coefficients for the PPSS-LG and negative affect were compared to the PSS-Fa and negative affect ($p=.936$), and the correlation coefficients for the SSQ6 and negative affect ($p=.504$). The fisher z-transformation

demonstrated that there were no significant differences in the correlations between each of the three social support scales and negative affect.

In addition to comparing the correlations of social support and negative affect, the correlations between each social support scale and respondents rating of maternal/paternal support was further examined. Specifically, the correlations between the PPSS-LG and respondent's assessment of their maternal and paternal support were compared to the correlations between the maternal and parental support and the other social support scales. The correlation coefficients used in the fisher z-transformation were .76 for the PPSS-LG maternal support correlation, -.47 for the PSS-Fa and maternal support correlation, and .52 for the SSQ6 and maternal support correlation. The correlations for each of the social support scales and paternal support as follows: .74 (PPSS-LG and paternal support), -.49 (PSS-Fa and paternal support) and .61 (SSQ6 and paternal support). The fisher z-transformations used to compare the correlations of the scales correlated with maternal support are as follows: the PSS-Fa compared to the PPSS-LG was significant at $p<.01$, for the SSQ6 compared to the PPSS-LG was significant at $p<.05$. The fisher z-transformations used to compare the correlations of the scales correlated with paternal support are: PSS-Fa compared to the PPSS-LG was significant at $p<.05$, for the SSQ6 compared to the PPSS-LG was not significant ($p=.197$). The results of the fisher z-transformation analysis indicates that the correlations for the PPSS-LG and maternal and paternal social support were higher than for the PSS-FA and the SSQ6.

Discriminant Validity

Bivariate correlations were also calculated between the PPSS-LG and two scales hypothesized to have little or no correlation with perceived parental support. Specifically, scores on the BIDR-IM and the PANAS-NA were correlated with scores on the PPSS-LG. Of the correlations calculated to investigate the discriminant validity of the PPSS-LG, the relationship between the PANAS-NA and PPSS-LG yielded the only significant result (-.32, $p<.01$). See Table 7 for all intercorrleational data.

CHAPTER 5: DISCUSSION

The purpose of this dissertation was to develop a measure that could more accurately evaluate the perceived parental social support from the perspective of lesbians and gay men. Previous attempts to assess the affects of this type of perceived social support has utilized scales that have not been normed or developed specifically for lesbian and gay samples. Although previous research using general social support scales have demonstrated significant validity and reliability with lesbian and gay samples (Berger, 1992; Berger & Mallon, 1993; D'Augelli, 1989), it was suggested that a more LG specific scale would better measure the construct of perceived parental social support from the perspective of lesbians and gay men. Additionally, a more accurate scale was believed to be needed in order to be more precise in assessing the affects of social support on issues of safety, psychological distress and functioning. As previous scholarship has attempted to demonstrate support for the affects perceived parental support has on lesbians and gay men, a more accurately defined scale should strengthen the associations that social support has for lesbians and gay men.

The hypothesis that the EFA would reveal a multi-factor scale was not supported by this investigation. Results of the exploratory factor analysis in Study 1, however, indicated that the hypothesized covariance among the items of

the PPSS-LG was best explained by a one-factor solution. As originally hypothesized the main components of social support previously discussed and used to develop this specific social support scale (Barrera & Ainlay, 1983; House, 1981; Sarason, Levine, Basham & Sarason, 1983) were not supported by the data and analyses. Specifically, components of general social support did not appear to be as important to LG individuals as components that referred directly to their sexual identity. Questions related to general perceptions of social support from parents did not load onto the final factor structure developed from the EFA. Statements referring to general emotional support (e.g., affection, caring behaviors), informational support (e.g., advice), instrumental support (e.g., providing physical aid) were not included in the final scale. Also, the questions adapted from the SSQ6 and PSS-Fa did not load onto the final factor solution. The strongest components reflected in the development of this scale related to affirming behaviors toward another's (e.g., child's) sexual identity (Brown, 1997). The PPSS-LG was developed for this project to have a high level of face validity because it is more tied to the specific areas that lesbians and gay men may use to assess the affirming and supportive behaviors of their parents. These behaviors demonstrate a level of affirmation regarding the individual's identity, which has been suggested as one of the cornerstones for perceptions of social support. Specifically, the presence of behaviors that illustrate acceptance and support for the understanding of the child's identity thorough open discussions regarding the struggles the child may have had. Other components included acceptance

and affirmation of the child's partner and relationships as seen through behaviors related to including one's partner in family functions and communications.

Evidence for convergent and discriminant validity was demonstrated in study 2. As hypothesized, higher levels of perceived parental social support from the perspective of lesbians and gay men related to moderate levels of social support assessed by the SSQ6 and the PSS-Fa. No associations with impression management (as measured by the BIDR-IM) suggest that the variance is not accounted for by social desirability. Because of this it is believed that the PPSS-LG is an adequate measure of perceived parental social support and it appears to account for similar amounts of variance as the PSS-Fa and SSQ6. Reliability estimates indicate that the PPSS-LG is internally consistent.

Fisher z-transformations were used to address the possible differences between the correlations of each support scale and the PANAS-Na. The correlations coefficients estimated for each were found to not be significantly different across all three. The lack of significant difference across the correlations between the PANAS-NA and all three support variables suggests that each may be affected by negative affect in similar ways. This finding lends additional support to the belief that the PPSS-LG measures, at least, similar aspects of social support as the PSS-Fa and the SSQ6.

Fisher z-transformations also indicated that the PPSS-LG may account for a unique amount of variance when compared to the PSS-Fa and the SSQ6.

Specifically, the significant differences between the correlations of maternal/paternal support (as measured by a self-report one-item) and each of the social support variables suggest that the PPSS-LG accounts for some variance that the PSS-Fa and the SSQ6 may not. Furthermore, this suggests, at present, that the PPSS-LG measures something unique compared to other scales commonly used for evaluation of perceived parental social support. However, these findings are preliminary and further investigation of the validity of this scale is needed to determine what the unique aspects are. These and other limitations are discussed in a later section.

Implications for Future Research

The PPSS-LG has several implications for future research in the area of LGBT issues and experiences. Although this project demonstrated moderate validity and reliability for the PPSS-LG, replication and further study of the PPSS-LG is needed. Specifically, exploring the stability and performing a confirmatory factor analysis will lend further support to the use of this scale as a substitution for a more general social support assessment scale commonly used for LG samples. Additionally, due to the use of self-report measures the need to assess social support with varied research designs and methodologies will help make the validity of this scale stronger. At present the measurement of validity for this scale may be statistically significant, but without a more objective measure of social support it is not clear where the source of the variance accounted for comes from (Hoyt, Warbasse & Chu, 2006). However, a true

objective measure of social support may be difficult to create because the construct of social support is subjective and thus needs to be measured by self-report. Nevertheless, there may be other ways to address the inflated corrletaion coefficients due to common method variance.

One way to establish this may be to examine other constructs related to social support including the level of homonegativity held by one's parents and compare that to scores on the PPSS-LG. This assumes that lower levels of parental homonegativity would be associated with higher levels of parental social support. Other methods might employ qualitative interviews of parents and children who scored differently on the PPSS-LG to determine if other sources of support were overlooked or minimized.

This project has demonstrated the need to continue to develop and refine assessment tools used to evaluate the psychological well-being of lesbians and gay men. Specifically, the continuation and inclusion of LG experience specific scales will allow for a better and more accurate assessment of constructs such as social support (as well as psychological well-being and relationship satisfaction). The more precise we can measure social support for LG individuals the more precisely we can predict the affects of perceived social support for LG individuals. This means that a continuation of the development of scales for specific populations rather than rely solely on adapting general scales that may not accurately reflect the experiences of a specific population (e.g., lesbians and gay men) is needed. Until then the validity of general scales assessing these

constructs may be statistically significant but may not be experientially significant for lesbians and gay men.

Finally, future research dictates the need to examine these variables for bisexual and transgender individuals. Although bisexual and transgender individuals are assumed to have many similarities in their experiences (hence the typical categorization with lesbians and gay men), there are many aspects of social support that may not be similar.

Limitations and Conclusions

Although the PPSS-LG demonstrated some validity, and internal reliability, limitations exist that affects the use of this measure in future research. Additionally, there are implications for future research related to this construct and training in the area of LGBT psychology. One limitation of this study was the way that respondents were asked to rate the perception of acceptance and support of their parents. In order to keep the sample manageable for this project respondents were asked to rate their parents both as a unit regardless if one or both parents were aware of the participants sexual identity. Historically, LG individuals have rated mothers more accepting and supportive over fathers (D'Augelli et al., 1998), thus the implication that when the parents are rated as a unit the specific and true perceptions of support and acceptance may be limited. Thus, the need to separate these out into three separate categories (out to mother, out to father, out to both parents) may reveal different results. This is because the

acceptance and support perceived from one parent may not be the same for the other or a unit.

Similarly both lesbians and gay men were collapsed into one category rather than investigating them as individual groups of respondents. The assumption that both groups of individuals would rate the perception of their parent(s) similarly was necessary to manage the difficulties in obtaining an adequate sample and completion of this project. Because the sample employed in this investigation was so specific (must identify as lesbian or gay and be out to one or both parents) the number of respondents needed to perform the analyses would have been too large to collect at this time. Thus, all individuals were analyzed together rather than performing an EFA for six separate sub-groups (lesbians out to mother only, lesbians out to father only, lesbians out to both parents, gay men out to mother only, gay men out to father only and gay men out to both parents). Although the between-subjects ANOVA's suggested that there were significant differences between lesbians and gay men on the PPSS-LG for Study 1, respondents in Study 2 were not significantly different. These inconsistent results establish the need to assess the potential differences in future research.

Another limitation to this study is related to the generalizabilty to LGBT individuals. Since the sample was accessed though the internet and were primarily college aged individuals this may not be reflected of the experiences of lesbians and gay men not associated with the college population or without

regular internet access. The potential social class differences that may exist between college and non-college samples may present a limitation to the external validity of this scale. Additionally, the focus on lesbians and gay men means that this scale is only intended for those populations and limits the use for bisexual and transgender individuals. The narrow focus of this project on only lesbian's and gay men's perceptions of parental social support was used because the experiences for lesbians and gays are similar enough to assess together. The experiences of bisexual and transgender individuals present enough differences to exclude them from this present research project.

The use of self-report measures could also be considered a limitation to this investigation. Hoyt et al. (2006) discussed the use of self-report scales to establish convergent or criterion-related validity and how self-report measures may not be able to account for all variance. Thus, the validity established in this present project may not be enough or may not be accurate enough to make strong suggestions regarding what the scale actually measures.

The use of a single item measure to assess and compare social support to may also limit the conclusions made regarding the PPSS-LG. Although the correlations coefficients and fisher z-transformations were significant, the subjectivity of a one question response may not accurately reflect the true variance present. Additionally, the construct of social support appears to be more complex than simply asking if one perceives support from another, especially in regards to lesbians and gay men. Nevertheless, based on the

findings described above, the PPSS-LG may be a more accurate assessment of perceived parental social support for lesbians and gay men.

A final limitation is the lack of an adequate stability assessment. Because of the limited pool of respondents available to assess their perceptions of parental support test-retest reliability was not performed on the PPSS-LG. The lack of stability evidence also limits the use of this scale as a means of investigating the full affects of social support for LG individuals.

Despite these limitations this project provides initial reliability and validity for the PPSS-LG. Additionally, the inclusion of LG specific experiences when assessing the affects of perceived parental support is supported by the findings. Continued development of the PPSS-LG will continue to provide support for the need to assess population specific variables when assessing the psychological impact of constructs such as social support.

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Table 1
Scores on the PPSS-LG by Demographics for Respondents in Study 1

Demographic Variable	n	Mean	SD
Race/Ethnicity			
Black/African American	16	3.04	1.25
Euro-American/Caucasian	175	3.14	0.92
Latino/Latina/Hispanic	8	2.39	1.05
Asian/Asian American/Pacific Islander	6	1.95	1.04
Native American	1	4.63	--
Multi/bi-racial	12	3.58	0.91
Non-disclosure/other	3	4.09	0.27
Gender and Sexual Orientation			
Male (Gay)	111	3.28	0.94
Female (Lesbian)	110	2.95	1.01

Table 1
Scores on the PPSS-LG by Demographics for Respondents in Study 1 (*Continued)*

Demographic Variable	n	Mean	SD
Religious Orientation			
Christian	98	3.15	0.96
Jewish	11	3.51	0.92
Agnostic	14	3.08	0.73
Atheist	12	2.86	1.13
Pagan	15	2.99	1.30
Spiritual	8	3.10	1.05
None	49	3.19	0.96
Other	14	2.68	1.01

Note. N=221

Table 2
Scores on the PPSS-LG by Demographics for Respondents in Study 2

Demographic Variable	n	Mean	SD
Race/Ethnicity			
Black/African American	1	3.50	--
Euro-American/Caucasian	55	3.02	0.91
Latino/Latina/Hispanic	4	3.26	0.69
Asian/Asian American/Pacific Islander	2	3.84	0.10
Native American	0	--	--
Multi/bi-racial	1	2.18	--
Non-disclosure/other	1	4.04	--
Gender and Sexual Orientation			
Male (Gay)	35	3.10	0.97
Female (Lesbian)	29	3.04	0.78

Table 2
Scores on the PPSS-LG by Demographics for Respondents in Study 2 (*Continued)*

Demographic Variable	n	Mean	SD
Religious Orientation			
Christian	27	3.08	0.91
Jewish	2	2.16	0.22
Agnostic	7	3.35	0.66
Atheist	1	2.63	--
Pagan	0	--	--
Spiritual	1	3.91	--
None	23	3.01	0.98
Other	4	3.30	0.44

Note. N=64

Table 3
Item Factor Loadings, Communalities, Means and Standard Deviations for the EFA in Study 1

Item	Factor Loading	h^2	M	SD
My parent(s) would value my relationship as much as others in my family.	.857	.734	3.44	1.41
My parents would not be supportive of my gay/lesbian identity.	-.839	.703	3.57	1.40
My parents would be supportive of my actual romantic relationships.	.834	.696	3.61	1.36
My parents would defend my gay/lesbian identity to other family members.	.794	.630	3.28	1.41
My parent(s) would ask about my lesbian and gay friends.	.793	.629	3.46	1.42
My parent(s) would ask about my partner when I speak to them	.765	.585	3.70	1.44
My parent(s) would invite my partner to family functions and celebrations.	.764	.584	3.79	1.41
My parent(s) would not accept my partner as part of the family.	-.759	.576	3.90	1.29
I believe that my parent(s) would be genuinely concerned about my partner's well being.	.758	.574	4.00	1.13
I think my parents would be uncomfortable with my gay/lesbian identity.	-.751	.564	3.05	1.45
My parents change the subject when we discuss my gay/lesbian identity.	-.747	.558	3.28	1.37

Table 3
Item Factor Loadings, Communalities, Means and Standard Deviations for the EFA in Study 1 (*continued*)

Item	Factor Loading	h^2	M	SD
My parent(s) would talk openly about my experiences related to my identity	.737	.543	2.71	1.31
My parents would never admit to friends or associates my gay/lesbian identity.	-.736	.541	3.10	1.35
My parents would never encourage me to change my gay/lesbian identity.	.726	.528	3.33	1.47
When interacting with other family members my parent(s) do not refer to my partner	-.697	.485	3.06	1.36
I would feel comfortable talking with my parents about my relationships	.691	.477	3.45	1.29
My parent(s) would refer to my partner as my "roommate" or "friend" when speaking to others about me	-.643	.413	3.73	1.35
My parent(s) would seek out resources on lesbian and gay concerns to better understand my identity	.627	.393	2.45	1.31
My parent(s) have rarely talk about my identity	-.623	.388	2.80	1.47

Table 3
Item Factor Loadings, Communalities, Means and Standard Deviations for the EFA in Study 1 (*continued*)

Item	Factor Loading	h^2	M	SD
My parent(s) would talk openly about their struggle with understanding my identity development	.575	.331	2.66	1.31
My parent(s) would be actively involved in a community parental support organization (e.g., PFLAG)	.566	.320	1.64	0.98
My parent(s) would regularly attended a parental support meeting (e.g., Parents, Families and Friends of Lesbians and Gays)	.528	.279	1.61	0.97

Note. N=221; EFA= Exploratory Factor Analysis

Table 4
Between subjects ANOVA for PPSS-LG in Study 1

Source	Sum of Squares	*df*	Mean Squares	F
Age	3.33	1	3.33	3.48
Gender/SO	5.74	1	5.74	6.07*
Race/Ethnicity	0.08	1	.079	.081

Note. N=221; * p<.05; SO=Sexual Orientation

Table 5
Scale Means, Standard Deviations and Range for Study 1 and Study 2

Variable	Mean	SD	Range
	Study 1		
PPSS-LG	3.12	0.98	4.95
MS	3.60	1.18	4.00
PS	3.28	1.25	4.00
	Study 2		
PPSS-LG	3.05	0.89	3.58
PSS-FA	1.66	0.30	1.00
SSQ6	3.86	1.31	5.00
PA	2.96	0.92	3.80
NA	1.78	0.85	4.00
IM	4.11	0.68	3.86

Table 5
Scale Means, Standard Deviations and Range for Study 1 and Study 2 (*Continued)*

Variable	Mean	SD	Range
	Study 2		
MS	3.72	1.26	4.00
PS	3.37	1.25	4.00

Note. PPSS-LG = Perceive Parental Support Scale-Lesbian Gay; SSQ6 = Social Support Questionnaire; PSS-Fa = Perceived Social Support from Family; BIDR-IM = Balanced Inventory of Desirable Responding-Impression management; PANAS-NA = Positive and Negative Affect Schedule Negative Affect; PANAS-PA = Positive and Negative Affect Schedule-Positive Affect; Maternal Support = self-report perception of mother's social support; Paternal Support = self-report perception of father's social support

Table 6
Between subjects ANOVA for Study 2

Source	Sum of Squares	*df*	Mean Squares	F
Race/Ethnicity				
PPSS-LG	1.09	1	1.09	1.428
PSS-Fa	0.14	1	0.14	1.540
SSQ6	3.33	1	3.33	1.938
IM	0.23	1	0.23	.475
PA	3.62	1	3.62	4.358*
NA	1.40	1	1.40	1.890

Table 6
Between subjects ANOVA for Study 2 (*Continued)*

Source	Sum of Squares	*df*	Mean Squares	F
Gender/SO				
PPSS-LG	0.19	1	0.19	.239
PSS-Fa	0.04	1	0.04	.443
SSQ6	0.16	1	0.16	.092
IM	0.02	1	0.02	.032
PA	0.60	1	0.60	.675
NA	0.06	1	0.06	.079

Table 6
Between subjects ANOVA for Study 2 (*Continued)*

Source		Sum of Squares	*df*	Mean Squares	F
Age					
	PPSS-LG	0.34	1	0.34	.437
	PSS-Fa	0.10	1	0.10	.111
	SSQ6	11.48	1	11.48	7.280**
	IM	1.31	1	1.31	2.790
	PA	0.02	1	0.02	.024
	NA	0.62	1	0.62	.822

Note. N=64; ** p<.01, * p<.05; PPSS-LG = Perceive Parental Support Scale-Lesbian Gay; SSQ6 = Social Support Questionnaire; PSS-Fa = Perceived Social Support from Family; BIDR-IM = Balanced Inventory of Desirable Responding-Impression management; PANAS-NA = Positive and Negative Affect Schedule Negative Affect; PANAS-PA = Positive and Negative Affect Schedule-Positive Affect; Maternal Support = self-report perception of mother's social support; Paternal Support = self-report perception of father's social support , SO=Sexual Orientation

Table 7
Intercorrelations of Variables in Study 2

Variable	1	2	3	4	5	6	7	8	9
1. PPSS-LG		.572**	-.658**	-.187	-.322**	.170	.763**	.735**	.135
2. SSQ6	.572**		-.570**	.003	-.426	.211	.521**	.608**	-.202
3. PSS-Fa	-.658**	-.570**		.068	.335**	-.224	-.469**	-.494**	.135
4. BIDR-IM	-.187	.003	.068		-.034	.309*	-.056	.078	-.066
5. NA	-.322**	-.426**	.335**	-.034		-.064	-.185	-.346**	.091
6. PA	.170	.211	-.224	.309*	-.064		.221	.079	.112
7. MS	.763**	.521**	-.469**	-.056	-.185	.221		.608**	.204
8. PS	.735**	.608**	-.494**	.078	-.346**	.079	.608**		.153
9. Age	.135	-.202	.135	-.066	.091	.112	.204	.153	

Note. N=64; ** P<.01. PPSS-LG = Perceive Parental Support Scale-Lesbian Gay; SSQ6= Social Support Questionnaire; PSS-Fa = Perceived Social Support from Family; BIDR-IM= Balanced Inventory of Desirable Responding-Impression management; NA = Positive and Negative Affect Schedule Negative Affect; PA= Positive and Negative Affect Schedule-Positive Affect; MS = self-report perception of mother's social support; PS= self-report perception of father's social support

Appendix A

Demographic Questionnaire

BACKGROUND INFORMATION

Directions: Please answer the following questions about yourself.

1. Gender:

___ Male

___ Female

___ Transgender

2. Age: _____

3. Race/Ethnicity: _____

4. Sexual Orientation: _____

5. Religion/Spiritual preference: _____

6. Years of education completed, beginning with Grade 1: (for example, if you completed Grade 1-8 and 4 years of high school, 8+4=12) _____

7. What best describes the size of the community where you live?

___ City (>50,000)

___ Medium sized town (2,500 – 50,000)

___ Small town (< 2,500)

8. What best describes the location where you live?

___ Urban

___ Suburban

___ Rural

9. Do you:

___ Live Alone

___ Live with Partner

10. Length of relationship: _____

11. Place yourself on the following continuum with 5 being out to everyone personally and professionally, 4 being out to family and friends, 3 being out to a few friends/family members, 2 being out to a few close friends, and 1 being totally closeted.

1 2 3 4 5

|----------|----------|----------|----------|

12. Of the following who knows about your sexual identity (check all that apply):

___ Mother

___ Father

___ Both Parents

___ Guardian

___ None

13. Please rate the level of supportiveness of your mother based on the following continuum with 5 being the most supportive, and 1 being the most unsupportive.

1 2 3 4 5

|----------|----------|----------|----------|

14. Please rate the level of supportiveness of your father based on the following continuum with 5 being the most supportive, and 1 being the most unsupportive.

1 2 3 4 5

|----------|----------|----------|----------|

Appendix B

Perceived Parental Social Support Scale-Lesbian Gay (PPSS-LG): Study 1

Instructions: Please use the scale below to respond to the items that follow. Please respond to each item without regard to whether you are out to only one or both of your parents.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree

1. My parents would never encourage me to change my gay/lesbian identity.
2. My parents rarely give me the emotional support I need. (R)
3. My parents would defend my gay/lesbian identity to other family members.
4. I think my parents would be uncomfortable with my gay/lesbian identity. (R)
5. My parents change the subject when we discuss my gay/lesbian identity. (R)
6. My parent(s) have rarely talked about my identity. (R)
7. When I confide in my parents, I get the idea that it makes them uncomfortable. (R)
8. My parents would blame me for being victimized because of my gay/lesbian identity.
9. I feel comfortable confiding in my parents.
10. My parents would not be supportive of my gay/lesbian identity. (R)
11. I share much of my life with my parents.
12. My parents would never admit to friends or associates my gay/lesbian identity. (R)
13. I rely on my parents for emotional support.
14. My parents would be supportive of my actual romantic relationships.
15. I would not feel comfortable talking about my gay/lesbian identity with my parents. (R)
16. My parent(s) would ask about my partner when I speak to them.
17. My parent(s) would invite my partner to family functions and celebrations.
18. My parent(s) would not accept my partner as part of the family.
19. My partner would always be welcome to family functions and celebrations.

20. It is clear that my partner would be considered a part of my family.
21. My parent(s) would refer to my partner as my "roommate" or "friend" when speaking to others about me.
22. My parent(s) would value my relationship as much as others in my family.
23. When interacting with other family members my parent(s) do not refer to my partner. (R)
24. I believe that my parent(s) would be genuinely concerned about my partner's well being.
25. I do not feel I would have to hide my identity from my parent(s).
26. My parent(s) would help pay my bills when I cannot.
27. My parent(s) would identify my partner and I as a couple rather than individually.
28. My relationship would be talked about openly with my parent(s).
29. My parent(s) would seek out resources on lesbian and gay concerns to better understand my identity.
30. My parent(s) would talk openly about their struggle with understanding my identity development
31. My parent(s) would talk openly about my experiences related to my identity.
32. My parent(s) rarely ask about my daily activities. (R)
33. My parent(s) would regularly attend a parental support meeting (e.g., Parents, Families and Friends of Lesbians and Gays).
34. My parent(s) would be actively involved in a community parental support organization (e.g., PFLAG).
35. I would feel comfortable talking with my parents about my relationships.
36. My parent(s) would ask about my lesbian and gay friends.

Appendix C

Informed Consent Form for Internet Collection for Study 1

Project Information and Informed Consent

The goal of this project is to create a scale to measure parental support of Lesbian and Gay (LG) children from the perspective of the LG individual. In order to study this relationship we will be asking participants to provide some demographic information and respond to a series of questions. This survey should take you approximately 15-20 minutes to complete.

As a participant in this research, you should read and understand the following statements:

- Your participation in this research is VOLUNTARY. You are not required to answer every question that might be asked. This means that you are free to stop participating at any point without penalty or loss of privilege, except for benefits directly related to your participation in this study.

- All participant responses will be completely ANONYMOUS. In order to assure anonymity, please do not put your name (or any other identifying information) anywhere on the accompanying questionnaires.

- Because this research is ANONYMOUS, you will not be identified in any presentation or publication of this research. All information you provide will be combined with the data from other respondents and reported as grouped data.

- In order to assure ANONYMITY, while at the same time facilitating our efforts to obtain a high quality data set, we have developed the following procedure:

1. There are no codes or any other information contained on the questionnaire or any other materials associated with it that identifies you as an individual respondent to this survey.
2. However, in order to ensure that our data does not include duplications or multiple submissions from the same individual, we will retrieve and record the IP address of each computer from which data is submitted, along with a time/date stamp that records when the data was submitted. The IP address and time/date stamp information will serve only to identify duplicate or multiple submissions. Although it is conceivable that the IP address could be used to gain access to the location of the computer used to submit data, the information WILL NOT be used in this way. Further, it is nearly impossible to ascertain the identity of the individual using any particular computer. Finally, this is a highly unlikely scenario, and one that is not intended by the research investigators.

- You have a right to be informed of all potential risks associated with your participation in this research. There is no more than minimal risk associated with participation in this survey. Possible psychological risks

are likely to be small and unlikely to occur. You may at any time discontinue participation.

NOTE: Because the research questionnaire requests you to provide information about yourself that you may not want other people to know, there is a risk associated with the unlikely chance that somebody else might view the information you provide. For example, you should protect yourself from the types of occurrences identified below:
1. There is a possibility that your responses could be viewed by an outside party if you do not EXIT/CLOSE your Internet browser (e.g., Netscape Navigator, Internet Explorer, etc.) as soon as you finish responding to the questionnaire because your responses might be visible if you (or someone else) click the BACK button on the browser. In order to ELIMINATE this possibility, you should EXIT/CLOSE the browser as soon as you finish responding to the survey and have submitted your responses.
2. There is a possibility that your responses could be viewed by an outside party if you leave your browser on and leave the computer terminal before finishing the questionnaire (e.g., answer the phone, leave the computer unattended, etc.). In order to avoid inadvertent access to your responses by a third party, do not leave the terminal or stop responding to the questionnaire until you have completely finished and closed the browser.

If you have questions or concerns about this research or your participation, please contact:

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For additional information regarding human participation in research, please feel free to contact the UMC Campus IRB Office at 573-882-9585.

Appendix D

Informed Consent for Live Data Collection

Project Information and Informed Consent

The goal of this project is to create a scale to measure parental support of Lesbian and Gay (LG) children from the perspective of the LG individual. In order to study this relationship we will be asking participants to provide some demographic information and respond to a series of questions. This survey should take you approximately 15-20 minutes to complete.

As a participant in this research, you should read and understand the following statements:

- Your participation in this research is VOLUNTARY. You are not required to answer every question that might be asked. This means that you are free to stop participating at any point without penalty or loss of privilege, except for benefits directly related to your participation in this study.

- All participant responses will be completely CONFEDENTIAL. In order to assure confidentiality, please do not put your name (or any other identifying information) anywhere on the accompanying questionnaires.

- Because this research is CONFEDENTIAL, you will not be identified in any presentation or publication of this research. All information you provide will be combined with the data from other respondents and reported as grouped data.

- In order to assure CONFIDENTIALITY, while at the same time facilitating our efforts to obtain a high quality data set, we have developed the following procedure:

1. All materials will be kept in the custody of the researchers, and will not be viewed by anyone else.

2. There are no codes or any other information contained on the questionnaire or any other materials associated with it that identifies you as an individual respondent to this survey.

- You have a right to be informed of all potential risks associated with your participation in this research. There is no more than minimal risk associated with participation in this survey. Possible psychological risks are likely to be small and unlikely to occur. You may at any time discontinue participation.

NOTE: Because the research questionnaire requests you to provide information about yourself that you may not want other people to know, there is a risk associated with the unlikely chance that somebody else might view the information you provide.
If you have questions or concerns about this research or your participation, please contact:

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For additional information regarding human participation in research, please feel free to contact the UMC Campus IRB Office at 573-882-9585.

Appendix E

Perceived Parental Social Support Scale-Lesbian, Gay (PPSS-LG) : Study 2

Perceived Parental Support Scale-Lesbian/Gay

Instructions: Please use the scale below to respond to the items that follow. Circle the number that corresponds to your agreement to that statement. Please respond to each item without regard to whether you are out to only one or both of your parents.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree

1. My parents would never encourage me to change my gay/lesbian identity.

1 2 3 4 5

|----------|----------|----------|----------|

2. My parents would defend my gay/lesbian identity to other family members.

1 2 3 4 5

|----------|----------|----------|----------|

3. I think my parents would be uncomfortable with my gay/lesbian identity.

1 2 3 4 5

|----------|----------|----------|----------|

4. My parents change the subject when we discuss my gay/lesbian identity.

1 2 3 4 5

|----------|----------|----------|----------|

5. My parent(s) have rarely talk about my identity

1 2 3 4 5

|----------|----------|----------|----------|

6. My parents would not be supportive of my gay/lesbian identity.

1 2 3 4 5

|----------|----------|----------|----------|

7. My parents would never admit to friends or associates my gay/lesbian identity.

1 2 3 4 5

|----------|----------|----------|----------|

8. My parents would be supportive of my actual romantic relationships.

1 2 3 4 5

|----------|----------|----------|----------|

9. My parent(s) would ask about my partner when I speak to them

1 2 3 4 5

|----------|----------|----------|----------|

10. My parent(s) would invite my partner to family functions and celebrations

1 2 3 4 5

|----------|----------|----------|----------|

11. My parent(s) would not accept my partner as part of the family

1 2 3 4 5

|----------|----------|----------|----------|

12. My parent(s) would refer to my partner as my "roommate" or "friend" when speaking to others about me

1 2 3 4 5

|----------|----------|----------|----------|

13. My parent(s) would value my relationship as much as others in my family

1 2 3 4 5

|----------|----------|----------|----------|

14. When interacting with other family members my parent(s) do not refer to my partner

1 2 3 4 5

|----------|----------|----------|----------|

15. I believe that my parent(s) would be genuinely concerned about my partner's well being.

1 2 3 4 5

|----------|----------|----------|----------|

16. My parent(s) would seek out resources on lesbian and gay concerns to better understand my identity

1 2 3 4 5

|----------|----------|----------|----------|

17. My parent(s) would talk openly about their struggle with understanding my identity development

1 2 3 4 5

|----------|----------|----------|----------|

18. My parent(s) would talk openly about my experiences related to my identity

1 2 3 4 5

|----------|----------|----------|----------|

19. My parent(s) would regularly attended a parental support meeting (e.g., Parents, Families and Friends of Lesbians and Gays)

1 2 3 4 5

|----------|----------|----------|----------|

20. My parent(s) would be actively involved in a community parental support organization (e.g., PFLAG)

1 2 3 4 5

|----------|----------|----------|----------|

21. I would feel comfortable talking with my parents about my relationships

1 2 3 4 5

|----------|----------|----------|----------|

22. My parent(s) would ask about my lesbian and gay friends

1 2 3 4 5

|----------|----------|----------|----------|

Appendix F

Perceived Social Support from Family (PSS-Fa)

Directions: The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with their family of origin. For each statement there are three possible answers: Yes, No, Don't Know. Please circle the answer you choose for each item.

Yes No Don't Know	1. My family gives me the moral support I need.
Yes No Don't Know	2. I get good ideas about how to do things or make things from my family.
Yes No Don't Know	3. Most other people are closer to their family than I am.
Yes No Don't Know	4. When I confide in the members of my family who are closest to me, I get the idea that it makes them uncomfortable.
Yes No Don't Know	5. My family enjoys hearing about what I think.
Yes No Don't Know	6. Members of my family share many of my interests.
Yes No Don't Know	7. Certain members of my family come to me when they have problems or need advice.
Yes No Don't Know	8. I rely on my family for emotional support.
Yes No Don't Know	9. There is a member of my family I could go to if I were just feeling down, without feeling funny about it later.
Yes No Don't Know	10. My family and I are very open about what we think about things.
Yes No Don't Know	11. My family is sensitive to my personal needs.
Yes No Don't Know	12. Members of my family come to me for emotional support.
Yes No Don't Know	13. Members of my family are good at helping me solve problems.
Yes No Don't Know	14. I have a deep sharing relationship with a number of members of my family.
Yes No Don't Know	15. Members of my family get good ideas about how to do things or make things for me.
Yes No Don't Know	16. When I confide in members of my family, it makes me uncomfortable.
Yes No Don't Know	17. Members of my family seek me out for companionship.
Yes No Don't Know	18. I think that my family feels that I'm good at helping them solve problems.
Yes No Don't Know	19. I don't have a relationship with a member of my family that is as close as other people's relationships with family members.
Yes No Don't Know	20. I wish my family were much different.

Appendix G

Social Support Questionnaire

Social Support Questionnaire Short Form (SSQ6)

For each of the statements below rate your satisfaction with that support for each person(s) listed. Rate each statement on a 6-point Likert-type scale where a 1 would indicate the least satisfied and a 6 being the most satisfied. Please circle the number for the answer you choose for each item.

1. Whom can you really count on to distract you from your worries when you feel under stress?

Father

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Mother

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Both Parents

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

2. Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

Mother

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Father

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Both Parents

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

3. Who accepts you totally, including your worst and your best points?

Mother

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Father

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Both Parents

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

4. Whom can you really count on to care about you, regardless of what is happening to you?

Mother

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Father

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Both Parents

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

5. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

Mother

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Father

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Both Parents

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

6. Whom can you count on to console you when you are very upset?

Mother

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Father

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Both Parents

1 2 3 4 5 6

|----------|----------|----------|----------|----------|

Appendix H

Balanced Inventory of Desirable Responding –Impression Management

(BIDR-IM)

Instructions: Using the scale below as a guide, click the button for the number below each statement to indicate how much you agree with it. Please circle the number for the answer you choose for each item. Please circle the number for the answer you choose for each item.

1	2	3	4	5	6	7
Not True			Somewhat True			Very True

1. I sometimes tell lies if I have to.

1 2 3 4 5 6 7

|----------|----------|----------|----------|----------|----------|

2. I never cover up my mistakes.

1 2 3 4 5 6 7

|----------|----------|----------|----------|----------|----------|

3. There have been occasions when I have taken advantage of someone.

1 2 3 4 5 6 7

|----------|----------|----------|----------|----------|----------|

4. I never swear.

1 2 3 4 5 6 7

|----------|----------|----------|----------|----------|----------|

5. I sometimes try to get even rather than forgive and forget.

1 2 3 4 5 6 7

|----------|----------|----------|----------|----------|----------|

6. I always obey laws, even if I'm unlikely to get caught.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

7. I have said something bad about a friend behind his or her back.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

8. When I hear people talking privately, I avoid listening.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

9. I have received too much change from a salesperson without telling him or her.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

10. I always declare everything at customs.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

11. When I was young I sometimes stole things.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

12. I have never dropped litter on the street.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

13. I sometimes drive faster than the speed limit.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

14. I never read sexy books or magazines.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

15. I have done things that don't I don't tell other people about.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

16. I never take things that don't belong to me.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

17. I have taken sick-leave from work or school even though I wasn't really sick.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

18. I have never damaged a library book or store merchandise without reporting it.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

19. I have some pretty awful habits.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

20. I don't gossip about other people's business.

1 2 3 4 5 6 7

|---|---|---|---|---|---|

Appendix I

Positive and Negative Affect Schedule (PANAS)

Instructions: This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now, that is, at the present moment. Use the following scale to record your answers. Please circle the number for the answer you choose for each item.

1	2	3	4	5
Very Slightly or not at all	A little	Moderately	Quite a bit	Extremely

1. Interested

1 2 3 4 5

|----------|----------|----------|----------|

2. Distressed

1 2 3 4 5

|----------|----------|----------|----------|

3. Excited

1 2 3 4 5

|----------|----------|----------|----------|

4. Upset

1 2 3 4 5

|----------|----------|----------|----------|

5. Strong

1 2 3 4 5

|----------|----------|----------|----------|

6. Guilty

1 2 3 4 5

|---|---|---|---|

7. Scared

1 2 3 4 5

|---|---|---|---|

8. Hostile

1 2 3 4 5

|---|---|---|---|

9. Enthusiastic

1 2 3 4 5

|---|---|---|---|

10. Proud

1 2 3 4 5

|---|---|---|---|

11. Irritable

1 2 3 4 5

|---|---|---|---|

12. Alert

1 2 3 4 5

|---|---|---|---|

13. Ashamed

1 2 3 4 5

|---|---|---|---|

14. Inspired

1 2 3 4 5

|----------|----------|----------|----------|

15. Nervous

1 2 3 4 5

|----------|----------|----------|----------|

16. Determined

1 2 3 4 5

|----------|----------|----------|----------|

17. Attententive

1 2 3 4 5

|----------|----------|----------|----------|

18. Jittery

1 2 3 4 5

|----------|----------|----------|----------|

19. Active

1 2 3 4 5

|----------|----------|----------|----------|

20. Afraid

1 2 3 4 5

|----------|----------|----------|----------|

Appendix J

Email Notices for Study 1

"Email to LGBT center Directors"

Greetings:

My name is Sean Clouse and I am a doctoral student in counseling Psychology at the University of Missouri-Columbia working on a scale construction project for my dissertation under the direction of Dr. Roger Worthington. The goal of this project is to assess parental support of lesbian and gay individuals. We are seeking to examine the important qualities that lesbian and gay individuals use to identify support from their parents. I am writing to you as a director of a LGBT center in the hope that you would be willing to forward an email about this research project to the LGBT listserv at your university. This project has been approved by the MU Campus IRB and for additional information, please feel free to contact the MU Campus IRB Office at 573-882-9585.

If you are willing to do this, you can cut this part of the email out and forward what follows.

Thank you for your time and consideration,

Sean Travis Clouse, MA
Doctoral Candidate
Department of Educational, School and Counseling Psychology
16 Hill Hall
University of Missouri-Columbia

Appendix K

Email to participants-Study 1

"Email to Participants"

Greetings:

My name is Sean Clouse and I am a doctoral student in counseling Psychology at the University of Missouri-Columbia working on a scale construction project for my dissertation under the direction of Dr. Roger Worthington We are seeking to examine the important qualities that lesbian and gay individuals use to identify support from their parents. I am requesting your participation in completing a series of questionnaires which should only take approximately 25-35 minutes. This project has been approved by the MU Campus IRB and for additional information, please feel free to contact the MU Campus IRB Office at 573-882-9585.

Your participation in this research is VOLUNTARY and ANONYMOUS. This means that you may quit at anytime and will not be individually identified in any report from this research.

If you decide to participate, please go to the following URL now and read the informed consent form. Then complete the online survey. It's that easy!!

Please click the following link to participate:
www.missouri.edu/~stc839/study1

Sean Travis Clouse, MA
Doctoral Candidate
Department of Educational, School and Counseling Psychology
16 Hill Hall
University of Missouri-Columbia

Appendix J

Email Notice for Study 2

Subject: Parental Support for Gay Men and Lesbians

Greetings:

Many gay and lesbian students come out during the college years. During the coming out process, parental social support often becomes a major concern. I am conducting research to learn more about the unique aspects of parental social support for gay men and lesbians.

I am writing to request your assistance by forwarding the e-mail below to members of your LGBT listserve. If you are willing to do this, you can cut this part of the email out and forward what follows.

Thank you for your time and consideration,

Sean Travis Clouse, MA
Doctoral Candidate
Department of Educational, School and Counseling Psychology
16 Hill Hall
University of Missouri-Columbia

****

Appendix K
Email Notice to Participants in Study 2

Greetings:

I am conducting research to learn more about the unique aspects of parental social support for gay men and lesbians. I am requesting your participation in completing a brief series of questionnaires which should only take approximately 15-25 minutes.

This project has been approved by the MU Campus IRB and for additional information, please feel free to contact the MU Campus IRB Office at 573-882-9585. Your participation in this research is VOLUNTARY and ANONYMOUS. This means that you may quit at anytime and will not be individually identified in any report from this research.

If you decide to participate, please go to the following URL now and read the informed consent form. Then complete the online survey. It's that easy!!

Please click the following link to participate:

www.missouri.edu/~stc839/study2

Sean Travis Clouse, MA
Doctoral Candidate
Department of Educational, School and Counseling Psychology
16 Hill Hall
University of Missouri-Columbia

Appendix L-1
Factor Analysis 1

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg02	2.43	1.391	220	4
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg07	3.08	1.389	220	4
ppsslg08	2.18	1.414	221	3
ppsslg09	3.22	1.276	221	3
ppsslg10	2.43	1.404	220	4
ppsslg11	3.25	1.318	218	6
ppsslg12	2.90	1.351	220	4
ppsslg13	2.92	1.361	219	5
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg19	3.85	1.319	218	6
ppsslg20	3.67	1.375	218	6
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg26	3.98	1.196	217	7
ppsslg27	3.36	1.310	215	9
ppsslg28	3.53	1.333	216	8
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7

ppsslg32	2.25	1.318	217	7
ppsslg33	1.61	.968	216	8
ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.952
Bartlett's Test of Sphericity	**Approx. Chi-Square**	6080.702
	df	630
	Sig.	.000

Communalities

	Initial	**Extraction**
ppsslg01	.614	.541
ppsslg02	.549	.450
ppsslg03	.723	.694
ppsslg04	.665	.608
ppsslg05	.712	.635
ppsslg06	.603	.514
ppsslg07	.701	.680
ppsslg08	.579	.480
ppsslg09	.604	.545
ppsslg10	.803	.781
ppsslg11	.679	.653
ppsslg12	.639	.535
ppsslg13	.592	.638
ppsslg14	.809	.751
ppsslg15	.530	.532
ppsslg16	.739	.659
ppsslg17	.840	.751
ppsslg18	.673	.647
ppsslg19	.781	.712
ppsslg20	.795	.732
ppsslg21	.576	.461
ppsslg22	.804	.762

ppsslg23	.626	.498
ppsslg24	.759	.719
ppsslg25	.514	.414
ppsslg26	.322	.230
ppsslg27	.742	.680
ppsslg28	.734	.707
ppsslg29	.535	.482
ppsslg30	.689	.575
ppsslg31	.798	.721
ppsslg32	.467	.369
ppsslg33	.828	.795
ppsslg34	.841	.827
ppsslg35	.680	.715
ppsslg36	.707	.640
Extraction Method: Principal Axis Factoring.		

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	17.984	49.956	49.956	17.624	48.955	48.955	15.248
2	2.160	5.999	55.955	1.866	5.185	54.139	8.764
3	1.598	4.439	60.394	1.169	3.246	57.386	9.110
4	1.182	3.282	63.676	.770	2.139	59.524	10.719
5	1.109	3.079	66.756	.705	1.958	61.482	4.352
6	.972	2.700	69.456				
7	.867	2.409	71.865				
8	.805	2.237	74.102				
9	.748	2.078	76.180				
10	.718	1.996	78.175				
11	.602	1.672	79.848				
12	.597	1.659	81.506				
13	.529	1.469	82.975				
14	.484	1.345	84.321				
15	.465	1.292	85.612				
16	.426	1.184	86.797				

17	.401	1.114	87.911				
18	.383	1.065	88.976				
19	.373	1.037	90.013				
20	.355	.986	90.999				
21	.312	.867	91.866				
22	.309	.858	92.723				
23	.292	.812	93.536				
24	.276	.766	94.302				
25	.253	.704	95.006				
26	.247	.687	95.692				
27	.242	.673	96.365				
28	.206	.573	96.938				
29	.190	.527	97.466				
30	.172	.478	97.944				
31	.163	.454	98.398				
32	.151	.420	98.818				
33	.139	.386	99.205				
34	.117	.326	99.531				
35	.092	.255	99.786				
36	.077	.214	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)

	Factor				
	1	**2**	**3**	**4**	**5**
ppsslg19	.869				
ppsslg17	.731				
ppsslg18	-.728				
ppsslg22	.703				
ppsslg10	-.694				
ppsslg24	.687				
ppsslg20	.675				
ppsslg14	.666				

ppsslg03	.659				
ppsslg01	.575				
ppsslg16	.552			-.340	
ppsslg27	.546				
ppsslg04	-.510				.319
ppsslg12	-.507				
ppsslg23	-.486				
ppsslg21	-.462				
ppsslg08	-.457		-.362		
ppsslg36	.406				
ppsslg33		.962			
ppsslg34		.958			
ppsslg30		.617			
ppsslg31		.488			
ppsslg29		.482			
ppsslg13			.823		
ppsslg11			.729		
ppsslg32			-.455		
ppsslg26			.398		
ppsslg09			.396		
ppsslg02			-.393		
ppsslg35				-.699	
ppsslg15				.693	
ppsslg25				-.475	
ppsslg28	.426			-.456	
ppsslg06				.374	.357
ppsslg05				.348	.312
ppsslg07	-.301				.396

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 12 iterations.

Factor Correlation Matrix

Factor	**1**	**2**	**3**	**4**	**5**
1	1.000	.466	.537	-.632	-.306
2	.466	1.000	.406	-.409	-.350

3	.537	.406	1.000	-.438	-.227
4	-.632	-.409	-.438	1.000	.266
5	-.306	-.350	-.227	.266	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-2
Factor Analysis 2

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg02	2.43	1.391	220	4
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
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ppsslg12	2.90	1.351	220	4
ppsslg13	2.92	1.361	219	5
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg19	3.85	1.319	218	6
ppsslg20	3.67	1.375	218	6
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg26	3.98	1.196	217	7
ppsslg27	3.36	1.310	215	9
ppsslg28	3.53	1.333	216	8
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7
ppsslg32	2.25	1.318	217	7

ppsslg33	1.61	.968	216	8
ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.952
Bartlett's Test of Sphericity	**Approx. Chi-Square**	6080.702
	df	630
	Sig.	.000

Communalities

	Initial	**Extraction**
ppsslg01	.614	.529
ppsslg02	.549	.450
ppsslg03	.723	.626
ppsslg04	.665	.559
ppsslg05	.712	.643
ppsslg06	.603	.529
ppsslg07	.701	.648
ppsslg08	.579	.440
ppsslg09	.604	.515
ppsslg10	.803	.730
ppsslg11	.679	.655
ppsslg12	.639	.530
ppsslg13	.592	.642
ppsslg14	.809	.752
ppsslg15	.530	.396
ppsslg16	.739	.623
ppsslg17	.840	.711
ppsslg18	.673	.649
ppsslg19	.781	.711
ppsslg20	.795	.723
ppsslg21	.576	.429
ppsslg22	.804	.753
ppsslg23	.626	.498

ppsslg24	.759	.715
ppsslg25	.514	.382
ppsslg26	.322	.221
ppsslg27	.742	.681
ppsslg28	.734	.681
ppsslg29	.535	.484
ppsslg30	.689	.570
ppsslg31	.798	.724
ppsslg32	.467	.368
ppsslg33	.828	.780
ppsslg34	.841	.794
ppsslg35	.680	.562
ppsslg36	.707	.640
Extraction Method: Principal Axis Factoring.		

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	17.984	49.956	49.956	17.602	48.894	48.894	16.520
2	2.160	5.999	55.955	1.851	5.141	54.034	8.292
3	1.598	4.439	60.394	1.162	3.227	57.261	9.881
4	1.182	3.282	63.676	.730	2.027	59.288	3.863
5	1.109	3.079	66.756				
6	.972	2.700	69.456				
7	.867	2.409	71.865				
8	.805	2.237	74.102				
9	.748	2.078	76.180				
10	.718	1.996	78.175				
11	.602	1.672	79.848				
12	.597	1.659	81.506				
13	.529	1.469	82.975				
14	.484	1.345	84.321				
15	.465	1.292	85.612				
16	.426	1.184	86.797				
17	.401	1.114	87.911				

18	.383	1.065	88.976				
19	.373	1.037	90.013				
20	.355	.986	90.999				
21	.312	.867	91.866				
22	.309	.858	92.723				
23	.292	.812	93.536				
24	.276	.766	94.302				
25	.253	.704	95.006				
26	.247	.687	95.692				
27	.242	.673	96.365				
28	.206	.573	96.938				
29	.190	.527	97.466				
30	.172	.478	97.944				
31	.163	.454	98.398				
32	.151	.420	98.818				
33	.139	.386	99.205				
34	.117	.326	99.531				
35	.092	.255	99.786				
36	.077	.214	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)				
	Factor			
	1	**2**	**3**	**4**
ppsslg19	.940			
ppsslg17	.916			
ppsslg20	.839			
ppsslg14	.824			
ppsslg18	-.822			
ppsslg16	.798			
ppsslg22	.787			
ppsslg24	.749			
ppsslg28	.744			

ppsslg10	-.737			
ppsslg27	.695			
ppsslg03	.654			
ppsslg01	.633			
ppsslg12	-.621			
ppsslg23	-.617			
ppsslg04	-.584			
ppsslg25	.564			
ppsslg36	.555			
ppsslg05	-.521			.357
ppsslg35	.519			
ppsslg21	-.512			
ppsslg07	-.464			.318
ppsslg15	-.435			
ppsslg08	-.402		-.347	
ppsslg33		.927		
ppsslg34		.907		
ppsslg30		.608		
ppsslg31		.506		
ppsslg29		.483		
ppsslg13			.865	
ppsslg11			.760	
ppsslg32			-.463	
ppsslg09			.410	
ppsslg02			-.405	
ppsslg26			.396	
ppsslg06				.441

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 9 iterations.

Factor Correlation Matrix

Factor	**1**	**2**	**3**	**4**
1	1.000	.490	.610	-.331
2	.490	1.000	.397	-.283
3	.610	.397	1.000	-.213

4	-.331	-.283	-.213	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-3
Factor Analysis 3

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg02	2.43	1.391	220	4
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg07	3.08	1.389	220	4
ppsslg08	2.18	1.414	221	3
ppsslg09	3.22	1.276	221	3
ppsslg10	2.43	1.404	220	4
ppsslg11	3.25	1.318	218	6
ppsslg12	2.90	1.351	220	4
ppsslg13	2.92	1.361	219	5
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg19	3.85	1.319	218	6
ppsslg20	3.67	1.375	218	6
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg26	3.98	1.196	217	7
ppsslg27	3.36	1.310	215	9
ppsslg28	3.53	1.333	216	8
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7

ppsslg32	2.25	1.318	217	7
ppsslg33	1.61	.968	216	8
ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.952
Bartlett's Test of Sphericity	**Approx. Chi-Square**	6080.702
	df	630
	Sig.	.000

Communalities

	Initial	**Extraction**
ppsslg01	.614	.526
ppsslg02	.549	.450
ppsslg03	.723	.626
ppsslg04	.665	.553
ppsslg05	.712	.564
ppsslg06	.603	.403
ppsslg07	.701	.596
ppsslg08	.579	.428
ppsslg09	.604	.508
ppsslg10	.803	.731
ppsslg11	.679	.656
ppsslg12	.639	.531
ppsslg13	.592	.648
ppsslg14	.809	.749
ppsslg15	.530	.339
ppsslg16	.739	.623
ppsslg17	.840	.696
ppsslg18	.673	.626
ppsslg19	.781	.664
ppsslg20	.795	.713
ppsslg21	.576	.431
ppsslg22	.804	.748

ppsslg23	.626	.498
ppsslg24	.759	.657
ppsslg25	.514	.350
ppsslg26	.322	.173
ppsslg27	.742	.681
ppsslg28	.734	.665
ppsslg29	.535	.490
ppsslg30	.689	.581
ppsslg31	.798	.712
ppsslg32	.467	.357
ppsslg33	.828	.691
ppsslg34	.841	.712
ppsslg35	.680	.526
ppsslg36	.707	.641
Extraction Method: Principal Axis Factoring.		

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	17.984	49.956	49.956	17.582	48.839	48.839	16.846
2	2.160	5.999	55.955	1.809	5.024	53.863	8.259
3	1.598	4.439	60.394	1.150	3.195	57.057	9.851
4	1.182	3.282	63.676				
5	1.109	3.079	66.756				
6	.972	2.700	69.456				
7	.867	2.409	71.865				
8	.805	2.237	74.102				
9	.748	2.078	76.180				
10	.718	1.996	78.175				
11	.602	1.672	79.848				
12	.597	1.659	81.506				
13	.529	1.469	82.975				
14	.484	1.345	84.321				
15	.465	1.292	85.612				
16	.426	1.184	86.797				

17	.401	1.114	87.911				
18	.383	1.065	88.976				
19	.373	1.037	90.013				
20	.355	.986	90.999				
21	.312	.867	91.866				
22	.309	.858	92.723				
23	.292	.812	93.536				
24	.276	.766	94.302				
25	.253	.704	95.006				
26	.247	.687	95.692				
27	.242	.673	96.365				
28	.206	.573	96.938				
29	.190	.527	97.466				
30	.172	.478	97.944				
31	.163	.454	98.398				
32	.151	.420	98.818				
33	.139	.386	99.205				
34	.117	.326	99.531				
35	.092	.255	99.786				
36	.077	.214	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)

	Factor		
	1	**2**	**3**
ppsslg19	.926		
ppsslg17	.926		
ppsslg20	.857		
ppsslg14	.854		
ppsslg16	.832		
ppsslg18	-.828		
ppsslg22	.816		
ppsslg28	.803		

ppsslg10	-.776		
ppsslg24	.740		
ppsslg27	.732		
ppsslg03	.687		
ppsslg12	-.662		
ppsslg01	.659		
ppsslg23	-.653		
ppsslg04	-.637		
ppsslg25	.617		
ppsslg05	-.604		
ppsslg36	.595		
ppsslg35	.585		
ppsslg21	-.551		
ppsslg07	-.544		
ppsslg15	-.502		
ppsslg08	-.414		-.324
ppsslg06	-.380		
ppsslg33		.849	
ppsslg34		.834	
ppsslg30		.654	
ppsslg31		.578	
ppsslg29		.503	
ppsslg13			.871
ppsslg11			.757
ppsslg32			-.443
ppsslg09			.411
ppsslg02			-.395
ppsslg26			.358
Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.			
a Rotation converged in 5 iterations.			

Factor Correlation Matrix

Factor	**1**	**2**	**3**
1	1.000	.509	.624
2	.509	1.000	.386

3	.624	.386	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-4
Factor Analysis 4

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg02	2.43	1.391	220	4
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg07	3.08	1.389	220	4
ppsslg09	3.22	1.276	221	3
ppsslg10	2.43	1.404	220	4
ppsslg11	3.25	1.318	218	6
ppsslg12	2.90	1.351	220	4
ppsslg13	2.92	1.361	219	5
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg19	3.85	1.319	218	6
ppsslg20	3.67	1.375	218	6
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg27	3.36	1.310	215	9
ppsslg28	3.53	1.333	216	8
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7
ppsslg32	2.25	1.318	217	7
ppsslg33	1.61	.968	216	8

ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.953
Bartlett's Test of Sphericity	**Approx. Chi-Square**	5858.260
	df	561
	Sig.	.000

Communalities

	Initial	**Extraction**
ppsslg01	.613	.526
ppsslg02	.543	.441
ppsslg03	.717	.624
ppsslg04	.654	.551
ppsslg05	.706	.565
ppsslg06	.593	.416
ppsslg07	.697	.595
ppsslg09	.591	.512
ppsslg10	.795	.725
ppsslg11	.677	.676
ppsslg12	.631	.531
ppsslg13	.573	.633
ppsslg14	.809	.749
ppsslg15	.524	.343
ppsslg16	.728	.626
ppsslg17	.838	.699
ppsslg18	.670	.628
ppsslg19	.781	.665
ppsslg20	.787	.716
ppsslg21	.576	.426
ppsslg22	.789	.747
ppsslg23	.611	.493
ppsslg24	.754	.642
ppsslg25	.503	.349

ppsslg27	.735	.680
ppsslg28	.732	.665
ppsslg29	.533	.489
ppsslg30	.689	.578
ppsslg31	.798	.715
ppsslg32	.456	.329
ppsslg33	.827	.729
ppsslg34	.841	.731
ppsslg35	.679	.535
ppsslg36	.707	.640
Extraction Method: Principal Axis Factoring.		

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	17.475	51.398	51.398	17.081	50.237	50.237	16.409
2	2.156	6.340	57.738	1.817	5.343	55.580	8.125
3	1.465	4.310	62.048	1.072	3.152	58.731	9.123
4	1.135	3.338	65.386				
5	1.007	2.961	68.348				
6	.884	2.601	70.948				
7	.804	2.366	73.314				
8	.783	2.303	75.618				
9	.712	2.094	77.712				
10	.609	1.790	79.502				
11	.588	1.730	81.232				
12	.504	1.483	82.715				
13	.484	1.423	84.138				
14	.478	1.405	85.544				
15	.432	1.271	86.814				
16	.409	1.203	88.018				
17	.381	1.120	89.137				
18	.375	1.103	90.241				
19	.326	.959	91.200				
20	.315	.925	92.125				

21	.296	.870	92.995				
22	.288	.847	93.841				
23	.261	.768	94.609				
24	.247	.727	95.337				
25	.244	.717	96.054				
26	.217	.639	96.692				
27	.191	.561	97.253				
28	.175	.514	97.767				
29	.164	.483	98.250				
30	.160	.469	98.720				
31	.139	.410	99.129				
32	.123	.361	99.490				
33	.095	.280	99.770				
34	.078	.230	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)

	Factor		
	1	**2**	**3**
ppsslg19	.936		
ppsslg17	.927		
ppsslg14	.874		
ppsslg20	.861		
ppsslg18	-.843		
ppsslg22	.825		
ppsslg16	.823		
ppsslg28	.802		
ppsslg10	-.793		
ppsslg24	.780		
ppsslg27	.752		
ppsslg03	.694		
ppsslg01	.668		
ppsslg12	-.653		

ppsslg04	-.629		
ppsslg23	-.628		
ppsslg25	.616		
ppsslg36	.610		
ppsslg05	-.592		
ppsslg35	.587		
ppsslg21	-.537		
ppsslg07	-.534		
ppsslg15	-.495		
ppsslg06	-.364		
ppsslg33		.885	
ppsslg34		.853	
ppsslg30		.626	
ppsslg31		.540	.321
ppsslg29		.496	
ppsslg13			.845
ppsslg11			.767
ppsslg09	.303		.420
ppsslg32			-.377
ppsslg02			-.373

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 5 iterations.

Factor Correlation Matrix

Factor	**1**	**2**	**3**
1	1.000	.512	.604
2	.512	1.000	.407
3	.604	.407	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-5
Factor Analysis 5

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg02	2.43	1.391	220	4
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg07	3.08	1.389	220	4
ppsslg10	2.43	1.404	220	4
ppsslg11	3.25	1.318	218	6
ppsslg12	2.90	1.351	220	4
ppsslg13	2.92	1.361	219	5
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg19	3.85	1.319	218	6
ppsslg20	3.67	1.375	218	6
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg27	3.36	1.310	215	9
ppsslg28	3.53	1.333	216	8
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7
ppsslg32	2.25	1.318	217	7
ppsslg33	1.61	.968	216	8

ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.952
Bartlett's Test of Sphericity	**Approx. Chi-Square**	5693.616
	df	528
	Sig.	.000

Communalities

	Initial	**Extraction**
ppsslg01	.608	.528
ppsslg02	.543	.452
ppsslg03	.715	.624
ppsslg04	.654	.553
ppsslg05	.702	.568
ppsslg06	.588	.413
ppsslg07	.693	.591
ppsslg10	.792	.724
ppsslg11	.661	.645
ppsslg12	.626	.532
ppsslg13	.568	.634
ppsslg14	.804	.748
ppsslg15	.523	.344
ppsslg16	.722	.626
ppsslg17	.836	.698
ppsslg18	.670	.628
ppsslg19	.780	.666
ppsslg20	.786	.716
ppsslg21	.572	.430
ppsslg22	.789	.747
ppsslg23	.611	.494
ppsslg24	.754	.646
ppsslg25	.492	.348
ppsslg27	.735	.681

ppsslg28	.731	.664
ppsslg29	.531	.491
ppsslg30	.689	.587
ppsslg31	.795	.714
ppsslg32	.455	.333
ppsslg33	.827	.723
ppsslg34	.841	.727
ppsslg35	.679	.539
ppsslg36	.703	.641
Extraction Method: Principal Axis Factoring.		

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	17.027	51.598	51.598	16.635	50.409	50.409	16.043
2	2.145	6.501	58.100	1.807	5.475	55.884	7.746
3	1.415	4.288	62.387	1.010	3.062	58.946	8.294
4	1.134	3.437	65.824				
5	.988	2.994	68.818				
6	.884	2.678	71.496				
7	.801	2.426	73.922				
8	.714	2.165	76.087				
9	.699	2.119	78.206				
10	.607	1.839	80.045				
11	.588	1.782	81.827				
12	.494	1.497	83.324				
13	.481	1.458	84.782				
14	.446	1.351	86.134				
15	.428	1.297	87.431				
16	.381	1.155	88.586				
17	.375	1.137	89.723				
18	.334	1.012	90.735				
19	.323	.978	91.713				
20	.301	.911	92.625				
21	.296	.896	93.520				

22	.279	.845	94.365				
23	.249	.754	95.119				
24	.245	.741	95.861				
25	.223	.676	96.536				
26	.196	.595	97.131				
27	.179	.542	97.673				
28	.165	.501	98.175				
29	.160	.484	98.659				
30	.146	.443	99.102				
31	.123	.372	99.474				
32	.095	.289	99.763				
33	.078	.237	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)

	Factor		
	1	**2**	**3**
ppsslg19	.937		
ppsslg17	.913		
ppsslg14	.876		
ppsslg20	.860		
ppsslg18	-.836		
ppsslg22	.831		
ppsslg10	-.813		
ppsslg16	.808		
ppsslg28	.801		
ppsslg24	.769		
ppsslg27	.752		
ppsslg03	.714		
ppsslg01	.676		
ppsslg12	-.655		
ppsslg04	-.646		
ppsslg23	-.634		

ppsslg25	.618		
ppsslg36	.614		
ppsslg05	-.592		
ppsslg35	.584		
ppsslg07	-.554		
ppsslg21	-.553		
ppsslg15	-.494		
ppsslg06	-.376		
ppsslg33		.872	
ppsslg34		.842	
ppsslg30		.627	
ppsslg31		.542	.312
ppsslg29		.492	
ppsslg13			.829
ppsslg11			.719
ppsslg02			-.388
ppsslg32			-.377

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 5 iterations.

Factor Correlation Matrix

Factor	**1**	**2**	**3**
1	1.000	.505	.586
2	.505	1.000	.379
3	.586	.379	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-6
Factor Analysis 6

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg02	2.43	1.391	220	4
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg07	3.08	1.389	220	4
ppsslg10	2.43	1.404	220	4
ppsslg11	3.25	1.318	218	6
ppsslg12	2.90	1.351	220	4
ppsslg13	2.92	1.361	219	5
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg19	3.85	1.319	218	6
ppsslg20	3.67	1.375	218	6
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg27	3.36	1.310	215	9
ppsslg28	3.53	1.333	216	8
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7
ppsslg33	1.61	.968	216	8
ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7

ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.952
Bartlett's Test of Sphericity	**Approx. Chi-Square**	5584.661
	df	496
	Sig.	.000

Communalities		
	Initial	**Extraction**
ppsslg01	.606	.529
ppsslg02	.542	.451
ppsslg03	.715	.625
ppsslg04	.653	.552
ppsslg05	.699	.571
ppsslg06	.574	.413
ppsslg07	.693	.591
ppsslg10	.792	.724
ppsslg11	.634	.612
ppsslg12	.625	.532
ppsslg13	.568	.627
ppsslg14	.801	.748
ppsslg15	.522	.348
ppsslg16	.721	.625
ppsslg17	.835	.699
ppsslg18	.670	.628
ppsslg19	.780	.667
ppsslg20	.786	.716
ppsslg21	.569	.426
ppsslg22	.786	.749
ppsslg23	.606	.494
ppsslg24	.752	.639
ppsslg25	.484	.346
ppsslg27	.724	.679
ppsslg28	.729	.664
ppsslg29	.530	.491

ppsslg30	.687	.585
ppsslg31	.795	.718
ppsslg33	.827	.732
ppsslg34	.840	.733
ppsslg35	.670	.555
ppsslg36	.702	.645
Extraction Method: Principal Axis Factoring.		

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	16.752	52.349	52.349	16.364	51.138	51.138	15.800
2	2.144	6.701	59.050	1.809	5.654	56.792	7.646
3	1.334	4.170	63.220	.944	2.951	59.743	7.797
4	1.128	3.524	66.744				
5	.986	3.082	69.826				
6	.828	2.586	72.412				
7	.776	2.425	74.836				
8	.701	2.192	77.029				
9	.642	2.007	79.036				
10	.604	1.887	80.923				
11	.507	1.583	82.506				
12	.481	1.504	84.010				
13	.472	1.474	85.484				
14	.433	1.353	86.837				
15	.386	1.206	88.043				
16	.377	1.177	89.219				
17	.336	1.051	90.270				
18	.324	1.013	91.283				
19	.314	.982	92.266				
20	.296	.926	93.192				
21	.279	.872	94.064				
22	.255	.798	94.862				
23	.245	.767	95.629				
24	.236	.737	96.366				

25	.209	.653	97.019				
26	.179	.559	97.578				
27	.167	.523	98.101				
28	.164	.511	98.613				
29	.146	.457	99.070				
30	.123	.384	99.454				
31	.096	.301	99.755				
32	.078	.245	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)

	Factor		
	1	**2**	**3**
ppsslg19	.936		
ppsslg17	.910		
ppsslg14	.890		
ppsslg20	.858		
ppsslg18	-.839		
ppsslg22	.838		
ppsslg10	-.818		
ppsslg16	.807		
ppsslg28	.796		
ppsslg24	.788		
ppsslg27	.760		
ppsslg03	.718		
ppsslg01	.677		
ppsslg12	-.650		
ppsslg04	-.638		
ppsslg23	-.622		
ppsslg25	.619		
ppsslg36	.613		
ppsslg05	-.584		
ppsslg35	.572		

ppsslg07	-.551		
ppsslg21	-.540		
ppsslg15	-.483		
ppsslg06	-.378		
ppsslg33		.880	
ppsslg34		.848	
ppsslg30		.620	
ppsslg31		.533	.329
ppsslg29		.490	
ppsslg13			.814
ppsslg11			.677
ppsslg02	-.301		-.384

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 5 iterations.

Factor Correlation Matrix

Factor	1	2	3
1	1.000	.504	.572
2	.504	1.000	.379
3	.572	.379	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-7
Factor Analysis 7

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg02	2.43	1.391	220	4
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg07	3.08	1.389	220	4
ppsslg10	2.43	1.404	220	4
ppsslg11	3.25	1.318	218	6
ppsslg12	2.90	1.351	220	4
ppsslg13	2.92	1.361	219	5
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg19	3.85	1.319	218	6
ppsslg20	3.67	1.375	218	6
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg27	3.36	1.310	215	9
ppsslg28	3.53	1.333	216	8
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7
ppsslg33	1.61	.968	216	8
ppsslg34	1.64	.979	218	6

ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.952
Bartlett's Test of Sphericity	**Approx. Chi-Square**	5584.661
	df	496
	Sig.	.000

Communalities		
	Initial	**Extraction**
ppsslg01	.606	.519
ppsslg02	.542	.395
ppsslg03	.715	.617
ppsslg04	.653	.544
ppsslg05	.699	.570
ppsslg06	.574	.401
ppsslg07	.693	.592
ppsslg10	.792	.718
ppsslg11	.634	.368
ppsslg12	.625	.526
ppsslg13	.568	.252
ppsslg14	.801	.741
ppsslg15	.522	.344
ppsslg16	.721	.624
ppsslg17	.835	.701
ppsslg18	.670	.626
ppsslg19	.780	.657
ppsslg20	.786	.718
ppsslg21	.569	.407
ppsslg22	.786	.733
ppsslg23	.606	.492
ppsslg24	.752	.640
ppsslg25	.484	.346
ppsslg27	.724	.673
ppsslg28	.729	.661

ppsslg29	.530	.493
ppsslg30	.687	.592
ppsslg31	.795	.715
ppsslg33	.827	.623
ppsslg34	.840	.659
ppsslg35	.670	.529
ppsslg36	.702	.633
Extraction Method: Principal Axis Factoring.		

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	16.752	52.349	52.349	16.343	51.073	51.073	16.014
2	2.144	6.701	59.050	1.767	5.522	56.595	8.203
3	1.334	4.170	63.220				
4	1.128	3.524	66.744				
5	.986	3.082	69.826				
6	.828	2.586	72.412				
7	.776	2.425	74.836				
8	.701	2.192	77.029				
9	.642	2.007	79.036				
10	.604	1.887	80.923				
11	.507	1.583	82.506				
12	.481	1.504	84.010				
13	.472	1.474	85.484				
14	.433	1.353	86.837				
15	.386	1.206	88.043				
16	.377	1.177	89.219				
17	.336	1.051	90.270				
18	.324	1.013	91.283				
19	.314	.982	92.266				
20	.296	.926	93.192				
21	.279	.872	94.064				
22	.255	.798	94.862				
23	.245	.767	95.629				

24	.236	.737	96.366				
25	.209	.653	97.019				
26	.179	.559	97.578				
27	.167	.523	98.101				
28	.164	.511	98.613				
29	.146	.457	99.070				
30	.123	.384	99.454				
31	.096	.301	99.755				
32	.078	.245	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)

	Factor	
	1	**2**
ppsslg17	.929	
ppsslg19	.909	
ppsslg20	.896	
ppsslg14	.894	
ppsslg18	-.850	
ppsslg24	.849	
ppsslg10	-.828	
ppsslg16	.825	
ppsslg22	.823	
ppsslg28	.814	
ppsslg27	.769	
ppsslg36	.729	
ppsslg03	.720	
ppsslg35	.705	
ppsslg01	.669	
ppsslg05	-.658	
ppsslg12	-.656	
ppsslg23	-.642	
ppsslg25	.640	

ppsslg04	-.637	
ppsslg07	-.619	
ppsslg15	-.555	
ppsslg21	-.508	
ppsslg06	-.490	
ppsslg02	-.483	
ppsslg11	.482	
ppsslg13	.356	
ppsslg33		.803
ppsslg34		.799
ppsslg30		.712
ppsslg31	.316	.631
ppsslg29		.510
Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.		
a Rotation converged in 5 iterations.		

Factor Correlation Matrix

Factor	**1**	**2**
1	1.000	.545
2	.545	1.000
Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.		

Appendix L-8
Factor Analysis 8

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg07	3.08	1.389	220	4
ppsslg10	2.43	1.404	220	4
ppsslg12	2.90	1.351	220	4
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg19	3.85	1.319	218	6
ppsslg20	3.67	1.375	218	6
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg27	3.36	1.310	215	9
ppsslg28	3.53	1.333	216	8
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7
ppsslg33	1.61	.968	216	8
ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.953
Bartlett's Test of Sphericity	**Approx. Chi-Square**	5179.906
	df	406
	Sig.	.000

Communalities

	Initial	Extraction
ppsslg01	.605	.523
ppsslg03	.710	.618
ppsslg04	.648	.552
ppsslg05	.691	.569
ppsslg06	.567	.394
ppsslg07	.692	.592
ppsslg10	.788	.721
ppsslg12	.624	.529
ppsslg14	.800	.745
ppsslg15	.522	.345
ppsslg16	.711	.629
ppsslg17	.832	.698
ppsslg18	.660	.624
ppsslg19	.777	.654
ppsslg20	.782	.715
ppsslg21	.557	.414
ppsslg22	.782	.741
ppsslg23	.606	.493
ppsslg24	.735	.632
ppsslg25	.477	.349
ppsslg27	.721	.677
ppsslg28	.715	.669
ppsslg29	.511	.491
ppsslg30	.686	.566
ppsslg31	.781	.685
ppsslg33	.823	.674
ppsslg34	.838	.698
ppsslg35	.660	.521

ppsslg36	.692	.621
Extraction Method: Principal Axis Factoring.		

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	15.772	54.387	54.387	15.380	53.035	53.035	15.061
2	2.122	7.318	61.704	1.762	6.076	59.111	7.748
3	1.156	3.985	65.689				
4	.986	3.400	69.089				
5	.812	2.799	71.888				
6	.762	2.628	74.515				
7	.717	2.472	76.987				
8	.631	2.176	79.163				
9	.511	1.762	80.924				
10	.499	1.721	82.645				
11	.483	1.667	84.312				
12	.448	1.545	85.857				
13	.428	1.476	87.333				
14	.371	1.280	88.613				
15	.365	1.260	89.873				
16	.326	1.126	90.999				
17	.309	1.066	92.065				
18	.304	1.047	93.112				
19	.274	.944	94.056				
20	.256	.883	94.939				
21	.247	.851	95.790				
22	.235	.811	96.601				
23	.187	.646	97.247				
24	.171	.591	97.838				
25	.168	.578	98.416				
26	.152	.526	98.942				
27	.128	.440	99.381				
28	.098	.337	99.718				
29	.082	.282	100.000				

Extraction Method: Principal Axis Factoring.
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix(a)

	Factor	
	1	**2**
ppsslg17	.920	
ppsslg19	.899	
ppsslg20	.888	
ppsslg14	.886	
ppsslg18	-.843	
ppsslg24	.842	
ppsslg10	-.821	
ppsslg16	.819	
ppsslg22	.815	
ppsslg28	.808	
ppsslg27	.762	
ppsslg36	.725	
ppsslg03	.713	
ppsslg35	.702	
ppsslg01	.662	
ppsslg05	-.655	
ppsslg12	-.650	
ppsslg25	.637	
ppsslg23	-.634	
ppsslg04	-.631	
ppsslg07	-.614	
ppsslg15	-.552	
ppsslg21	-.500	
ppsslg06	-.488	
ppsslg33		.846
ppsslg34		.834
ppsslg30		.693
ppsslg31	.319	.611

ppsslg29		.513

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 5 iterations.

Factor Correlation Matrix

Factor	**1**	**2**
1	1.000	.541
2	.541	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-9
Factor Analysis 9

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg10	2.43	1.404	220	4
ppsslg12	2.90	1.351	220	4
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7
ppsslg33	1.61	.968	216	8
ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.942
Bartlett's Test of Sphericity	**Approx. Chi-Square**	3925.331
	df	276
	Sig.	.000

Communalities

	Initial	Extraction
ppsslg01	.599	.544
ppsslg03	.698	.681
ppsslg04	.635	.577
ppsslg05	.655	.564
ppsslg06	.530	.403
ppsslg10	.765	.743
ppsslg12	.613	.551
ppsslg14	.789	.746
ppsslg15	.510	.556
ppsslg16	.698	.626
ppsslg17	.755	.652
ppsslg18	.650	.645
ppsslg21	.514	.431
ppsslg22	.749	.754
ppsslg23	.578	.482
ppsslg24	.712	.623
ppsslg25	.464	.423
ppsslg29	.500	.491
ppsslg30	.678	.558
ppsslg31	.775	.671
ppsslg33	.821	.718
ppsslg34	.836	.750
ppsslg35	.646	.743
ppsslg36	.680	.630

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	12.631	52.627	52.627	12.250	51.042	51.042	11.727
2	1.975	8.227	60.855	1.637	6.823	57.864	6.521

3	1.079	4.498	65.352	.675	2.814	60.679	7.330
4	.902	3.760	69.112				
5	.764	3.184	72.296				
6	.718	2.991	75.287				
7	.695	2.897	78.185				
8	.591	2.462	80.646				
9	.506	2.110	82.756				
10	.477	1.986	84.742				
11	.428	1.783	86.524				
12	.405	1.686	88.210				
13	.372	1.548	89.759				
14	.352	1.467	91.226				
15	.331	1.379	92.605				
16	.301	1.256	93.860				
17	.260	1.083	94.943				
18	.252	1.052	95.995				
19	.226	.941	96.935				
20	.191	.798	97.733				
21	.181	.756	98.489				
22	.157	.653	99.142				
23	.118	.491	99.633				
24	.088	.367	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)

	Factor		
	1	**2**	**3**
ppsslg03	.891		
ppsslg10	-.884		
ppsslg18	-.845		
ppsslg22	.840		
ppsslg14	.797		
ppsslg24	.781		

ppsslg17	.750		
ppsslg04	-.729		
ppsslg01	.708		
ppsslg12	-.692		
ppsslg16	.632		
ppsslg21	-.594		
ppsslg36	.587		
ppsslg23	-.561		
ppsslg05	-.476		
ppsslg06	-.312		
ppsslg34		.875	
ppsslg33		.875	
ppsslg30		.682	
ppsslg31		.576	
ppsslg29		.497	
ppsslg35			.761
ppsslg15			-.722
ppsslg25			.482
Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.			
a Rotation converged in 5 iterations.			

Factor Correlation Matrix

Factor	1	2	3
1	1.000	.549	.682
2	.549	1.000	.332
3	.682	.332	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-10
Factor Analysis 10

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg10	2.43	1.404	220	4
ppsslg12	2.90	1.351	220	4
ppsslg14	3.61	1.364	218	6
ppsslg15	2.41	1.279	219	5
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg25	4.23	1.126	217	7
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7
ppsslg33	1.61	.968	216	8
ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.942
Bartlett's Test of Sphericity	**Approx. Chi-Square**	3925.331
	df	276
	Sig.	.000

Communalities

	Initial	Extraction
ppsslg01	.599	.531
ppsslg03	.698	.623
ppsslg04	.635	.553
ppsslg05	.655	.559
ppsslg06	.530	.391
ppsslg10	.765	.719
ppsslg12	.613	.539
ppsslg14	.789	.748
ppsslg15	.510	.345
ppsslg16	.698	.626
ppsslg17	.755	.655
ppsslg18	.650	.633
ppsslg21	.514	.409
ppsslg22	.749	.738
ppsslg23	.578	.482
ppsslg24	.712	.620
ppsslg25	.464	.352
ppsslg29	.500	.491
ppsslg30	.678	.552
ppsslg31	.775	.667
ppsslg33	.821	.721
ppsslg34	.836	.753
ppsslg35	.646	.519
ppsslg36	.680	.630

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	12.631	52.627	52.627	12.223	50.931	50.931	11.903
2	1.975	8.227	60.855	1.632	6.800	57.731	6.632
3	1.079	4.498	65.352				

4	.902	3.760	69.112				
5	.764	3.184	72.296				
6	.718	2.991	75.287				
7	.695	2.897	78.185				
8	.591	2.462	80.646				
9	.506	2.110	82.756				
10	.477	1.986	84.742				
11	.428	1.783	86.524				
12	.405	1.686	88.210				
13	.372	1.548	89.759				
14	.352	1.467	91.226				
15	.331	1.379	92.605				
16	.301	1.256	93.860				
17	.260	1.083	94.943				
18	.252	1.052	95.995				
19	.226	.941	96.935				
20	.191	.798	97.733				
21	.181	.756	98.489				
22	.157	.653	99.142				
23	.118	.491	99.633				
24	.088	.367	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)		
	Factor	
	1	**2**
ppsslg14	.899	
ppsslg17	.880	
ppsslg18	-.855	
ppsslg24	.838	
ppsslg10	-.837	
ppsslg22	.825	
ppsslg16	.821	

ppsslg36	.750	
ppsslg03	.731	
ppsslg35	.714	
ppsslg01	.685	
ppsslg05	-.675	
ppsslg12	-.666	
ppsslg04	-.651	
ppsslg25	.651	
ppsslg23	-.621	
ppsslg15	-.569	
ppsslg06	-.525	
ppsslg21	-.500	
ppsslg33		.886
ppsslg34		.881
ppsslg30		.670
ppsslg31	.357	.564
ppsslg29		.498

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 4 iterations.

Factor Correlation Matrix

Factor	**1**	**2**
1	1.000	.550
2	.550	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-11
Factor Analysis 11

Descriptive Statistics

	Mean	Std. Deviation	Analysis N	Missing N
ppsslg01	3.33	1.469	221	3
ppsslg03	3.28	1.409	220	4
ppsslg04	2.95	1.452	221	3
ppsslg05	2.72	1.365	219	5
ppsslg06	3.20	1.470	221	3
ppsslg10	2.43	1.404	220	4
ppsslg12	2.90	1.351	220	4
ppsslg14	3.61	1.364	218	6
ppsslg16	3.70	1.440	218	6
ppsslg17	3.79	1.408	215	9
ppsslg18	2.10	1.289	217	7
ppsslg21	3.27	1.347	215	9
ppsslg22	3.44	1.407	217	7
ppsslg23	2.94	1.356	212	12
ppsslg24	4.00	1.126	217	7
ppsslg29	2.45	1.312	217	7
ppsslg30	2.66	1.315	215	9
ppsslg31	2.71	1.307	217	7
ppsslg33	1.61	.968	216	8
ppsslg34	1.64	.979	218	6
ppsslg35	3.45	1.287	217	7
ppsslg36	3.46	1.421	218	6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.943
Bartlett's Test of Sphericity	**Approx. Chi-Square**	3683.519
	df	231
	Sig.	.000

Communalities

	Initial	Extraction
ppsslg01	.591	.530
ppsslg03	.696	.632
ppsslg04	.633	.561
ppsslg05	.654	.556
ppsslg06	.527	.386
ppsslg10	.762	.723
ppsslg12	.601	.541
ppsslg14	.782	.742
ppsslg16	.695	.622
ppsslg17	.750	.663
ppsslg18	.649	.643
ppsslg21	.507	.413
ppsslg22	.745	.745
ppsslg23	.571	.484
ppsslg24	.709	.633
ppsslg29	.499	.492
ppsslg30	.677	.551
ppsslg31	.775	.667
ppsslg33	.817	.717
ppsslg34	.833	.758
ppsslg35	.549	.484
ppsslg36	.672	.634

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	11.979	54.448	54.448	11.587	52.669	52.669	11.281
2	1.920	8.725	63.174	1.590	7.229	59.897	6.465
3	.903	4.103	67.277				
4	.854	3.882	71.159				
5	.720	3.272	74.431				

6	.699	3.176	77.607				
7	.580	2.638	80.245				
8	.490	2.226	82.471				
9	.466	2.117	84.588				
10	.427	1.942	86.530				
11	.402	1.828	88.358				
12	.364	1.654	90.012				
13	.348	1.581	91.594				
14	.311	1.412	93.006				
15	.299	1.357	94.363				
16	.259	1.179	95.542				
17	.226	1.029	96.571				
18	.200	.908	97.479				
19	.183	.834	98.313				
20	.158	.717	99.030				
21	.122	.556	99.586				
22	.091	.414	100.000				
Extraction Method: Principal Axis Factoring.							
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Pattern Matrix(a)

	Factor	
	1	**2**
ppsslg14	.901	
ppsslg17	.896	
ppsslg18	-.872	
ppsslg24	.857	
ppsslg10	-.849	
ppsslg22	.839	
ppsslg16	.825	
ppsslg36	.762	
ppsslg03	.749	
ppsslg01	.689	
ppsslg05	-.676	

ppsslg35	.675	
ppsslg12	-.674	
ppsslg04	-.670	
ppsslg23	-.631	
ppsslg06	-.521	
ppsslg21	-.516	
ppsslg34		.889
ppsslg33		.884
ppsslg30		.666
ppsslg31	.359	.559
ppsslg29		.496

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 4 iterations.

Factor Correlation Matrix

Factor	**1**	**2**
1	1.000	.562
2	.562	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix L-12
Reliability
Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	**Valid**	190	84.8
	Excluded(a)	34	15.2
	Total	224	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.956	22

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ppsslg01	65.9211	388.264	.710	.954
ppsslg03	65.9632	387.612	.764	.953
ppsslg14	65.6158	387.772	.788	.953
ppsslg16	65.5105	389.817	.711	.954
ppsslg17	65.3947	389.775	.734	.954
ppsslg22	65.8158	384.765	.831	.952
ppsslg24	65.2000	400.775	.696	.954
ppsslg29	66.8421	396.758	.637	.955
ppsslg30	66.5842	397.705	.615	.955
ppsslg31	66.5211	391.859	.725	.954
ppsslg33	67.6632	409.632	.518	.956
ppsslg34	67.6368	407.915	.555	.956
ppsslg35	65.7316	398.134	.638	.955
ppsslg36	65.7105	388.313	.754	.953
ppsslg04r	66.1947	387.967	.729	.954
ppsslg05r	65.9789	390.317	.722	.954
ppsslg06r	66.4421	394.132	.591	.956
ppsslg10r	65.6263	385.844	.801	.953
ppsslg12r	66.1526	392.839	.691	.954
ppsslg18r	65.3000	396.317	.693	.954

ppsslg21r	66.5421	398.281	.590	.955
ppsslg23r	66.1789	393.693	.669	.954

VITA

Sean Travis Clouse was born August 20, 1974 in Springfield, Missouri. He graduated from the University of Missouri-Columbia in 1997 with a Bachelor's of Arts in Psychology and a minor in Women's Studies. He earned a Master's degree in Human Development and Family Studies in 2001 and Master's Degree in Counseling Psychology in 2003 at the University of Missouri-Columbia. He completed his pre-doctoral internship at the University of Missouri Counseling Center in 2006. He plans to pursue a career in clinical practice and college instruction.