

Perception of Alienation From Parents and Peers During the Coming Out Process for Lesbian, Gay, and Bisexual Individuals and Self-Reported Attachment Classifications: A Preliminary Investigation of the Relationship Between the Attachment System and Rejection due to Sexual Orientation

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## Abstract of Dissertation

### Perception of Alienation From Parents and Peers During the Coming Out Process for Lesbian, Gay, and Bisexual Individuals and Self-Reported Attachment Classifications: A Preliminary Investigation of the Relationship Between the Attachment System and Rejection due to Sexual Orientation

This study examined the relationship between attachment style and perceived alienation from significant attachment figures during the coming out process for lesbian, gay, and bisexual (LGB) adults. Participants completed an online survey measuring adult attachment via the Experiences in Close Relationships-Revised (ECR-R) and perceived alienation after coming out via the Inventory of Parent and Peer Attachment (IPPA). Three thousand eight hundred and forty-one heterosexual and LGB respondents completed the attachment portion of the survey, and analysis determined that sexual orientation was correlated with attachment security for the 18-29 year olds in this sample, with LGB respondents reporting higher rates of insecure attachment than their heterosexual peers. Within the LGB sample, chi-square analysis revealed that higher rates of perceived alienation from mother, father, and peers immediately after disclosure of sexual orientation was related to current attachment insecurity. Finally, discriminant function analysis was conducted using time variables as predictors of attachment group membership. It demonstrated that the predictors were affecting group membership, but only to a very small degree, and potential issues with survey construction make any firm conclusion of this question problematic. Time between self-identification as LGB and time of first significant

disclosure of sexual orientation (TBTW) was the dominant time variable in the parental analyses, while time since disclosure of sexual orientation (TSO) was the dominant predictor in the peer analysis. A discussion of the significance of these findings for the counseling profession and directions for future research are included.

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## Chapter I: Introduction

### *Overview*

The purpose of this study was to investigate a specific question that has not been previously examined by the psychosocial research community. Although attachment theory, John Bowlby's groundbreaking thesis on understanding and explaining the universal drive for interpersonal relationships and connectedness throughout the lifespan (Bowlby, 1969/1982), has received significant attention since its inception, the amount of research into how attachment relates specifically to the lesbian, gay, and bisexual (LGB) community has been much less robust. The specific issue of whether or not alienation from parents and peers during the time during which LGB individuals reveal their sexual orientation to others (commonly referred to as "coming out") has any affect on, or is affected by, the attachment system has not yet been investigated. According to the underlying tenets of attachment theory, such rejection during a critical point in development would have the capacity to injure the attachment system and increase the likelihood that insecure mental models of attachment would be introduced or reinforced. This could result in higher rates of insecure attachment, either transient or long-term. Given this, addressing this gap in the literature is important, and beginning to answer this question was the purpose of this study.

To understand why this research is valuable, a basic overview of the relevant theories and current state of knowledge is appropriate. Attachment

theory can be described as a map for interpersonal relationships throughout the lifespan. Experiences with significant caretakers in early life lay the foundation for how relationships later in life function, with subsequent family, peer, and romantic relationships continuing to confirm or deny previous interpersonal expectations, further strengthening or weakening the attachment schemas that were originally developed during infancy and early childhood. Research has demonstrated that there are links between infant attachment security and peer functioning at every age from preschool through adolescence (Sroufe, Carlson, Levy, & Egeland, 1999), and that security of attachment and partnership representation in young adulthood is significantly predicted from adolescent and childhood strategies when persons are faced with situations that challenge the attachment system (Grossman, Grossman, & Kindler, 2005). Attachment insecurity in infancy or childhood is, along with other risk factors, predictive of interpersonal difficulties such as the early-onset of antisocial behavior (Aguilar, Sroufe, Egeland, & Carlson, 2000), more difficulty dealing with peers (Fagot & Kavanagh, 1990), and experiencing less psychosocial adjustment, more negative self-concept, and higher levels of depression and anxiety (Cooper, Shaver, & Collins, 1998). Given the complexity of attachment theory and its role in a wide range of psychosocial and interpersonal issues, research that provides a deeper understanding of some aspect of attachment theory seems warranted, particularly so that helping professionals like counselors have the necessary understanding of the underlying

issues that may be driving current real life adaptations, symptoms, and pathology.

One of the areas that researchers have focused on are events or circumstances that can undermine the development of a secure attachment system, leading to the formation of insecure attachment or even precipitate previously secure children to demonstrate insecure attachment behaviors (Bowlby, Robertson, & Rosenbluth, 1952). Some of Bowlby's earliest ideas about attachment came as a result of research with young children separated from parents during a lengthy hospital stay. The observations of the children's expressions of fear, angry protests, desperate efforts to locate their caregivers, and finally detachment and reduced emotional expression led Bowlby to attempt to account for the underlying processes that organize these children's reactions to separation (Bowlby, 1969/1982; Kobak & Madsen, 2008).

Many of these attachment injuries or disruptions involve the loss of a key attachment figure due to separations, hospitalizations, or divorce, all of which have the potential to undermine the attachment system by removing the attachment figure, or by damaging the relationship with that figure, leading to behavioral and adjustment issues (Adam & Chase-Lansdale, 2002; Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, Robertson, & Rosenbluth, 1952). Given the importance of maternal sensitivity and responsiveness in the development of healthy attachment in infants and young children (De Wolff & van Ijzendoorn, 1997), and the far-reaching influence of early attachment relationships on later

attachment representations and interpersonal and psychosocial functioning, it seems reasonable to hypothesize that anything that would cause a reduction in supportive and responsive behavior on the part of the primary caregiver would have the potential to disrupt the attachment system. According to the underlying tenets of attachment theory, “disrupted communication, physical inaccessibility, and lack of responsiveness may lead to many of the emotional responses that are evident in young children’s responses to physical separations” (Kobak & Madsen, 2008, p. 32).

Older children, adolescents, and adults are not immune to potential attachment injuries. Witnessing family violence may threaten a child’s confidence in parental availability (Davies & Cummings, 1995, 1998); the stereotypical self-perpetuating pattern of pursuit and withdrawal between people in long term relationships represents a continual effort to fulfill attachment needs from an unresponsive partner (Johnson, 2008). During adolescence, conflict between children and parents, who serve as primary attachment figures, reaches its peak (Collins & Steinberg, 2006). If there is not adequate support during this time, during which attachment functions begin transferring from parents to peers and romantic partners (Scharf & Mayseless, 2007), attachment disruptions are possible, and an insecure attachment in adolescence is correlated with a host of risk factors. Preoccupied attachment in adolescence has been linked to depression (Kobak, Sudler, & Gamble, 1991), suicidal ideation (Adam et al., 1996), and an increase in delinquency between ages 16-18 (Allen et al., 2002).

Given this, research into a potential disruption of the attachment system, even in adolescence and early adulthood, warrants investigation. Gaining a better understanding of attachment injuries may assist counselors, teachers, and other professionals who come into contact with children, adolescents, and young adults to understand how such attachment injuries may influence social and emotional development. Understanding how attachment injuries may specifically affect the LGB community has similar treatment and educational implications.

Research on attachment as it applies to the LGB community has mainly focused on understanding how adult LGB relationships function in comparison to heterosexual relationships (Elizur & Mintzer, 2003; Gaines & Henderson, 2002; Kurdek, 2002, 1997), rather than on LGB attachment issues in childhood or adolescence. This makes sense, as studying attachment in LGB children or adolescents is fraught with complications. The logistics of identifying LGB individuals prior to coming out are practically and ethically problematic.

Although infancy and early childhood are not the developmental periods during which coming out typically occurs, at some point in life most LGB individuals begin to identify as such, not only to themselves, but also to others in their life. This process is usually referred to as “coming out,” wherein LGB people inform friends and family about their sexual orientation. Although this process can occur at any age, research suggests that the process of self-adopting and disclosing a non-heterosexual identity occurs in the late teens and early twenties (Rust, 2003). Adolescence and early adulthood are also the time that people

begin the process of transferring attachment from their parents to peers and/or romantic partners (Hazan & Zeifman, 1994; Scharf & Maysless, 2007). Given the need for support during the coming out process, as well as the fact that this usually occurs during the critical developmental period of adolescence through early adulthood, research into the attachment implications of parent and/or peer reactions to LGB individuals when they begin revealing their sexual orientation is theoretically important and fills a need.

It is the underlying assumption of this research that the perception of alienation from parents and/or peers during such a pivotal point in the lives of LGB individuals may constitute an attachment injury via the voluntary removal of the support by key attachment figures at a time when that support is both needed and desired. This increases the risk of insecure attachment (transient or sustained) and the potential for adverse consequences that insecure attachment carries. The underlying tenets of attachment theory and its importance in interpersonal functioning, the risks associated with insecure attachment and attachment injuries, and why alienation from parents and/or peers may theoretically be considered an attachment injury will be discussed in full in the literature review (Chapter II).

### *Statement of the Problem*

There are relatively few studies that have investigated attachment as it applies specifically to the LGB population. None has examined the issue of rejection during the coming out process as a potential attachment injury. Given

the importance of attachment to interpersonal relationships throughout the lifespan, attachment injuries have been investigated in other contexts (Adam & Chase-Lansdale, 2002; Aguilar et al., 2000; Fagot & Kavanagh, 1990). That no one has yet investigated the deliberate removal of parental and/or peer approval and support because of an individual's sexual orientation constitutes a gap in the attachment and LGB research, one that has meant that the full ramifications of rejection of LGB individuals has not been fully investigated or understood. Should such rejection have a significant influence on the attachment system, it would constitute new knowledge to advance this field of study, and it would have implications for counseling and other mental health fields, school teachers and administrators, parents, and anyone else who comes into regular contact with individuals struggling to come to terms with, and publicly acknowledge, their sexual orientation.

#### *Purpose and Research Questions*

The purpose of this research was to investigate two primary questions. The first was to replicate previous findings that found no statistically significant difference in the number of LGB individuals who endorsed having an insecure attachment style compared to the general population. To date, only a few studies have looked for differences in rates of attachment between heterosexual and LGB samples (Elizur & Mintzer, 2001; Gaines & Henderson, 2002; Mohr & Fassinger, 1997; Ridge & Feeney, 1998). Further confirmation of these results, which have generally found that heterosexual and LGB individuals endorse the

same rates of attachment security, would be beneficial, given the relative paucity of such results.

The research to date has found that adult LGB individuals endorse attachment orientation in roughly the same percentages as their heterosexual peers, which seems to suggest that LGB individuals are not more likely to be insecurely attached. Although this may be true (further replication of these results is needed), it does not address the reasons why insecurely attached LGB individuals endorse these insecure strategies. Alienation from or rejection by significant attachment figures during the coming out process may be a risk factor for attachment insecurity unique to the LGB community, yet may not raise the overall numbers of LGB adults that endorse insecure attachment strategies. Therefore examining both the rates of insecure attachment of the LGB community relative to their heterosexual peers and attempting to determine if perceived alienation from attachment figures while coming out is correlated with insecure attachment were the purposes of this study.

Broken down more specifically, null hypotheses for the first research question state:

- a) LGB individuals will not differ from heterosexual individuals in the proportion who are securely attached;
- b) LGB individuals will not differ from heterosexual individuals in the proportion who are ambivalently attached;

- c) LGB individuals will not differ from heterosexual individuals in the proportion who are fearfully attached; and,
- d) LGB individuals will not differ from heterosexual individuals in the proportion who are avoidantly attached.

If there were an insufficient number of participants endorsing the various subtypes of insecure attachment (preoccupied, fearful, and avoidant), then comparisons were made on a secure versus insecure basis. Results were determined to be significant if LGB participants differ from their heterosexual peers using a .05 level of significance.

The second and primary purpose of this study was to determine if there is a correlation between insecure attachment and perception of alienation from parents and/or peers during the coming out process for LGB individuals. The null hypotheses were:

- a) Level of perceived alienation from mother after disclosure of LGB identity is unrelated to attachment status;
- b) Level of perceived alienation from father after disclosure of LGB identity is unrelated to attachment status;
- c) Level of perceived alienation from peers after disclosure of LGB identity is unrelated to attachment status; and,
- d) Level of perceived alienation from parents and peers combined after disclosure of LGB identity is unrelated to attachment status.

If the number of participants endorsing each subtype of insecure attachment allowed, correlational analysis was conducted to determine if there was any relationship between perceived parental and/or peer alienation and the specific subtypes of insecure attachment. Again, the results were only reported as significant if there was a correlation between perceived parental and/or peer alienation and attachment using a .05 level of significance.

As the results from the second research question demonstrated a correlation between perceived alienation during the coming out process and attachment orientation, the relationship between the two variables was examined for possible mediation by two time variables. Lesbian, gay, and bisexual participants were asked two time-related questions. The first involved approximately how much time had elapsed since disclosure of sexual orientation to each major attachment figure (mother, father, close friend), as previous research suggested that interpersonal relationships may suffer immediately after disclosure of sexual orientation but later recover (Ridge & Feeny, 1998). Second, LGB participants were asked approximately how much time elapsed between when they first self-identified as LGB and when they first came out to a significant attachment figure. Again, previous research has demonstrated that high levels of attachment related anxiety and avoidance are related to more difficulty with self-acceptance of sexual orientation (Mohr & Fassinger, 2003).

Both of these time variables were analyzed as potential predictor variables. The null hypotheses were:

- a) Time elapsed since disclosure to attachment figures will not predict attachment group membership;
- b) Time elapsed between self-identification as LGB and disclosure to a primary attachment figure will not predict attachment group membership.

As before, the results were reported as significant if the time variables predicted attachment group membership at the .05 level of significance or better.

*Statement of Potential Significance*

Given the relative dearth of research on attachment as it applies to the LGB population (compared to attachment research with heterosexual participants), and the specific topic of familial or peer rejection or alienation as an attachment injury specifically, the significance of this study is the addition of useful information for mental health professionals and researchers in the fields of LGB and attachment research. Those who provide formal or informal support and counseling to members of the LGB community, such as counselors, therapists, psychiatrists, psychologists, high school and collegiate professors, administrators, physicians, and other professionals, would benefit greatly from more solid theoretical and research backed strategies for understanding the issues facing LGB youth and young adults. Finally, parents and other family members, community and church leaders, peers, and others who come into close contact with LGB individuals during the coming out process could also gain a

better understanding of the effect their rejection of another's sexual orientation may have, and the consequences that may result.

Given the current contentious environment in many countries regarding the rights of LGB individuals, definitive knowledge into the damage that alienation from key attachment figures may cause, as well as the mechanism by which the damage may act, is highly significant, both for academic researchers and for society in general. Attachment insecurity is a risk factor for a variety of issues in childhood and beyond, including impaired peer relationships, difficulties with romantic relationships, and higher incidences of diagnosed mental health disorders (Aguilar et al., 2000; Cooper et al., 1998; Fagot & Kavanagh, 1990). A connection between alienation from parents and/or peers of LGB individuals during the coming out process and attachment insecurity could provide a basis for improving education to those who work or come into contact with LGB youth and young adults (including parents and peers). Counselors and others who work with LGB individuals would gain an understanding of some of the underlying attachment issues that may be causing symptoms or distress. In addition, this research adds to the growing base of knowledge in social science research about the similarities and differences between the ways that heterosexuals and LGB individuals experience relationships and attachment.

### *Theoretical Foundation*

Explaining the human need for emotional and physical connection to others throughout the lifespan has spawned much interest, both practical and

theoretical, in the realm of psychology and counseling. One theory that has gained prominence since its inception in the 1950s is John Bowlby's attachment theory. Drawing from multiple fields of study, Bowlby presented a theory that explained not only the mechanism by which the foundations for intimate affectional bonds are created, but also the reasons for their existence throughout life (Bowlby 1969/1982). As a complex, lifespan encompassing model, attachment theory is sometimes difficult to define in a way that covers the entire theory. Bowlby himself summarized attachment theory:

Let me outline the picture of personality development proposed. A young child's experience of an encouraging, supportive, and co-operative mother, and a little later father, gives him a sense of worth, a belief in the helpfulness of others, and a favourable model on which to build future relationships. Furthermore, by enabling him to explore his environment with confidence and to deal with it effectively, such experience also promotes his sense of competence. Thenceforward, provided family relationships continue favourable, not only do these early patterns of thought, feeling and behaviour persist, but personality becomes increasingly structured to operate in moderately controlled and resilient ways, and increasingly capable of continuing so despite adverse circumstances. (Bowlby, 1969/1982, p. 378)

Bowlby's theory of attachment relies on the interactions between caregiver and infant to lay the foundation for later interpersonal functioning. Perhaps more

important for the field of counseling, however, is what disruptions to the attachment system mean for future relationships and psychological functioning. Although attachment theory explains that there must be a range of attachment behaviors in order for humans to be able to adapt to different caregiver environments (Bowlby, 1969/1982), it is generally accepted that certain types of caregiving (inconsistent, unsupportive, and/or negligent or abusive) give rise to rigid, mistrustful attachment behaviors that cause problems for future development and relationships (Crittenden, 1997). As difficulties in interpersonal relations are a common issue in counseling and therapy, any theory that offers an understanding of how affectional relationships are created, why they persist, and why humans are driven to form them despite the pain maladaptive relationships can cause, offers a perspective that counselors can use to understand clients, and to better help them understand themselves.

Although much study has been done into certain things that are believed to disrupt the attachment process in infancy and childhood, and although there exists evidence that attachment remains amenable to change throughout the lifespan, either toward increased security or increased insecurity (Crittenden, 1997; Kirkpatrick & Hazan, 1994; Shaver & Brennan, 1992), there remains much that is unknown about events that have the potential to undermine the security of internal working models of attachment and attachment behaviors. This research addressed one of these gaps in the knowledge. Specifically, it investigated the possibility that the perception of alienation from parents and peers during the

coming out process for lesbian, gay, and bisexual individuals constitutes an attachment injury, resulting in increased attachment insecurity. This raises the risk of negative consequences that may result from insecure attachment behaviors and representations.

### *Summary of the Methodology*

This research consisted of a convenience sampling of heterosexual and LGB adults (18-49), recruited via solicitation through the audiences and social media of prominent author, columnist, podcaster and gay-rights advocate Dan Savage to participate in an online survey of attachment and perceived alienation from parents and/or peers. The Internet was utilized as a method for recruitment of participants in order to reach a larger and more diverse LGB sample than would be available using traditional methods. Mr. Savage has a large online following (for example, he has over 100,000 Twitter followers, and his podcast is the highest rated Health podcast on iTunes) which allowed the survey to reach a diverse audience. The Internet was used to deliver the surveys for reasons of convenience, efficiency, and cost effectiveness.

Heterosexual participants (who completed only the applicable demographics questions and attachment portions of the survey) acted as a comparison for their LGB peers to determine any differences in the distribution of attachment strategies by sexual orientation. Previous research suggests that a sample of sexual minority individuals is unlikely to deviate from population norms for attachment categories (Ridge & Feeney, 1998), but a paucity of studies that

include LGB individuals make confirmation of this assumption a viable goal. Lesbian, gay, and bisexual individuals completed survey sections on demographics, current attachment orientation, and perceived alienation from parents and peers during the coming out process. Although perceived alienation during the coming out process was assessed retrospectively for those not still in the coming out phase, statistical tests to determine if time since disclosure of sexual orientation was a possible factor in attachment group membership were conducted as well. Chi-square tests were conducted to determine if attachment distributions differed by sexual orientation, and to determine if alienation from parents and/or peers was correlated with higher levels of attachment insecurity (Leech, Barrett, & Morgan, 2011).

The survey used to measure attachment was the Experiences in Close Relationships-Revised (ECR-R) Questionnaire. This public domain attachment survey was first introduced by Fraley, Waller, and Brennan in 2000, and has been well documented to have construct validity and stability over time, and the results of which conform to a four factor, anxiety and avoidance model of attachment (Sibley & Liu, 2004; Sibley, Fischer, & Liu, 2005). Perception of alienation from parents and/or peers after disclosure of sexual orientation was measured via the Inventory of Parent and Peer Attachment (IPPA), developed by Armsden and Greenburg in 1987, which includes subscales that measure alienation from mother, father, and peers. Permission to use this instrument was obtained (Greenburg, personal communication, March 2012). It been researched

and has well-documented construct validity and test-retest reliability (Armsden & Greenburg, 1987; Gullone & Robinson, 2005).

### *Limitations*

There are three primary limitations to this research, the nonrandom method of recruiting participants, the fact that findings of associations between attachment and perceived alienation from parents and/or peers are correlational only, and the use of self-report data. The methodology chosen was defensible given the difficulties recruiting LGB samples and the monetary and time constraints under which the research was conducted, considering the current level of understanding of LGB issues in attachment research, and the historical difficulty in recruiting LGB research participants. However, the fact remains that this study had specific limitations, and those limitations are acknowledged.

Finding research participants within one's immediate sphere of influence has, in the past, allowed researchers to conduct studies more easily, but often limits the generalizability to a very narrow demographic range. However, doing a completely random stratified national sample was prohibitively expensive. In addition, identifying and recruiting from a population not fully acknowledged in the U.S. Census would be fraught with logistical and ethical problems.

To make this survey accessible to a broader sample, an Internet study format was utilized for ease of distribution and administration, which means that only individuals with basic Internet knowledge and access were included. To ensure a sufficient sample of LGB individuals, targeting LGB friendly arenas

would be ideal, but this can skew the sample in both expected (out vs. closeted LGB participants) and unexpected ways. Finally, there is currently no appropriate sampling frame to develop a completely random stratified national sample of LGB participants. For all of these reasons, this study recruited participants in such a way as to garner a disproportionately high number of LGB participants, and in doing so cannot be considered a random sample, with all of the inherent limitations of a convenience volunteer sample attached (LaFountain & Bartos, 2002), including lack of generalizability to a broader population.

Another major limitation of this study was that it measured attachment at one point in time only. As a result, this one time representation of attachment may not be accurate; individuals who are experiencing attachment transitions may endorse different attachment orientations at other points in time. Also, any association found between attachment and perceived alienation from parents and/or peers is correlational only, rather than causal. It is impossible to determine if high levels of perceived alienation from parents or peers caused insecure attachment without knowing attachment status prior to the coming out process. Although this limitation must be acknowledged, this type of survey design is also consistent practice in psychosocial research during preliminary investigations into a topic or issue, or when other constraints make gathering data from participants at multiple points in time unfeasible, as was the case here.

Also, causation cannot be determined without random assignment of subjects, which was not possible in this study. Although some instruments exist

that attempt to ascertain previous attachment status, the retrospective nature of such instruments are, like all instruments which ask an individual to remember his or her thoughts or feelings at a specific point in the past, subject to memory distortions that would introduce additional limitations into this study. Given the lack of any previous research investigating alienation during the coming out process as an attachment injury, a simple correlational study was a viable first step. A properly designed correlational study with a diverse sample of LGB individuals was a reasonable alternative to add to the body of knowledge on this important and understudied topic.

Finally, all data gathered in this study were self-reported, which also carries inherent limitations. Although there are no current adult attachment instruments that do not utilize self-reporting, there are still issues utilizing self-reported data, such as lack of recall (a particularly salient issue in this research, given that respondents reported the average time since the first disclosure of their sexual orientation was between nine and ten years) or participants responding in the manner they think researchers want or expect rather than their honest opinions or experiences (LaFountain & Bartos, 2002). Self-report surveys were optimal for this study, but the limitations in using this type of data, which are subject to the distortions, intentional or not, must be acknowledged.

### *Conclusion*

Given the current state of knowledge about attachment in general and attachment as it applies to the LGB community specifically, this research filled an

important gap in the literature, namely examining attachment orientation and perceived alienation from parents and/or peers during the coming out process for LGB individuals. The rest of this paper provides a detailed treatise on the relevant attachment and LGB research, situating this research within the theory and existing evidence (Chapter II: Literature Review) and the details of the research methodology (Chapter III: Methodology). Next, the findings of the research are revealed (Chapter IV: Results), and the final chapter contains a discussion of the results and their implications, as well as recommendations for follow-up research (Chapter V: Interpretations, Conclusions, and Recommendations).

#### *Definition of Terms*

*Alienation:* feelings of isolation, estrangement, and/or of being an outsider.

Alienation from significant attachment figures by LGB individuals after disclosure of sexual orientation was measured retrospectively via the Alienation Subscale of the Inventory of Parent and Peer Attachment (IPPA).

*Attachment:* the process by which humans develop interpersonal relationships, based on learning from prior relationships, from infancy to adulthood.

Attachment was measured globally via the Experiences in Close Relationships–Revised (ECR-R), and in relation to specific attachment figures in conjunction with disclosure of sexual orientation via the IPPA.

*Attachment relationship:* relationship between individuals where at least one person in the dyad meets the attachment needs of the other, and exhibit

attachment behaviors with the other (secure base, separation protest, proximity seeking/maintenance, and safe haven).

*Attachment system:* a learned set of behaviors designed to foster the development of attachment relationships, and the ability to form comprehensive mental representations of interpersonal relationships based on these attachment experiences.

*Coming Out:* the process during which members of the LGB community reveal to others in their lives that they are gay, lesbian, or bisexual. Coming out was measured via questions regarding disclosure of sexual orientation in the proposed study.

*Internal Working Models (IWM):* the mental schema or constructs that individuals form based on experiences in prior relationships that guide their perceptions and beliefs about current and future interpersonal attachment relationships.

*LGB community:* A term used to broadly encompass individuals who self-identify as lesbian (women sexually/romantically attracted to women), gay (men sexually/romantically attracted to men) or bisexual (individuals sexually/romantically attracted to men and women).

*Peers:* individuals within a person's social sphere who are not family; friends and acquaintances.

## Chapter II: Literature Review

### *Introduction*

This research addressed a gap in the attachment and lesbian, gay, and bisexual (LGB) research. First, it is necessary to explore in depth our current understanding of attachment theory and how it applies to the LGB community in order to put this research into context. There has been a great deal of study involving attachment theory, and certain aspects of this complex topic that are not germane to this subject will not be discussed in any depth, so this review of the literature should not be considered inclusive of all attachment and LGB research. It will, however, provide a thorough background of attachment theory throughout the lifespan, describe how attachment security (or insecurity) is formed, and discuss some of the psychosocial consequences of attachment insecurity. It also outlines what is known about how attachment works within the LGB community, and some of the applicable LGB psychosocial research as it pertains to mental health and rejection. Given that the overarching theoretical basis for this research is attachment theory, the literature review begins there.

### *Attachment Theory*

*Theoretical overview.* Attachment theory, at its core, attempts to explain the nature of interpersonal relationships, how they form, why they are important on both an individual and species level, and how they influence the formation of behavioral, cognitive, and emotional patterns that persist across time and affect future relationships. To understand why disruptions in the attachment system can

be damaging, it is necessary to understand how attachments are formed, how they influence development, and the importance of attachment relationships throughout the lifespan. There are still unanswered questions about the specifics of how attachment works, which is not surprising given the relative difficulty of assessing and measuring internal mental schemata, but what is known points to a theoretical construct that explains a range of human behavior and experience.

Attachment theory was originally developed in the 1950s and 1960s by John Bowlby, a psychoanalyst who looked to multiple fields to explain the phenomena he observed during his work. In particular, he borrowed from anthropology, evolutionary psychology, and epistemology, and his seminal writings on attachment are filled with references to how behaviors from other species matched similar behavior seen in humans. Anthropology also provided Bowlby with the necessary ammunition to refute secondary drive theory, which postulated that infants attached to their mothers in order to sate innate drives for nourishment. Bowlby's interpretation of evidence from animal studies on imprinting with geese (Lorenz, 1935; as cited in Cassidy, 2008) and the desire for contact comfort in monkeys (Harlow, 1958) led him to believe that the role of the caretaker as food provider was insufficient to explain the behavioral and emotional engagement of human infants with their mothers (Bowlby, 1969/1982).

Bowlby was also intrigued by his work with juvenile offenders (Cassidy, 2008), whose histories were riddled with deprivation and who seemed unable or unwilling to form meaningful relationships. This led him to believe that major

disruptions in the mother/child relationship were precursors to later psychopathology. In the first volume of his seminal trilogy on attachment and loss, he describes the purpose of the development of attachment theory: “In particular, the aim is to describe certain patterns of response that occur regularly in early childhood and, thence, to trace out how similar patterns of response are to be discerned in the functioning of later personality” (Bowlby, 1969/1982, p. 4).

Attachment theory specifies that the first attachment relationships are formed via interactions in infancy between child and caregiver. Described succinctly by one of the many researchers in the field of attachment, “interactions and communications with the attachment figures during the early years become patterns of attachment and communication that organize the child’s perceptions, thoughts, feelings, and behaviors, especially in times of distress,” (Grossmann, Grossmann, & Kindler, 2005, p. 103). It is worth noting that when discussing attachment, particularly in infancy, it is usually described as a relationship between infant and mother, as historically it has been the mother who provides the majority of care during infancy. Attachment can and does occur between an infant and other significant adult figures, but the primary caregiver is usually the primary attachment figure. For the sake of simplicity, the mother is usually referenced in that role in the literature and here as well.

Infants of many species are dependent upon their caregivers for a variety of purposes, such as food, locomotion, comfort, and safety. From an evolutionary survival perspective, Bowlby was particularly interested in the role that safety

played in the attachment process. He observed that infants appeared to be equipped from birth with a variety of tools designed to maintain proximity to the caretaker, like smiling, clinging, reaching, crying, and following, as well as tools to protest when their caretaker is unavailable, most notably attempts to follow and vocalizations. These behaviors on the part of the infant signal a desire for the presence of and interaction with the caregiver, which in addition to fulfilling basic biological needs imperative for survival also begin the nascent development of interpersonal and social systems as the infant begins to learn which of his or her signals generate which responses from the caregiver (Bowlby 1969/1982).

Infant signals as such are generally universal, although they may vary in frequency and intensity on an individual basis. It is the responsiveness of the caregiver to the infant's signals that determines the specific attachment pattern that develops. It is worth noting before proceeding to a discussion of specific attachment patterns and types that a description of attachment as "secure" or "insecure" is not an indication of the intensity of the attachment relationship. The formation of an attachment relationship, in accordance with attachment theory, is a given. An insecure attachment relationship has the potential for the same strength and longevity as a secure one.

Upon publication of Bowlby's attachment theory, it attracted the interest of various parties, including Mary Ainsworth, who, with her background in observational research, conducted extensive in-home observations of infant-mother interactions, as well as administering a laboratory experiment designed to

activate the child's attachment system (the Strange Situation experiment). Via these methods Ainsworth was able to learn a great deal about infant attachment (Cassidy, 2008). The observed behavioral sequences resulted in the development of the three major infant attachment typologies still utilized today: secure, insecure-ambivalent, and insecure-avoidant behavior (Ainsworth et al., 1978). Main and Solomon (1986) later identified a fourth type, insecure-disorganized/disoriented, that appears to be related to infants who are abused, neglected, or have caregivers who act in frightening and bizarre ways.

As attachment types are heavily discussed throughout the attachment literature, a brief sketch of the primary types follows. It should be noted that there has been criticism of attempting to categorize individual infants or adults into an attachment "box"; activation of the attachment system (which typically occurs in times of fear, stress, and anxiety) results in a wide range of emotional and behavioral responses, and some people do not fit neatly into one category, or appear to exhibit responses that could be interpreted in different ways. Bowlby and Ainsworth both appeared to view attachment as a continuum, rather than as hard and fast discrete categories, and it is important to bear that in mind (Ainsworth et al., 1978; Bowlby, 1969/1982).

*Attachment styles.* Through the interactions of infant and caregiver, secure infants learn that responses to their behavior and signals are prompt, predictable, and soothing. Anxiety and discomfort are alleviated in a predictable, unambiguous fashion, and affective signals are clearly communicated and

predictably and positively reinforced. Assuming stability of environment and parental care, secure infants grow up believing that both external and internal stimuli and information are honest, trustworthy, and generally nonthreatening, and they can therefore react accordingly and trust both themselves and others (Crittenden, 1997). In the Strange Situation, secure infants use their mother as a secure base to explore prior to separation, exhibit proximity seeking and/or distress during the absence of their mother, and seek proximity, contact, or interaction with their mother upon her return. In the home environment during the first year, mothers of secure infants are sensitively responsive to infant signals (Ainsworth, 1979).

Insecure-ambivalent infants (also referred to as anxious or preoccupied) learn through their interactions that the effects of their behavior and signals are unpredictable. Caregivers respond sometimes, other times not at all, or they respond in inconsistent ways, such as soothing in one instance and punitive in the next. As such, they are on an intermittent and unpredictable reinforcement schedule for their behaviors, making any behaviors their caregivers wish to eliminate very difficult to extinguish. As insecure-ambivalent infants age, assuming stability of environment and care, they often display coercive strategies of dominance and submission, shifting their behaviors to elicit the desired response and/or avoid punishment. These infants learn that they must maximize affective displays to get attention. They generally show exaggerated emotional displays, a desire for immediate attention and gratification, and a diminished

ability to trust cognitive information (Crittenden, 1997). In the Strange Situation, these infants tend to show some anxiety even before separation, exhibit intense distress upon separation, and both seek and reject contact upon reunion with their mothers (Ainsworth, 1979).

Insecure-avoidant (also referred to as dismissing) infants learn that their affective signals and behavior are prompt, predictable, and unpleasant (maternal withdrawal or punishment), usually in response to negative affective cues. Because certain behaviors are predictably punished, they subsequently learn to inhibit these affective displays. As some of these affective cues are part of the attachment system (crying, clinging), they also begin to learn to suppress or disengage that system, effectively teaching themselves to ignore some or all of their own internal attachment drives and behaviors. They present misleading emotional cues (to appear happy when sad) in order to receive a supportive caregiver response, or else they must act as their own caregiver (develop self-soothing behaviors). Assuming stability of environment and care, insecure-avoidant infants learn that their feelings cannot be trusted, but rather must be modified to have their needs met or to avoid punishment (Crittenden, 1997). In the Strange Situation, these avoidant infants display little to no outward anxiety or protest during separation, continue to play and explore during the experiment, and either actively ignore or do not seek out proximity or interaction with the mother upon reunion. In home observations, it was observed that mothers of avoidant infants appeared to have an aversion to close bodily contact, and that

mothers of secure or ambivalent infants evidenced no such aversion (Ainsworth, 1979). It is worth noting that although avoidant infants are “punished” for their affect, they are not neglected or abused.

The preceding are the three major categories of infant attachment. However, during Strange Situation procedures since its inception, there have often been cases that were difficult to quantify under the established behavioral protocols for secure, ambivalent, and avoidant. Some infants appeared to exhibit what appeared to be contradictory behaviors, such as approaching then stilling, or a lack of any coherent strategy (freezing or appearing frightened). These infants were later designated as disorganized/disordered, and their behavioral responses (or lack thereof) are posited to have been the result of frightening or abusive interactions with caregivers. If the caregiver is unable to respond to infant signals, or responds in abusive or frightening ways, then the caregiver would become a stress provoking stimuli. Such infants, compelled by the attachment system to both seek out and avoid the attachment figure, come to exhibit confused or contradictory responses, such as incomplete proximity seeking motor activities or blank or frightened expressions (Main & Solomon, 1990). This is the least common category, as well as the one most closely linked to various forms of psychopathology, which will be discussed later.

Although these different attachment strategies are labeled secure and varieties of insecurity, all of them represent normative adaptations of the attachment system. In response to a caregiver who is unpredictable, punitive, or

frightening, the ability to develop strategies that will maintain optimal levels of caregiver involvement, either through excessive affective displays, self-soothing, avoidance, or other behaviors that are indicative of “insecurity” is in fact an adaptive and optimal strategy for the environment in which that particular child lives (Bowlby, 1969/1982; Crittenden, 1997). Although secure attachment is more closely related to a host of desirable cognitive, emotional, and behavioral outcomes, from a biological and psychological evolutionary perspective, humans would need to have evolved the ability to develop multiple behavioral strategies within the attachment system to meet the particular needs of that environment as well as all other potential environmental contingencies. Insecurity of attachment allows infants (and later children and adults) to have their needs met within specific environments. It is the rigidity of these strategies that makes them maladaptive outside the environment in which they developed. As insecure strategies teach the individual not to trust specific cues and signals, when these are encountered outside the original environment and then discounted, interpersonal difficulties often result (Crittenden, 1997).

*Attachment stability.* A significant issue in the field of attachment research is the question of the stability of the construct. Whether or not an individual retains the same attachment strategies from infancy to adulthood is particularly important in developmental research. If security of attachment is in constant flux, then the only attachment variable that needs to be assessed at any given time is an individual’s current state of attachment. If attachment becomes fixed at a

certain point, then all interventions aimed at increasing security would have to come before that point in the developmental cycle. As is usually the case when it comes to complex human behavioral systems, the stability of attachment lies somewhere between these two opposite extremes of perfectly fixed or perfectly malleable.

There have been a number of longitudinal studies that have attempted to answer the question of attachment stability, at least from infancy into early adulthood. From a theoretical perspective, Bowlby's theory presupposes some measure of stability in the form of internal working models (IWM). Recall that infants, through their interactions with attachment figures, are theorized to learn from these interactions and develop mental constructs to guide attachment related interactions in the future (Bowlby, 1969/1982). If this theoretical method of attachment transmission is correct, then early attachment experiences should determine the security of future attachment strategies and relationships.

As Bowlby (1973) described it, "in the working model of the world that anyone builds, a key feature is his notion of who his attachment figures are, where they may be found, and how they may be expected to respond" (p. 208). Whatever shape early attachment relationships take is the base from which attachment related IWM are developed. From what is known of attachment theory, secure early relationships should lead to secure IWM and increase the likelihood of secure future relationships, with insecure relationships leading to future insecurity of internal schemas, behaviors, and interpersonal interactions. If

this is true, then longitudinal research should reveal that attachment orientation in infancy is related to attachment orientation later in life.

*Longitudinal research on attachment.* The first longitudinal study of attachment examined here is the Minnesota Longitudinal Study, an examination of attachment in an at-risk urban poor sample of children. The study included a thorough battery of assessments in a variety of settings typical for infants and children. Attachment related assessments, caregiver characteristics, childhood interpersonal traits and functioning, and salient adolescent and early adult competence measures were all conducted at appropriate ages. Romantic attachment in adulthood was included for participants and their partners who had been in a relationship for at least four months. This included the Current Relationship Inventory (CRI; Crowell & Owens, 1996), with 170 participants comprising the full sample tracked through early adulthood. Utilizing these diverse measures, the authors of the study hoped to gain greater understanding of attachment through the developmental course (Sroufe et al., 2005).

In the Minnesota study, the authors found that attachment security in infancy accounts for 13% of the variance in middle-childhood friendship competence nine years later (Sroufe et al., 2005). The Minnesota sample also demonstrated clear links between infant attachment security and peer functioning at every age from preschool through adolescence (Sroufe et al., 1999), with the predictions at adolescence sometimes as strong or stronger than predictions of peer variables at earlier ages. The addition of certain parental variables

increased the variance that was accounted for in middle-childhood friendship scores (Sroufe et al., 1999). Combining prior peer competence measures and attachment histories increased the predictiveness of later peer competence over using either variable separately. In general, the more measures of attachment and related functions utilized, the greater the predictive value. Global competence at age 19 was significantly related to infant attachment security, but the attachment scores accounted for only five percent of the variance. When other aspects of early care, home environment quality, peer competence in childhood, and parent-child support during the transition to adolescence were included, the variance in adult global competence accounted for approached 50% (Sroufe et al., 2005).

These later findings are notable in that they suggest that attachment is not a fixed construct; continuing interactions with parents and peers throughout infancy and childhood provide ongoing influence. Attachment at 12 months is not, by itself, particularly predictive of friendship competence nine years later, or of global competence at age 19. Factoring in later experiences that likely involve the attachment system increases the predictiveness of the overall construct, theoretically by continually either confirming or contradicting earlier attachment experiences, leading to either greater attachment stability or the increased likelihood of attachment modulation or change. In the context of this research, this takes on added significance. A major injury to the attachment system, such as perceived alienation from primary attachment figures as a result of an

individual disclosing his or her sexual orientation, would contradict early secure attachment representations (or confirm insecure IWM), potentially disrupting IWM and future attachment strategies and behaviors.

Attachment as a developmental process, results like this would suggest, is much more complex than a simple linear stability of an attachment model. These results underscore both the predictive value of attachment in relation to specific outcomes, but also highlight the complexity of these predictive relationships and the intertwining of attachment with other developmental tasks as they influence later behavioral and developmental outcomes. Again, specifically in the context of this research, it is crucial to note how measures of interpersonal support and skill in adolescence, such as parental support and peer competence, have the potential to influence an individual's attachment relationships years down the road. This is a particularly salient point here, as adolescence through early adulthood is the most common time for LGB youth to begin the coming out process (Rust, 2003). Results from the Minnesota study (Sroufe et al., 2005) lend credence to the theoretical construct that significant disruptions to the attachment system outside of infancy and into the teen years have long term implications for attachment functioning, making research into the specific influence of perceived alienation from parents and peers because of sexual orientation a potentially fruitful avenue of study.

Other longitudinal studies are the Bielefeld and Regensburg projects, which also provide an opportunity to examine attachment theory cross-culturally.

These studies were some of the first to be conducted outside of the United States (in Germany), thereby providing an opportunity to gather empirical evidence as to the global applicability of attachment theory. The original goal of the first study (the Bielefeld Project) was in fact to replicate the link between maternal care and infant attachment security observed in Ainsworth's seminal Baltimore study in a German middle-class sample (Grossmann et al., 2005).

The Bielefeld Project consisted of a sample of 49 middle class families recruited before the birth of their child, with 38 (77.5%) still involved in the study when the child turned 22. Observations in the home included infant/child-parent interactions and communications and the Strange Situation assessment. As the result of expanding attachment research during this time, another study was started in Regensburg. Participants were again recruited from low risk middle-class families, with fifty-one 11-month-old infants selected from the city's birth register, of whom 36 (74.5%) were still participating at age 21-22. Assessments in this project included laboratory observations in infancy, the Strange Situation with both parents in infancy, child and parental assessments in childhood, Adult Attachment Inventory (AAI) for the parents, adolescent follow-up with both parents, and young adulthood attachment, relationship, and competence measurements (Grossmann et al., 2005).

Throughout the studies, links between early attachment-related experiences and later attachment variables were found. Adolescent strategies when meeting emotional challenges were significantly influenced by maternal

sensitivity and support during childhood, and by paternal behavior during infancy. Young adulthood security of attachment and partnership representation were predicted by personal strategies in adolescence and childhood, as well as by maternal sensitivity and support during childhood. There was also a significant link between paternal facilitation and support during infancy and security of attachment representation in adulthood (Grossmann et al., 2005). These findings provide support for the long term developmental influence of early childhood attachment experiences, as composite indices from the first three years of life had statistically significant predictive power in determining young adults' attachment and relationship representations.

Pathway models from early experiences and their relative contributions to later security or preoccupation in representations of attachment and partnership showed that response strategies when meeting emotional adversity in adolescence and childhood predicted strongly whether a secure attachment (39%) or partnership representation (20%) would develop at age 22. In adolescence, emotional response patterns within peer relationships occupied much more of the aggregate variable than did patterns within the adolescent-parent relationship, suggesting that the quality of relating to friends in adolescence exerts a stronger influence on later partnership representations, although both adolescent and childhood strategies were influenced by parental behavior (Grossmann et al., 2005). This particular point is important for this research because it supports the inclusion of perceived alienation from peers as

a possible variable influencing attachment, as patterns within peer relationships in adolescence have already been demonstrated to influence later attachment representations in early adulthood.

Follow-up and replication analysis from the Regensburg Project continued to support the hypothesis that attachment and partnership representations in adulthood have their roots in experiences with parents throughout the years of immaturity. Preoccupation with partnership was related to both preoccupied attachment in adolescence and interactions with both parents. Children whose fathers were positively involved with them at age eight were very likely to have a secure partnership representation at age 20 (Grossmann et al., 2005). Infancy attachment patterns weakly predicted attachment patterns at age six (Wartner et al., 1994).

These results from both research projects point to attachment representations as a constantly evolving process, with adult attachment having roots in infancy, childhood, and adolescence, and relationships with parents, peers, and the personal strategies developed over time all contributing to later attachment and relationship development. Although this does not allow for a simplistic attachment model or attachment oriented interventions, it does illustrate the importance of continual supportive and sensitive care. Optimal (or suboptimal) attachment experiences at any one point in the lifespan do not guarantee secure (or insecure) attachment. Rather, these results seem to indicate that they provide one strand in the attachment tapestry, the final result of

which is a mosaic of the combined attachment experiences of one's life to date. Positive experiences in infancy give young children the tools to form positive peer relationships and deal with emotionally stressful situations, which give rise to even more tools that, with continued sensitive and supportive parental interactions, make transition to adolescence more likely to be secure and positive. At each successive level of development, the attachment bonds become more intricate. If they are mostly positive, secure attachment representations are highly probable. If they are contradictory or negative, future development becomes much more difficult to predict, and less adaptive attachment representations become more difficult to modify.

In terms of this research, these longitudinal studies suggest that a singular event (rejection by or alienation from parents and/or peers during the coming out process) would not have much of an influence on the entire attachment system, as adult attachment representations are influenced by interpersonal interactions with attachment figures from infancy through adulthood. Although this concern is valid, it presupposes that rejection by significant attachment figures is a one time, specific event. It is arguable that individuals who experience this type of rejection within their attachment system are unlikely to view it as a singular event as opposed to a series of rejections over time. In any event, given the dearth of knowledge on this topic, dismissing the possibility that alienation from attachment figures due to disclosure of sexual orientation may be an attachment injury, and

as such an event with the potential to negatively disrupt the attachment system, seems premature.

These longitudinal studies provide some idea of how attachment persists over time. Next, some of the specifics of attachment at various points in the lifespan will be examined briefly. Although not directly related to the research reported here, it is important to have a thorough overview of attachment theory to fully understand its theoretical importance in an individual's IWM and interpersonal functioning, how it underpins relationships, and how disruptions may influence behavioral and psychological functioning.

*Attachment in infancy.* The Pennsylvania Infant and Family Development Project was a series of four short-term longitudinal studies that focused on the early years of life. Although there was some variety in the type and timing of some measurements throughout the separate studies, data collection started prenatally with assessments of maternal child rearing history and personality, marital quality, social support, and work-family issues. Assessment and observation continued through infancy (including naturalistic home observations, determination of infant temperament and emotionality, and evaluation of specific family and marital factors) up to the Strange Situation, which was conducted at ages 12 or 13 months with the mother and the father. Participants were exclusively Caucasian, mostly working- and middle-class, and resided in a semi-rural area (Belsky, 2005).

Due to the assessments the Pennsylvania studies employed, the researchers were able to investigate the role of infant temperament as it pertains to attachment. During other research (Frodi & Thompson, 1985; Thompson & Lamb, 1984) it was observed that some secure infants behaved similarly to some insecure avoidant infants, and other secure infants behaved more like infants classified as insecure resistant. In the first Pennsylvania study ( $N = 56$ ), temperament measurements obtained during the newborn period and at age three months discriminated between those infants who cried little during the Strange Situation and those who exhibited higher levels of distress. These measures did not, however, distinguish between attachment classifications of the infants; that is, early temperament measures were not predictive of security versus insecurity (Belsky & Rovine, 1987).

One of the findings in the first of the Pennsylvania studies concerns the development of attachment styles in response to maternal care. In accordance with attachment theory, on a composite index of reciprocal mother-infant interaction, mothers of insecure-avoidant infants scored highest, and mothers of insecure-resistant scored lowest (mothers of secure infants scored in the intermediate group on this index). Further, when the index was broken down into indices of maternal involvement and infant behavior, the former was clearly the one that distinguished attachment groups (Belsky, Rovine, & Taylor, 1984). This was confirmed in the second and third studies ( $N = 153$  for both) (Isabella & Belsky, 1991; Isabella, Belsky, & von Eye, 1989).

Data from the National Institute of Child Health and Infant Development (NICHD) Early Child Care Research Network were also examined for developmental antecedents of infant-mother attachment security. Higher levels of observed maternal sensitivity as measured when infants were 6 and 15 months of age predicted increased likelihood of the child establishing a secure attachment to mother in a sample of over 1,000 children (Belsky, 2005). These findings support the theory that attachment develops as a result of interactions between infants and caregivers, with infants learning from these interactions and beginning the development of an appropriate behavioral and emotional response to what they have experienced. Although infant attachment is not specifically related to this research, this set of studies provides evidence that the theoretical constructs of attachment theory in general, which posit the formation of attachment as a result of infant-caregiver interactions, are sound.

Other research on attachment in infancy has confirmed the intergenerational (parent to child) transmission of attachment by showing a link between parental attachment representations assessed via the Adult Attachment Interview (AAI) prior to the birth of the first child and that child's infant attachment in the Strange Situation at age one (Fonagy, Steele, & Steele, 1991; Steele, Steele, & Fonagy, 1996). These findings tend to exclude strictly biological factors in predetermining infant attachment. So the early learning pathways of attachment, although not completely mapped, are generally understood, and supportive of Bowlby's underlying attachment theory. Interactions between

parents and child provide an attachment learning context for the child, who forms internal mental models of how interpersonal relationships should function, and how one should act to have one's attachment needs met. Meta-analyses of many studies have significantly demonstrated the link between sensitive caregiving and security (de Wolff & van Ijzendoorn, 1997), even in non-Western cultures (van Ijzendoorn & Sagi-Schwartz, 2008). Sensitive parental care is much more powerful in the formation of the child-parent bond than any characteristics of the child (van Ijzendoorn & Bakermans-Kranenburg, 1996).

*Attachment in adolescence.* If the early stages of attachment are generally well understood, such is not the case for adolescence. The process of attachment transference from the parent(s) in infancy and childhood into the relative independence of adulthood and the search for adult romantic partners (and the formation of an adult romantic attachment relationship) is more difficult to analyze. Because this period involves both the lessening of old attachment relationships and the formation of new ones (along with the wide variety of other psychological, social, and biological tasks that occur during this period), uncertainty regarding what processes are being assessed is common.

The normative attachment tasks of adolescence include turning away from former attachment figures, finding others with whom to meet attachment needs (discussed below), forming pair bonds, consolidating and developing the ability to flexibly apply internal working models of attachment, and recognizing individual differences in attachment relationships and attachment needs (Scharf &

Mayseless, 2007). The first two of these are met, at least in part, by the fact that during adolescence individuals spend progressively less time with parents and more time with peers (relative to the amount of time spent during early and middle childhood) (Larson et al., 1996; Youniss & Smollar, 1989). Conflict frequency between children and parents peaks during adolescence, increasing from early to mid adolescence (Collins & Steinberg, 2006). In addition, adolescents utilize their parents as exclusive attachment figures with less frequency (Allen, 2008).

Hazan and Zeifman (1994) framed the developmental task of transference of attachment functions from parents to peers to romantic partners throughout adolescence and into adulthood. Research has suggested that full transference of the four attachment functions (proximity seeking, safe haven, separation protest, and secure base) and the development of new attachment relationships takes approximately two years. Nickerson and Nagle (2005) found that nominations for peers for proximity and safe haven functions increased between fourth and eighth grades, but all children identified parents as serving as a safe base during this period. Kerns, Tomich, and Kim (2006) found that 90% of third and fifth graders nominated parents in attachment situations but peers in 74-90% of companionship situations, suggesting that this general age range (middle childhood) begins the beginning of transference of certain behaviors in the attachment system from parents to peers.

By late adolescence, romantic partners are preferred to peers as primary attachment figures, and romantic relationships that endure are more likely to become attachment relationships (Kobak et al., 2007). Formation of pair bonds is practiced during adolescence, and research suggests that although nascent romantic relationships may begin in early adolescence, they become more stable in late adolescence (Carver, Joyner, & Udry, 2003). Early adolescent relationships are more frequently about social status or sexual experimentation (Furman & Wehner, 1997; Shulman & Scharf, 2000). In contrast, romantic relationships in late adolescence and early adulthood evince greater emphasis on intimacy and compatibility (Zani, 1993), and these relationships begin to fulfill needs for support and caregiving (Furman & Wehner, 1997; Scharf & Mayseless, 2001).

Examination of adults' networks of attachments indicates that although romantic partners are central, adults usually have several attachment figures, including parents and friends, and that parents still often occupy a central position (Doherty & Feeney, 2004; Trinke & Bartholomew, 1997). A network of attachment relationships with same-sex family members and age mates is common (Caporael, 2001; Fraley et al., 2005). This suggests that attachment relationships formed very early in life remain important far into adulthood. Evidence suggests that adolescence is also a key time for the formation of an overarching attachment model (Allen, 2008), when lessons learned from all attachment relationships converge to form a general attachment ideology. On this

basis future potential attachment relationships are assessed. However, they also continue to hold specific models that reflect variance in the different attachment figures. Furman and Simon (2004) found differences in attachment states of mind for mother and father when the AAI was administered to adolescents.

Examination of relationships with parents and romantic partner relationships in adult subjects also showed differences in attachment states of mind (Owens et al., 1995), demonstrating that although individuals may have global attachment strategies, these may manifest differently depending on the specific attachment relationship.

These developmental attachment tasks will differ by adolescent, with previous attachment history, and a plethora of other individual differences that influence the rate and ease at which attachment tasks proceed. As in infancy, insecure attachment in adolescence is linked to more problematic functioning. Preoccupied/anxious attachment in adolescence has been linked to depression (Kobak, Sudler, & Gamble, 1991), suicidal ideation (Adam et al., 1996), and an increase in delinquency between ages 16-18 (Allen et al., 2002). Dismissive adolescents are more likely to evince substance abuse and conduct disorders (Brown & Wright, 2003).

As the development of attachment over time is a complex process, adolescent attachment states are not a direct reflection of infant attachment experiences and working models. Some studies (e.g. Hamilton, 2000; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000) find sizable correlations between

infant attachment and adolescent AAI security, and others find no correlation but identify experiences beyond infancy that can account for some of the discontinuity (Weinfield, Sroufe, & Egeland, 2000). Adolescent security is not a direct mirror into infant/childhood attachment, but nor is it a direct reflection of current parent-adolescent relationships. Research suggests that although parental-adolescent behavior patterns of sensitivity and autonomy explain as much as 40% of the variance in security in adolescent attachment states of mind (Allen et al., 2003), AAI security also links strongly to adolescent behavior with peers, and more strongly with peers than with parents (Allen et al, 2005).

The findings discussed here regarding attachment in adolescence provide evidence for several key points. First, adolescence is a period of attachment consolidation, experimentation, and transference. Also, the development of childhood to adult attachment representations is a lengthy process that appears to involve the gradual transference of different components of the attachment system to peers and, eventually, to romantic partners. Finally, parents remain important within the attachment system, although they may become less important in fulfilling specific attachment functions. In terms of this research, the importance of both parents and peers as attachment figures during adolescence into adulthood is pertinent because perceived alienation from these attachment figures would have the potential to disrupt an individual's IWMs and the attachment system.

*Attachment in adulthood.* As people become adults, the attachment consolidation of the generalized attachment models is completed, and relationship specific attachment models continue and/or develop with the maturation of long-standing interpersonal relationships or the introduction of new people into the attachment hierarchy. Adult attachment is usually referenced in several specific frameworks. Adult attachment in relation to historical memories and incidents specific to childhood is assessed using the AAI, and is usually utilized to describe an individual's global attachment orientation. In addition, this historical, consolidated version of childhood attachment is referenced in the generational transmission of attachment, with mother's AAI scores predicting infant attachment at age one. Adult attachment is usually described in terms of current global functioning or in terms of specific romantic relationships (or pair-bonds). The quality of the relationship is described in terms of attachment security, as well as in terms of the overall attachment health of the individuals within the relationship.

Long-term stability of adult attachment has been studied, and findings in general have supported the stability of the adult attachment construct. Excluding stability research that has measured relatively short periods of time, when utilizing a three-category model of adult attachment and examining stability over time periods from 40 weeks to four years, stability of adult attachment categories (when an individual endorses having the same attachment style over time) has been found to be between 70-75% (Kirkpatrick & Hazan, 1994; Senchak &

Leonard, 1992; Shaver & Brennan, 1992). A study utilizing a four-category model found 75% and 80% stability of attachment over eight months for females and males, respectively (Scharfe & Bartholomew, 1994).

The Stony Brook Adult Relationship Project also examined the issue of stability over time in adult romantic relationships. The research design included 101 steadily dating and 157 engaged couples assessed on their attachment representations via the AAI and the Current Relationship Inventory (CRI), problem solving as a couple, and other measures. Intermediate follow-up occurred at 18 months post-marriage, including assessments of important life events, then again at 36 months (although disrupted funding interrupted data collection at this point, resulting in only a subset of the sample included) and 70 months for the married group only. Finally, a parent-child follow-up occurred for those couples with a child when the offspring was between the ages of three and four. Retention across the years of the study was 73%, with dropping out being associated with separation or divorce from the original partner, although follow-ups were conducted with those who were willing to come back alone or with a new partner. At the time of the six-year assessment, 22% of the originally engaged couples had separated, divorced, or never married, and 43% of the dating sample had married (Crowell & Waters, 2005).

During the time period that encompassed the transition to marriage, 78% of participants were given the same AAI classification at both times using the three primary classifications (secure, dismissing, and preoccupied), and 83% had

the same classification when a secure/insecure dichotomy was used (Crowell, Treboux, & Waters, 2002). Examination of the stability across this dichotomous measure revealed that secure AAI classifications were 96% stable, with the insecure classification only 76% stable. Most of this group changed from insecure at time one to secure at time two, with this newly secure group differing from those who remained insecure in having secure specification attachment representations as assessed with the CRI and more positive feelings about their relationships. Higher education levels and living away from parents prior to marriage also appeared to create opportunities for a shift to more secure attachment representations (Crowell, Treboux, & Waters, 2002).

From 18 months to six years of marriage, approximately two-thirds of the participants became parents. There was an 83% correspondence of the three major AAI classifications across this time frame, with no difference in the stability of secure versus insecure classifications, indicating that, unlike the beginning of marriage, this was not a prominent period for movement toward security. There was no significant difference in the stability of attachment classifications for men or women who did not become parents. However, although women who became mothers ( $n = 73$ ) were extremely stable in their AAI classifications (94%), men who became fathers ( $n = 65$ ) experienced only 71% stability, and were just as likely to move from secure to insecure as vice versa. This suggests that the transition to parenthood specifically may represent a time wherein men experience a change in their attachment representations, and not always in a

positive direction (Crowell & Waters, 2005), a significant finding in light of the proposed research as it demonstrates that adult attachment may be modulated by a particular discrete event (such as parenthood, or “coming out”).

The researchers were also interested in what affect relationships may have on general or specific representations of attachment. As previously discussed, Bowlby proposed that early attachment was relationship specific (child-caretaker). Over time, these relationships created internal working models (IWM) of attachment that could be generalized and used as a guide for attachment-related thoughts, feelings, and behaviors beyond the initial attachment relationship(s) of early childhood, so that early relationship experiences influenced current relationships (Bowlby, 1969/1982). Given that roughly 55% of adults in romantic partnerships match on representational security status (Crowell, Treboux, & Waters, 2002; van Ijzendoorn & Bakermans-Kranenburg, 1996), the Stony Brook Adult Relationship Project seemed an ideal framework for measuring changes in representational and specific attachment security over time. As already noted, the first 18 months of marriage appeared to provide a good opportunity for individuals with secure relationship representations (as assessed by the CRI) but insecure generalized attachment (as assessed by the AAI) to move to secure generalized attachment status (Crowell, Treboux, & Waters, 2002). Although this was the only time period with such a robust movement from insecure to secure status in this study, the potential effect a current, secure attachment relationship can have for an

individual with a generalized insecure attachment representation is encouraging. It suggests that troubled early development need not condemn someone to unsatisfactory interpersonal relationships.

*Attachment and Psychological Functioning.* The last part in this overview of attachment related issues involves how attachment plays a part in psychological functioning and the presentation of psychological distress and symptoms. Given the overarching theoretical constructs that make up attachment theory, and the potential for maladaptive functioning as a result of rigid and insecure attaching schemas, research on how attachment and mental health are related is an important consideration. Not only do attachment injuries have the potential to influence the attachment system, insecure attachment is a risk factor for a variety of psychological disorders. Anything with the potential to disrupt the attachment system may result in psychosocial consequences beyond attachment insecurity, which has broad applications for counseling (practical, research, and education), as well as for other fields, including public policy and anti-bullying or anti-discrimination efforts.

Attachment theory, among other things, “provides a critical developmental frame for understanding *how* caregiving relationships influence processes thought to be central to emerging psychopathology - for example, the construction of cognitive-affective expectancies, the capacity for emotional and behavioral regulation, and strategies for coping with stress,” (DeKlyen & Greenberg, 2008, p. 637). Insecure forms of attachment represent a natural

adaptation to the particular caregiving environment, providing the infant a method for ensuring that at least some of his or her needs are met. However, as the insecure forms of attachment involve selectively attending to or ignoring specific internal or external behavioral or emotional cues, they also establish an internal schema of interpersonal relationships that may be maladaptive in other environments (Crittenden, 1997). The formation of strategies that were adaptive for the initial caregiver/infancy dynamic can become a hindrance elsewhere, with the potential for the development of clinically significant psychopathology.

Although attachment theory is one that can potentially explain a number of developmental issues and trajectories, it is important to note that the presence or absence of secure attachment does not normally, in and of itself, predict psychological health or pathology. Secure attachment is not the Holy Grail of optimal psychosocial functioning, and insecure attachment does not sentence the individual to a lifetime of various pathologies. From a theoretical standpoint, there are four interrelated mechanisms that have been posited to link early attachment with later pathology: emotional regulation, observed behavior, cognitive-affective structures, and motivational processes (DeKlyen & Greenberg, 2008).

Empirical support for a direct link between infant attachment classification and behavioral or emotional difficulties has been mixed. For example, Fagot and Kavanagh (1990) examined children who were unequivocally classified as either insecure/avoidant ( $n = 31$ ) or securely attached ( $n = 58$ ) using the Strange Situation procedure. Parents reported that occurrence of problem behaviors at

four different ages, and there were observations at home and in toddler playgroups at two points in time. The only significant effect for attachment classification was that both teachers and observers of the play groups rated insecure/avoidant girls as more difficult to deal with and as having more difficulty with peers than their securely attached peers (Fagot & Kavanagh, 1990). Similar results from other studies of low risk populations (Bates, Bayles, Bennett, Ridge, & Brown, 1991; Goldberg, Lojkasek, Minde, & Corter, 1990) strongly suggest that insecure attachment has no significant main effect on externalizing problems in late infancy and early childhood in low risk samples.

The Minnesota Parent-Child Project followed a high-risk sample from infancy into early adulthood (Sroufe et al., 2005). Assessments from preschool, the early elementary school years, preadolescence, and adolescence all consistently showed that children in high-risk environments who exhibit early attachment insecurity are significantly more likely to have poor peer relations, as well as more symptoms of aggression, depression, and general maladjustment later in their development than their securely attached high-risk peers.

Adolescents with early-onset antisocial behavior were more likely to have been rated as avoidantly attached as infants than adolescents with later-onset behavioral issues or youth without clinical disorders (Aguilar, Sroufe, Egeland, & Carlson, 2000).

For externalizing issues, attachment and early parent-child relationship predictions were much stronger for boys than for girls (Sroufe et al., 2005). Other

longitudinal studies with high risk populations have found correlations between disorganized attachment at 18 months with hostility in preschool and kindergarten, as well as the combination of insecure attachment and low intelligence as highly predictive of teacher-rated externalizing issues at age seven. Insecure attachment in infancy was related to behavioral problems in preschool and at age five, and avoidant and disorganized attachment classifications in infancy associated with higher externalizing scores at age nine (DeKlyen & Greenberg, 2008). Given these results, it appears as if early attachment, when coupled with other adverse factors, has some moderate predictive power on later psychosocial symptoms, but the full measure of attachment's unique influence is difficult to separate from the other risk factors that influence the development of psychopathology.

Greenberg et al. (2001) conducted a study comparing 80 preschool aged boys referred to a psychiatry clinic and diagnosed with oppositional defiant disorder (with or without attention deficit hyperactivity disorder) with 80 boys who were not clinic referred. The boys were matched on the presence of four risk factors (quality of early attachment relationships, child characteristics, parental management and socialization strategies, and family ecology). Although no correlates were found to differentiate the two groups of boys by themselves, the combination of risk factors provided relatively high sensitivity (81%) and specificity (85%) for clinic status. Boys referred to the clinic were 44.8 times more likely than the comparison group to have present three or four risk factors (as

long as the parental management/socialization strategies risk factor was present; the odds dropped to 24:1 where this risk factor was absent). If two risk factors were present, the boys were 3.7 times more likely to be clinic referred, although in these cases, poor parental strategies did not significantly increase the child's risk. Control group boys were 11.6 times more likely to have only one risk factor or none at all (Greenberg et al., 2001). These results demonstrate that the more risk factors a child experiences, including poor quality of early attachment, the more likely that child is to exhibit behavioral difficulties, even at a very young age. Although this does not show an absolute link between insecure attachment and pathology, it is suggestive of the power that insecure attachment may have, in combination with other factors, to shape early cognitive, emotional, and behavioral patterns.

Other studies have found that adolescents who were classified as secure reported significantly better psychosocial adjustment, more positive self-concept, and lower levels of depression and anxiety than their insecure peers (Cooper, Shaver, & Collins, 1998). Preoccupied attachment has been linked to increases in delinquent behavior in late adolescence in a sample ( $n = 117$ ) of moderately at risk teenagers, and security predicted an increase in social skills during the same time period (Allen et al., 2002). Another study found that dismissing adolescents were more likely to evince substance abuse and conduct disorders, and that ambivalent adolescents reported significantly more interpersonal difficulties and symptoms (Brown & Wright, 2003). It is noted that this study did have issues with

sample size (only 30 participants, 15 each clinical and control) and measuring attachment (used a projective test that measured separation anxiety from parents). Finally, in another psychiatric adolescent sample ( $N = 60$ ), dismissing attachment was predictive of conduct disorder, comorbid conduct and affective disorders, and substance abuse, and adolescents with affective disorders alone were more likely to be rated as preoccupied or unresolved. For unresolved patients (18%), affective disorders were associated with this attachment classification regardless of conduct disorder status (Rosenstein & Horowitz, 1996).

Although an analysis of every study examining attachment in infancy and childhood and its influence on behavioral, social, cognitive, and psychological development is outside the scope of this review, the aforementioned studies demonstrate that attachment plays a role in later mental health. The exact nature of that role is not yet fully understood, nor does it appear that attachment orientation is solely (or even primarily) responsible for the absence or presence of specific psychopathology later in life. This is an important consideration, particularly because research often pathologizes insecure attachment in and of itself, despite the necessity of attachment variations to ensure parental attention during infancy. However, the available evidence does support the importance of attachment over the long term. Early attachment difficulties, when coupled with other risk factors like maternal youth or psychological diagnoses, low

socioeconomic status, and lack of familial social support, represent early lessons in relationships that may lead to future interpersonal and psychosocial difficulties.

As humans develop, they have the chance to test early interpersonal expectations through the relationships they develop outside the mother-infant dynamic. Those relationships may serve to either confirm or deny the basic lessons they have been taught. When corrective relationships fail to develop for those who experience early interpersonal hardships, the IWM become more entrenched, and their interpersonal behavioral patterns more fixed. Next, some of the current literature on adult attachment and psychopathology will be reviewed.

Some of the most compelling evidence about attachment and psychopathology in adults has come from meta-analytic reviews. These reviews combine many independent studies to look for findings across research, as well as increasing the likelihood that reported conclusions are statistically valid by combining participant pools. One such meta-analysis examined research specifically on mothers and adolescents (van Ijzendoorn & Bakermans-Kranenburg, 2008). Pertinent studies were found via Web of Science and PsychLIT searches, and also by examining studies listed as using the AAI in the first edition of the *Handbook of Attachment*. This resulted in a set of 28 samples with mothers without clinical diagnosis, 61 clinical samples, and 16 samples with adolescents. In all, 4200 participants who took the AAI were included in the analysis of 105 studies involving the AAI (van Ijzendoorn & Bakermans-Kranenburg, 2008).

In nonclinical mothers and adolescents, the rate of participants that received a secure attachment classification via the AAI was 55.2% and 47.5%, respectively, with dismissing attachment seen in 19.6% and 27.7% of the participants, and the preoccupied attachment classification was assigned to 10.4% and 8.3% of the samples. Unresolved or “cannot classify” participants made up 14.9% of the adult sample and 16.5% of the adolescent sample. Contrast these percentages with the attachment classifications of the combined samples of adult mothers with some form of clinical diagnosis. Only 27% of the women were rated as secure. Within the insecure attachment categories, 35% of the combined sample was dismissing and 38% preoccupied, and 41% fell into the unresolved/cannot classify category. These numbers clearly illustrate the correlation between insecure attachment and some form of psychopathology, although causality or directionality is impossible to determine from such data (van Ijzendoorn & Bakermans-Kranenburg, 2008).

These authors also examined the type of attachment in relation to externalizing or internalizing clinical diagnoses. Many studies have attempted to find some sort of relationship between the specific varieties of insecure attachment and specific disorders. The meta-analysis detailed here found that individuals with internalizing clinical disorders (for example, depression) showed an overrepresentation of preoccupied attachment, but mood disorders as a broad category were linked only with insecurity rather than a specific type of insecurity. Although some of the more severe externalizing disorders (e.g., antisocial

personality disorder, conduct disorder, somatoform disorder) seem to be characterized by an overrepresentation of dismissing attachment, most externalizing disorders did not demonstrate a statistically significantly higher rate of one insecure attachment style over another. Finally, borderline personality disorder, abuse, and suicidal behaviors were strongly associated with the unresolved attachment classification (van Ijzendoorn & Bakermans-Kranenburg, 2008).

The same authors conducted another meta-analytic study in 1996. Studies were selected through a PsychLIT search and consultation with Mary Main, who developed the AAI. In all, 33 studies were included, encompassing 13 samples of mothers without clinical diagnoses, 6 samples of fathers from families without clinic referral, 14 clinical samples, 4 samples with adolescents and young adults, and 8 samples from low socioeconomic and multicultural backgrounds, for a total of over 2000 participants who took the AAI included in the analysis. Similar distributions of attachment category were found for women with no clinical diagnoses, although the data did show that mothers of low socioeconomic status were more likely to be dismissing or unresolved in their attachment histories. In this sample of studies, clinically disordered participants had a strong overrepresentation of insecure attachment representations as compared to their control peers, but systematic relations between clinical diagnosis and type of insecurity were not found. This meta-analysis also included samples from fathers, adolescents, and persons from different cultures, which generally showed the

same general AAI distributions as nonclinical mothers (van Ijzendoorn & Bakermans-Kranenburg, 1996). These analyses, which take different studies and combine the results to increase their statistical power and validity, not only give us a baseline for attachment distributions in the general population, but also confirm the link between insecure attachment and psychopathology in adults. Admittedly, the link is correlational rather than causal. Still, as in adolescence, the link between insecure attachment and psychopathology persists, which provides possible avenues for research and treatment of various psychological disorders.

Finally, should the attachment system and interpersonal relationships show evidence of significant impairment, this in and of itself can be recognized as one of two trauma- and stressor-related disorders according to the *Diagnostic and Statistical Manual of Mental Disorders*, which is currently in its fifth edition (*DSM-V*). Under the *DSM-V* (American Psychiatric Association, 2013), Reactive Attachment Disorder or Disinhibited Social Engagement Disorder may occur when attachment traumas are pervasive and/or severe. Diagnostic criteria for Reactive Attachment Disorder (RAD) include (a) a consistent pattern of inhibited, emotionally withdrawn behavior towards adult caregivers (child rarely or minimally seeks or responds to comfort when distressed), (b) persistent social and emotional disturbance as evidenced by at least two criteria (minimal social/emotional responsiveness to others, limited positive affect, episodic unexplained sadness, irritability, or fearfulness evident even in nonthreatening

interactions with adult caregivers, and (c) a pattern of extremes of insufficient care evidenced by at least one criteria (social neglect or deprivation in the form of persistent lack of having basic emotional needs for comfort, stimulation, and affections met by adult caregivers; repeated changes in primary caregivers that limit opportunities to form stable attachments; rearing in unusual settings that limit opportunities to form stable attachments) (American Psychiatric Association, 2013).

Disinhibited Social Engagement Disorder (DSED) is evidenced by indiscriminate attachment behavior, where as RAD is characterized by withdrawal from caregivers or attachment figures. Diagnostic criteria for DSED include (a) a pattern of behavior in which a child actively approaches and interacts with unfamiliar adults and exhibits at least two criteria (reduced or absent reticence is approaching and interacting with unfamiliar adults; overly familiar verbal or physical behavior; diminished or absent checking back with adult caregiver after venturing away, even in unfamiliar settings; willingness to go with an unfamiliar adult with minimal or no hesitation), (b) behaviors listed above are not limited to impulsivity but include socially disinhibited behavior, and (c) a pattern of extremes of insufficient care evidenced by at least one criteria (social neglect or deprivation in the form of persistent lack of having basic emotional needs for comfort, stimulation, and affections met by adult caregivers; repeated changes in primary caregivers that limit opportunities to form stable attachments; rearing in unusual settings that limit opportunities to form stable attachments).

For both DSED and RAD, the child must be at least 9 months of age. For RAD, the *DSM-V* also qualifies that disturbances are evident before age 5, and diagnostic criteria for autism spectrum disorder cannot be met (American Psychiatric Association, 2013).

Having already discussed the specifics of the various attachment strategies and how they develop, the fact that severely pathological attachment reactions may take distinct courses toward either inhibited interactions with others (RAD) or disinhibited behaviors towards others (DSED) should come as little surprise. This is completely consistent with what is known about the formation of attachment relationships and internal working models of attachment. Such is the relative importance of the attachment system that in children for whom early care has been particularly abusive, negligent, or chaotic, their entire ability to form interpersonal relationships, with all that entails for social, intellectual, and emotional development, becomes disordered.

*Conclusion.* The preceding sections on attachment and psychosocial issues in childhood, adolescence, and adulthood demonstrate that although insecure forms of attachment are natural adaptations which allow infants and children to meet at least some of their biological and psychosocial needs, they are unhealthy in that they result in elevated risk for pathology. Tactics that force children to ignore significant internal and external social and emotional cues, as well as to develop behavioral scripts to meet their needs that do not translate well into other situations and relationships, leaves those with an insecure attachment

base vulnerable in many ways. All things being equal, starting with or later developing a secure attachment base is optimal. This is why research into events that have the potential to damage attachment relationships or representations is important. As it relates specifically to this research, the data described here suggest the possibility that anything with the potential to undermine healthy IWM of attachment (or verify rigid or maladaptive IWM) may influence a person's psychosocial health. Alienation from attachment figures at a particularly vulnerable period in life, such as during the coming out process for LGB individuals, would appear at least theoretically to have this potential.

#### *Research on the Lesbian, Gay, and Bisexual Community*

Until now, the focus of this literature review has been on attachment theory, including its origins, how it affects individuals from infancy to adulthood, and some of the research that demonstrates the validity of this developmental theory. Here, we will examine a specific subset of the population, the lesbian, gay, and bisexual (LGB) community. To understand why a study of attachment as it applies specifically to gays and lesbians is appropriate and worthwhile, it is important to provide some basic demographic information about this community.

*Behavior, attraction, or identity.* First, there is the question of how to define someone as gay, lesbian, or bisexual. Generally, there are three common methods of assessing sexual orientation. Those are by assessing behavior, desire, and self-identification (Laumann et al., 1994; Saewyc et al., 2004). There can be discordance among sexual orientation (pattern of sexual attraction),

sexual identity (self-label of sexual attraction), and sexual behavior (actual sexual contact). Although these terms, particularly sexual orientation and sexual identity, are sometimes used interchangeably, the challenge for psychosocial research is to understand and acknowledge that in some people, labels may not match either their internal fantasy life or their behavior (Bailey, 2003). Using self-report responses to categorize someone's sexual identity will lead to error if there is discordance in the respondent's fantasies, behavior, and self-identification of sexual orientation.

Some research has asked about sexual activity, and any individual endorsing same gender sexual contact becomes categorized as gay or lesbian. The obvious problem with this approach is that it is not uncommon for individuals who would otherwise be considered heterosexual to have at least one same gender sexual encounter. In a recent survey of Americans between the ages of 15-44 ( $N = 13,495$ ), 12.5% women reported at least one experience of same-sex sexual contact, and very few researchers believe that levels of lesbian or bisexual women in the U.S. reach those levels (Chandra, Mosher, Copen & Sionean, 2011). It is also plausible that someone who may self-identify as gay or lesbian has yet to have any same gender sexual experience, as 28.6% of females and 27.2% of males aged 15-24 reported no sexual contact with another person (Chandra et al., 2011). Therefore, categorizing research participants on the basis of their reported sexual activity can be problematic, and a dichotomous

heterosexual/homosexual distinction also results in the exclusion or mislabeling of bisexual and other sexual minorities.

Assessing orientation through desire is also a difficult task. Attraction can be difficult to quantify or assess, and questions regarding the nature of individual's erotic fantasies are potentially embarrassing. Then there is the question of intent versus commission. If individuals acknowledge same-gender sexual fantasies and urges, but have not acted on them, how should they be defined? Given this, utilizing desire to categorize sexual orientation is also fraught with potential complications.

Finally, researchers can request that individuals select the sexual orientation they believe fits them best. The issue here is the potential reluctance to identify oneself as a sexual minority. An individual may identify as straight despite same-gender attraction, particularly if he or she is afraid of being identified as gay or lesbian and concerned about who will have access to the research data. Of course, this self-report bias is a problem for all research that utilizes self-report measurements, so this is not necessarily unique to research on sexual orientation. Taking all this into consideration, this research had respondents to self-report their sexual orientation, as opposed to asking about sexual behavior or patterns of attraction. In doing so, the author acknowledges that this is a necessarily simplistic way to categorize individuals, and respondents who are discordant in their sexual fantasies, behavior, and self-label of sexual orientation may, as a result, be miscategorized.

*Census data.* For most of the history of the United States, there was no official way to document the number of gay and lesbians within the country, as the U.S. Census form does not include questions on sexual orientation. However, in 1990, the category of “unmarried partner” was included as a choice for individuals to select as their relationship to the “head of household.” Although this did not result in the gathering of information on single gays and lesbians, it did provide the first national data on same-sex households within the United States (Baumle, Compton, & Poston, 2009). Of course, because the Census does not ask specifically about sexual activity or orientation, it is possible that some roommate relationships are miscategorized as same-sex partnerships, but assuming that all coding errors are blind and random, this new category in the official Census data has enormous potential for research on partnered gays and lesbians. The “unmarried partner” choice has been included since its inception in 1990, so although the 2010 Census data have yet to be fully analyzed, a snapshot of same-sex households within the United States can be constructed from the 2000 Census data. Otherwise, only two national level studies have included questions of sexual orientation. These are the National Health and Social Life Survey (NHSLs) and the National Survey of Family Growth (NSFG) conducted in 2002 and 2006-2008, respectively, by the National Center for Health Statistics (Baumle et al., 2009).

Based on estimations from the Public Use Microdata Sample of the Census, approximately one in ten unmarried partner households in the United

States are same-sex partnerships, with roughly 301,000 gay male and 293,000 lesbian households out of the estimated 5.5 million unmarried partner households nationwide. Gay and lesbian unmarried households were found in almost every county in the country, with 85% of them located in urban areas (Simmons & O'Connell, 2003:2). Although the Census does not report on single or dating gays and lesbians, weighted NSFG data provide estimates on the overall percentage of gays and lesbians in the United States of approximately 2.55% of men and 1.81% of women who may be classified as gay or lesbian, and these data were a close match to the NHLS data. Using these percentages with the total 2000 Census numbers for U.S. citizens between the ages of 15-44 (the same age range used in the NSFG survey), there were an estimated 1.6 million gay men and 1.1 million lesbians living in the United States at the time of the Census (Baumle et al., 2009).

Necessarily, these figures are estimates, and are based on age ranges rather than on the entire U.S. population. Because the Census does not ask about individual sexual orientation, there is no way to know the exact number of gays and lesbians within U.S., and as there is no absolute way of assessing sexual orientation, there is some margin of error. However, the data do illustrate that there are millions of gays and lesbians living in our country, in the vast majority of cities and counties in the United States, living alone or with partners.

Families must also be considered. Thirty-four percent of lesbian cohabiting couples and 22% of gay male cohabiting couples have at least one child living

with them (Baumle et al., 2009). Cianciotto and Cahill (2003) estimate that there are between two and eight million gay and lesbian parents, with between one and fourteen million children having at least one LGB parent, in the United States. This means that LGB individuals are often raising children in a culture where their legal status as families and parents is on constantly shifting ground, and where they still face the heightened risk of being a victim of a hate crime, or being discriminated against in public spaces or places of employment (Collins, 2004). Because of this, research into how specific tenets of psychological theory affect this population is an important and valid endeavor.

*Discrimination.* It is important to briefly discuss the prejudice against the LGB community within Western culture, both in order to understand why members of the community may be reluctant to identify themselves and/or participate in psychosocial research, and to appreciate some of the particular social complexities which underpin both the LGB community and this study. Understanding why discriminatory practices, beliefs against, and rejection of LGB individuals are still common in certain segments of society involves the concept of sexual orientation as a master status (Garnets & Kimmel, 2003). Sexual orientation has been given great importance by society, and because of that individuals who identify as a sexual minority are embracing an identity that overarches everything else about their personal identities. Attributes like gender, race, age, religion, and political affiliation all become subordinate to sexual orientation. As a result, individuals become defined solely by what they do (or

would like to do) in their affectional or sexual lives. When they then “come out,” or engage in activities that would be unremarkable when conducted by a heterosexual (openly dating or expressing affection for their partner in public, for example), it may provoke complaints that they are doing something inappropriate, vulgar, or even obscene or evil (Garnets & Kimmel, 2003). As late as 1996, a majority of Americans still held negative attitudes toward homosexual behavior, endorsing that it was morally wrong and unacceptable (Yang, 1997).

There is evidence that attitudes toward LGB individuals are changing, however. According to data from the General Social Surveys conducted by NORC at The University of Chicago, the percentage of Americans who believe that “sexual relations between two adults of the same sex” is always wrong dropped below 50% in 2008, falling to 43.5% in 2010, and those who believe that such relationships are not wrong at all climbed over 40% for the first time in 2010 (40.6%) (Smith, 2011). There is a wide generational gap in attitudes towards same sex behavior as well. In 2010, 62.5% of those over 70 believed that homosexual behavior is “always wrong,” with only 26% of those aged 18-29 endorsed the same opinion (Smith, 2011).

In addition to risking censure and derision, coming out and living openly as an LGB individual sometimes involves the potential for physical or sexual violence. In a sample of over 1,900 lesbians, 37% of the sample reported having been the victims of some form of physical abuse (24% while growing up, 16% as an adult). Forty-one percent of the sample reported being the victim of a sexual

assault (21% while growing up, 15% as an adult), and the perpetrators were overwhelmingly male (Bradford, Ryan, & Rothblum, 1994). Not surprising, given the amount of violence suffered by this sample, the mental health consequences were pronounced. Over half of the sample endorsed having at least contemplated suicide at one point in their lives, with 18% reporting having made an actual suicide attempt, and 73% of the sample reported being in counseling or having received supportive services from a mental health professional at some point in the past (Bradford et al., 1994).

In a 2002 study, D'Augelli, Pilkington, and Hershberger examined victimization based on sexual orientation, specifically during high school. Three hundred and fifty participants (56% male, 44% female; all identified being gay, lesbian, or bisexual but “mostly” gay/lesbian) were used for the analysis. Seventy percent of the sample had been “out” between one and three years, with the average being two and a half years ( $SD = 1.8$  years). Only 13% of the sample was completely open in high school; nearly half (46%) was completely closeted.

Participants reported knowledge of victimization of other LGB youth (34% verbal, 10% physical assault, 4% sexual assault, 27% shunning), with gay and bisexual males being victimized much more frequently than other sexual minority youth. In terms of their own victimization, participants reported victimization of the following types: verbal abuse (59%), threatened with violence (24%), objects thrown at (11%), physically assaulted (11%), threatened with weapons (2%), sexually assaulted (5%) and threatened with disclosure of their LGB status (20%).

Over half of the sample reported three or more instances of verbal abuse in high school, and verbal abuse was significantly predicted by openness and gender atypicality. As a result both of their own victimization, as well as the knowledge of the victimization of others, respondents reported fear of both verbal and physical abuse. Twenty-seven percent reported extreme fear of verbal abuse, and 44% had some fear of physical attack. In addition, 42% of males and 25% of females reported thinking of suicide “sometimes” or “often,” and 48% admitted that their suicidal ideation was related to their sexual orientation. Over one-third of the sample acknowledged at least one previous suicide attempt, and 22% of the sample acknowledged suicidal ideation within the previous week (D’Augelli et al., 2002).

These studies demonstrate the prevalence of stress and victimization associated with both assuming an LGB identity and publicly acknowledging this identity. Not only do LGB individuals face rejection in the form of verbal abuse, threats of disclosure, and shunning, they also face the real risk of verbal, physical, and sexual assault. Understanding and acknowledging that reality may help researchers to understand why some LGB people are so reluctant to disclose, and then to tailor their studies with that reality in mind, designing more inclusive instruments and research protocols that encourage honesty in research while assuaging fears of being “outed” and potentially harassed or assaulted.

*Attachment Research and the LGB Community.* A general overview of attachment theory and what is known about attachment through the lifespan has

already been discussed. Next, it is important to detail what is known about attachment as it applies to the LGB community. The initial question to be addressed concerns the utility of this type of research. As the roots of attachment stretch back to infancy, and because there is no known way of determining sexual orientation so early in life, it may seem as if the question is moot. There is no reason to suspect that future sexual orientation would have any affect on the initial development of the attachment system during infancy and early childhood, so is attachment within the gay and lesbian population worth examining?

As our exploration of attachment from infancy through adulthood has demonstrated, attachment, although influenced by experiences in infancy, remains somewhat malleable across time. Stability of attachment is linked primarily to stability of environment. That is, if the individual's relationship to the primary caregiver and the general stressors of the family remain consistent, it is less likely that attachment will change. However, change is an inherent part of life, and environmental changes, even those generally perceived as positive (such as the birth of another child), have the potential to change the interpersonal dynamics between parent and child, and so have the potential to influence the attachment system.

It seems reasonable, then, to question whether or not a parent's (or child's) suspicion that a child is gay or lesbian may have an affect on the attachment system. Depending on the beliefs and standards of the individuals, the family, and the society and culture in which they reside, being a sexual

minority may place a strain on the family, thereby having the potential to alter the attachment network. It does not always follow that when individuals disclose their identity as gay or lesbian to their family and friends, changes to the attachment relationships follow, but it is possible that such an outcome will occur. In fact, anything that may disrupt an individual's network of support may influence the attachment orientation, either for a transitory period or over the long term.

From a theoretical standpoint, investigation into attachment as it applies to the LGB community is still relatively limited compared to other avenues of attachment research, but there has been some examination of the topic. Attachment research as it applies to gays and lesbians has focused mostly on adult romantic attachment and how same-gender romantic relationships compare to their heterosexual peers. As research into adult romantic same-sex relationships is where the majority of research into attachment as it relates to the LGB community has been done, those findings will be discussed first.

*LGB relationships and attachment theory.* First, it is important to understand how attachment theory addresses the reality of same-sex attraction and relationships. Bowlby observed that the sexual system was functional in same-sex relationships (in that orgasm is routinely achieved), the quandary being that the system is organized in such a way that the functional goal of reproduction is not realized (Bowlby, 1969/1982). If the attachment system in general, and the sexual systems as a subset of romantic attachment in particular, have the evolutionary purpose of ensuring the survival of individual genes and

the survival of the species, it would appear that same-sex attachment is counterproductive. Still, Bowlby acknowledged the existence of same gender attraction and sexual relationships, and appeared to believe that the attachment system functioned as they would in heterosexual individuals and relationships (1969/1982). Ainsworth also noted that same-sex romantic attachments were likely to function the same way as heterosexual attractions, the main difference being that only one of them (heterosexual attachment) is societally sanctioned (Ainsworth, 1985). Unsurprisingly, at least from a theoretical perspective, the majority of the research to date supports the conclusion that same-sex romantic relationships function in much the same way as heterosexual relationships.

*LGB vs. heterosexual relationships.* One of the only studies on same-sex relationships explicitly grounded in attachment theory that has been conducted to date was published in 1998 by Ridge and Feeney. In this study, a sample of 177 individuals who identified as homosexual (77 gay males and 100 lesbians) was recruited from gay and lesbian university organizations throughout Australia (mostly undergraduate students). They were compared to 150 first-year heterosexual students (39 males and 111 females) from a single university. Participants were assessed for a variety of attachment and relationship variables, including attachment style, early parental relationships, relationship history and satisfaction, sexual attitudes, and aspects of coming out.

One of the most salient findings of this study was the comparable distribution of attachment styles across sexual orientation and gender. Only when

collapsing the fearful and dismissing groups into a single avoidant category did any result even approach significance with regard to there being any difference between the heterosexual and LGB portions of the study, with gay males being more likely to endorse a preoccupied attachment style than heterosexual males (Ridge & Feeney, 1998). This represented the first evidence that attachment styles were distributed in roughly the same percentages in the LGB population as in the heterosexual population. Interestingly, this study also found that lesbians were more likely to endorse being dismissing, and less likely to endorse being preoccupied than gay males. This is contrary to results from other heterosexual samples (Bartholomew & Horowitz, 1991), and demonstrates the difficulty in untangling the complex interactions between attachment, sexual orientation, and gender. The study also failed to find a relationship between attachment style and early parenting (Ridge & Feeney, 1998), an unusual finding considering previously discussed material on the link between early parental experiences and later attachment style. Whether this was a result of measurement insufficiency, skewed sample selection, or the relative ability of parental experiences to determine later attachment in gay and lesbian young adults is impossible to determine from a single study.

Relationship satisfaction (for those participants in a current relationship) was related to secure attachment (Ridge & Feeney, 1998), which is not surprising given research on heterosexual couples (Feeney, Noller & Callan, 1994; Kirkpatrick & Davis, 1994; Senchak & Leonard, 1992; Simpson, 1990). This

suggests that same gender and heterosexual romantic relationships function in similar ways. However, there were interesting results in the current and retrospective parental relationships endorsed by the participants that are particularly germane to this research.

Gays and lesbians who were “out” to their mothers and fathers reported more negativity within the relationship immediately after coming out than either before they had come out or currently, and lesbians reported worse relationships with their fathers, both currently and just after coming out, than did gay men. Preoccupied lesbians reported particularly poor relationships with their mothers after coming out as well (Ridge & Feeney, 1998), although this may be due to the fact that preoccupied individuals, regardless of sexual orientation, are highly attuned to feelings of rejection and have a heightened fear of abandonment (Crittenden, 1997). Dismissing lesbians endorsed negative maternal relationships both immediately after disclosure and currently (Ridge & Feeney, 1998), which suggests that certain attachment styles may result in different outcomes following disclosure of sexual orientation.

These results suggest that the coming out process for families with a gay or lesbian child is marked by at least a transient disruption in the parent-child relationship. This study seems to suggest that the disruption is short-lived and not detrimental to the formation of adult attachment, as rates of secure attachment in the gay and lesbian sample are not statistically different from their heterosexual counterparts. However, the lesbians in this sample who were “out”

to their fathers continued to endorse relationship difficulties, and both preoccupied and dismissing lesbians reported significant disruptions in the maternal relationship as well. As there exists the possibility that gays and lesbians willing to participate in such research are more secure in their sexual identity, and more accepted by their loved ones (parents and peers), a great deal more research into the long-term effect of coming out on the attachment process is warranted.

Links have been found between attachment patterns and romantic relationships in samples of gay, lesbian, and bisexual individuals, and have found associations between attachment security and ratings of relationship quality (Elizur & Mintzer, 2003; Kurdek, 2002), communication patterns (Gaines & Henderson, 2002), and commitment (Kurdek, 2002; 1997). Kurdek (2002; 1997) also examined the links between dimensions of attachment and relationship functioning in samples of same-sex and heterosexual couples, finding that the associations between attachment and functioning were the same in both samples. In short, research to date has failed to find significant differences in the links between attachment and relationship functioning or quality in same-sex samples when compared to their heterosexual counterparts.

This holds true when partner's attachment styles are included as well. Studies of heterosexual couples suggest that people often seek relationships with partners who confirm their attachment expectations. For example, anxious-ambivalent individuals tend to become involved with avoidantly attached partners,

which provides reality to their belief that they desire more closeness in a relationship than their partner (Collins & Read, 1990; Kirkpatrick & Davis, 1994). Mohr and Fassinger (2006) obtained similar results from a community sample of same-sex couples ( $N = 461$  couples), as individuals who were highly anxious about relationships tended to have partners who reported above average levels of discomfort with closeness (and vice versa), and these effects were equally strong for male and female couples, remaining significant even after controlling for length of relationship.

If the available research suggests that same-sex and heterosexual individuals are similar in their romantic attachment styles and relationships, then what is to be gained by further research? Can we assume that any research on romantic attachment and relationships is applicable to gays and lesbians regardless of whether they are represented in the study? To do so assumes that there are no differences between heterosexual and gay and lesbian couples, and ergo no difference in adult attachment between heterosexual and LGB individuals or couples. Although the research indicates that there are more similarities than differences when comparing the two groups, some differences are present.

The attachment, fear, and exploratory systems are intertwined in attachment theory. During infancy and early childhood, heightened fear and arousal activates the attachment system, resulting in separation protest and proximity seeking behaviors. This represses the exploratory system, resulting in the cessation of those behaviors (Bowlby, 1969/1982). Although the behaviors of

these systems change as individuals grow, attachment theory suggests that the underlying mechanisms and interplay between these systems remains the same into adulthood. Adults, when experiencing high levels of fear, uncertainty, stress, or anxiety, should experience activation of the attachment system. According to Bowlby, the attachment system evolved to ensure safety and survival during times of greatest threat (Bowlby, 1973).

Individuals who identify as LGB and same-sex couples, by virtue of their uncertain status in many cultures, experience stressors that are unfamiliar to their heterosexual counterparts. Although rejection, discrimination, prejudices, and even violence by parents, peers, and society in general vary a great deal, the heterosexist norms of society are pervasive. Sexual minorities may feel invisible or devalued if not outright rejected, and historically there have been very few visible role models for LGB individuals to look up to and emulate (Mohr, 2008). As with all stressors, these have the capacity, if experienced at high enough or frequent enough levels, to activate the attachment system.

Research suggests that a climate of intolerance does affect same-sex couple functioning. For example, external manifestations of anti-gay or lesbian prejudice and internalization of negative views of same-sex attraction (referred to here as homonegativity) can lead to diminished satisfaction and greater conflict in same-sex couples. This is particularly true when partners differ in their levels of internalized homonegativity and comfort with being “out” (Brown, 1995). Same-sex relationship quality is inversely related to perceived discrimination and stigma

sensitivity (Mohr & Fassinger, 2006), internalized homonegativity (Brown, 1995; Elizur & Mintzer, 2003; Mohr & Fassinger, 2006), and parental disapproval of individual's sexual orientation (Smith & Brown, 1997). What is not entirely clear from the research is the mechanism by which these stressors influence relationship quality. Theoretically, attachment should play a role.

*Attachment and LGB individuals.* Stress and fear are not confined to adulthood, of course. Gay and lesbian adolescents are often subjected to fear inducing stimuli unknown to their heterosexual counterparts. Sexual minority youth are at higher risk for a host of emotional and physical injuries. Large-scale public school studies show evidence that LGB youth experience more bullying, sexual harassment, coercive sex, dating violence, and threat or actual injury involving a weapon than do heterosexual youth (Goodenow, Szalacha & Westheimer, 2006; Williams, Connolly, Pepler, & Craig, 2005). The previously discussed studies by Bradford et al. (1994) and D'Augelli et al. (2002) also support the risks of victimization and abuse for LGB youth. Given that adolescence and early adulthood is the time when most LGB youth are developing their identity, including their identity as a sexual minority (Rust, 2003), the increased stigma, discrimination, and outright hatred that some of them face may put increased pressure on an attachment system that is not adequately resourced to handle it.

Recall the information discussed regarding attachment processes in adolescence. It is a time of transition, when people begin to transfer attachment

functions from parents to peers. What happens if parents, peers, or both reject an LGB youth for his or her sexual orientation? What if the culture is so homonegative, and the fear of rejection by parents and/or peers so pronounced, that the individual feels he or she cannot resolve his or her sexual identity, or cannot come out at all? Learning to identify sources of threat and danger is an important component of the fear behavioral system, and avoiding and protecting oneself from dangerous stimuli is intertwined with the attachment system (Bowlby, 1973). When the perceived danger to the self and the source of security are one and the same, confusion and turmoil are the likely result, and the individual is in a double-bind situation of potential rejection by attachment sources, derailing identity exploration, consolidation, and acceptance.

Prior to self-disclosure, fear of telling parents about one's LGB identity may be a source of considerable concern. In a college sample ( $N = 61$ ), 93% of gay men reported being somewhat or extremely troubled by the problem of disclosing their sexual orientation to their parents, despite the fact that only 15% of the sample rated their parents as the most important people in their lives (D'Augelli, 1991). Despite the decreasing importance of parents as attachment figures during the transition from adolescence to early adulthood, parents are usually part of the attachment system, and given current attitudes towards LGB individuals, disclosure of sexual orientation has the potential to damage this attachment bond. Fear of rejection not only hinders the development of a healthy LGB identity, it may also lead to withdrawal from, or avoidance of, attachment

figures, a typical feature when fear enters attachment relationships. As an author describes it, “the decision to delay disclosure may initially protect youths from feared parental reactions, but it may also create an irreplaceable fissure in the parent-child relationship” (Savin-Williams, 2003, pp. 305-306).

Research suggests that the risk of rejection during disclosure is a real one. In a community sample of youth from various support groups ( $N = 194$ ), 25% of mothers and 28% of fathers were intolerant or rejecting of their child’s sexual orientation (D’Augelli & Hershberger, 1993). Although the majority of parents were either accepting or tolerant, a sizable minority reacted, at least initially, in an emotionally or physically rejecting fashion. As has already been discussed, when attachment figures react in a rejecting or unsupportive fashion, it can have far reaching implications for IMWs of attachment. This may affect the future ability to form secure, trusting attachment bonds. Rejections or lengthy attachment disruptions from important attachment figures may theoretically result in disruptions in the ability to form secure attachment bonds, which, as previously discussed, is a risk factor for psychosocial, emotional, and behavioral difficulties.

Similarly, fear of disclosure to friends is a concern for many LGB individuals. Formation of an LGB identity (a component of which is self-disclosure) typically occurs between mid-adolescence and early adulthood, the same general time frame during which the transference of different attachment functions from parents to peers and romantic partners also occurs (Scharf & Mayseless, 2007). As peers now also perform attachment functions, rejection by

peers has the potential to constitute an attachment injury. In a sample of 194 lesbian, gay, and bisexual youth, Pilkington and D'Augelli (1995) reported that 36% of men and 27% of women (ages 15-21) expressed fears of losing friends that limited disclosure of their sexual orientation, and 43% of men and 54% of women in the sample reported losing at least one friend as a result of disclosing their LGB identity. Although this study did not differentiate between close and casual friends or rank friends within an attachment hierarchy, it nonetheless demonstrates the potential risk to the attachment system LGB individuals face when disclosing their sexual orientation.

Mohr (2008) hypothesized that if LGB identity development is conceptualized as an exploratory process, attachment insecurity increases susceptibility to fear and may curtail the necessary exploration critical to forging a positive LGB identity. Studies have linked attachment insecurity to negative identity and nondisclosure of sexual orientation (Elizur & Mintzer, 2003; Mohr & Fassinger, 2003), which suggests that attachment insecurity is associated with heightened fear and anxiety about an LGB identity. Conversely, parental support for gay and lesbian orientation is related to current romantic attachment security, identity, and level and comfort of self-disclosure, even when memories of early caregiving are controlled for (Mohr & Fassinger, 2003). This suggests that when attachment figures provide support, healthy identity formation and interpersonal functioning are fostered. Although our understanding of the relationship between attachment, reactions by attachment figures, and sexual identity formation is still

rudimentary, these studies show results that are consistent with attachment theory.

Further evidence suggesting a link between attachment tenets and gay and lesbian development is found in research on health indicators in sexual minority young adults as attenuated by family rejection (Ryan, Huebner, Diaz, & Sanchez, 2009). This study examined family rejection as it was related to nine negative health indicators, including indicators of mental health, substance abuse, and sexual risk. Two hundred twenty-four white and Latino self-identified LGB young adults between the ages of 21 and 25 completed self-report questionnaires on these health risks. A quantitative scale designed to retrospectively assess the frequency of parental and caregiver reactions to the subject's sexual orientation during adolescence was also utilized.

Although this study did not assess attachment, it did document results that suggest that parental rejection has a profound negative influence on the mental and physical health of gay and lesbian youth. Gay, lesbian, and bisexual subjects who reported higher levels of family rejection during adolescence were 8.4 times more likely to report having attempted suicide. They were also 3.4 times more likely to use illegal drugs, and were 3.4 times more likely to report having engaged in unprotected sexual intercourse compared with LGB peers who reported no or low levels of family rejection (Ryan et al., 2009).

In a recent survey designed to assess the experiences of homeless youth organizations in providing services to LGBT youth, 354 agencies from across the

United States participated in a web-based survey. Nearly all of the agencies (94%) reported working with LGBT clients, with approximately 40% of the clientele served by these agencies identifying as LGBT (30% gay or lesbian, 9% bisexual, 1% transgendered), a surprising number given the previously cited estimates of the prevalence of gays and lesbians relative to the population. Of more relevance to the current research, the three most frequently cited factors contributing to LGBT homelessness were running away due to family rejection of sexual orientation or gender identity (46%), being forced out because of sexual orientation or gender identity (43%), and physical, emotional, or sexual abuse at home (32%) (Durso & Gates, 2012).

These studies demonstrate a link between familial rejection and negative consequences, including risk of depression, destructive behavior, and homelessness. What they do not illustrate is the specific reason why this might be so. It seems logical that individuals who experience rejection by their family would be at higher risk for significant mental and behavioral disruptions. Given what is known about attachment theory, parental rejection should have the potential to disrupt attachment, and would place individuals experiencing rejection at increased risk for attachment instability and the risks that go with it. It is worth noting, too, that these studies did not include peer rejection in their analysis. As the review of the attachment literature during adolescence demonstrates, both parents and peers serve as attachment figures during this critical time period. Because of this, both were included in the current study.

The studies discussed in this section demonstrate that although same-sex and heterosexual relationships appear to function similarly, the reality of homonegativity has the potential to disrupt LGB identity formation, relationship satisfaction, and attachment processes. The full scope of this disruption is not fully understood. However, what is known so far coincides with the basic tenets of attachment theory, suggesting that further research from an attachment viewpoint is appropriate. The current research addressed one of the gaps in attachment research as it applies to the LGB community. Specifically, it investigated the relationship between perceived alienation from parents and/or peers during the coming out process and attachment security.

### *Conclusion*

The purpose of this section was to provide the background necessary to support the current research. This included a thorough review of attachment theory, the psychosocial theory underpinning this study, as well as an examination of what is known about attachment theory and the LGB population specifically. Although it was outside the scope of this review to discuss every attachment or LGB related psychological study to date, those relevant to the current research are included, and they provide the necessary context for the rest of the paper. In the next section, the methodology for the current research is presented.

## Chapter III: Methodology

### *Overview of Methodology*

The problem this research addressed was the lack of knowledge about how the perception of alienation from parents and/or peers, two of the most common primary attachment figures for adolescents and young adults (Hazan & Zeifman, 1994), during the coming out process for lesbian, gay, and bisexual (LGB) individuals (which also most frequently occurs during adolescence and early adulthood [Rust, 2003]) affects the attachment system. The underlying theory of attachment suggests that any significant attachment injury, such as withdrawal of support and the subsequent inability of the individual to rely on attachment figures as a safe haven and secure base during times of stress, may result in an alteration of the underlying internal working models (IWM) of attachment (Bowlby, 1969/1982). Given the relative dearth of studies comparing attachment rates between heterosexual and LGB samples, this study attempted to replicate or refute findings that there is no difference in attachment rates in these populations (Elizur & Mintzer, 2001; Gaines & Henderson, 2002; Mohr & Fassinger, 1997; Ridge & Feeney, 1998). In addition, this research examined the relationship between perception of alienation from parents and/or peers during the coming out process for LGB individuals and attachment security.

Given the relatively unexplored nature of the relationship between disruptions in attachment bonds and attachment security in the LGB population, a small-scale study that attempted to determine the existence of an association

between perceptions of parental and/or peer alienation and attachment insecurity in LGB individuals was practical. Although previous research has examined how attachment theory may be applied to the LGB community, no one had specifically examined the coming out process in LGB individuals for potential attachment implications. This research was designed to ascertain if such an association existed by utilizing a simple correlational study.

Also, a question that might arise in reading this research and the results concerns the exclusion of the transgendered community, as they are often included in LGB studies and advocacy. There are two primary reasons why they were not specifically recruited or included in the analysis here. First, although the author understands the inclusion of transgendered individuals with sexual minorities for the purposes of education, outreach, and advocacy, being transgendered is not the same thing as being LGB. Being lesbian, gay, or bisexual is one's sexual orientation. Being transgendered involves gender identity (self-identification as male or female, which may not match biological gender) and gender expression (presentation of masculine or feminine traits, which also may not match biological gender), which are distinct from sexual orientation and attraction. Second, although there is research on attachment and the LGB community, there is no such similar research on the transgendered community, making it difficult to establish a theoretical basis for including them in the proposed study. Transgendered individuals were welcome to participate in this study, but were not included in the statistical analysis as LGB unless they

endorsed being both transgendered and LGB (a male-to-female transsexual who identifies as lesbian, for example).

### *Research Questions/Hypotheses*

This research has significance for two reasons. First, it adds to the body of knowledge regarding any differences in adult attachment style between the heterosexual and LGB populations by attempting to replicate previous findings that have suggested that attachment levels are endorsed at similar rates between the two groups. Broken down more specifically, this research examined the following null hypotheses:

- a) LGB individuals will not differ from heterosexual individuals in the proportion who are securely attached;
- b) LGB individuals will not differ from heterosexual individuals in the proportion who are ambivalently attached;
- c) LGB individuals will not differ from heterosexual individuals in the proportion who are fearfully attached; and,
- d) LGB individuals will not differ from heterosexual individuals in the proportion who are avoidantly attached.

Results were considered significant if LGB participants differed from their heterosexual peers in the rates of attachment endorsed using a .05 level of significance.

The second research question examined the relationship between attachment security and perceived alienation from parents and/or peers during

the coming out process for LGB individuals. This question is grounded both in attachment theory and in understanding the role the coming out process plays in the development of long term acceptance and mental health in LGB individuals. Additionally, previous research (Ridge & Feeney, 1998) found support for at least transient disruption of relationship quality with parents after the disclosure of LGB status by a child. Lack of long-term follow-up makes it impossible to ascertain whether or not the effects persisted in the long run, although short-term follow up suggested that the parent-child relationship began to return to pre-disclosure functioning over time. However, this provided direction for the current research, such that it is anticipated that individuals reporting alienation from mother and father will also endorse higher rates of insecure attachment, assuming that they are relatively close in time to the disclosure. The specific research null hypotheses were:

- a) Levels of perceived alienation from mother after disclosure of LGB identity are unrelated to attachment status;
- b) Levels of perceived alienation from father after disclosure of LGB identity are unrelated to attachment status;
- c) Levels of perceived alienation from peers after disclosure of LGB identity are unrelated to attachment status; and,
- d) Levels of perceived alienation from parents and peers combined after disclosure of LGB identity are unrelated to attachment status.

Results were considered significant only with a correlation between perceived alienation and attachment insecurity using a .05 level of significance.

Within the analysis of this second research question, two time-related questions were asked of LGB participants. These questions include the length of time since the individual has come out to various primary attachment figures (mother, father, and close peers), and the length of time between an individual self-identifying as lesbian, gay or bisexual and starting the coming out process by revealing sexual orientation to a primary attachment figure. Either of these time intervals may affect attachment group membership.

Previous research has linked attachment insecurity to negative identity and nondisclosure of sexual orientation, whereas parental support for gay and lesbian orientation is related to current romantic attachment security, identity, and level and comfort of self-disclosure, even when memories of early caregiving are controlled for (Elizur & Mintzer, 2003; Mohr & Fassinger, 2003). These results suggest that discomfort with disclosure of LGB orientation should be correlated with insecure attachment, as certain types of insecure attachment are characterized by fear and a lack of trust that attachment needs will be met. Therefore this research attempted to examine if individuals who take longer to begin the disclosure to others show differences in their attachment orientation or perceived alienation from parents and peers during the coming out process.

Research has also demonstrated that relationship quality with parents tends to suffer immediately after disclosure of an LGB identity, although the

relationship may return to its previous level of functioning after some time (Ridge & Feeney, 1998). This suggests that some transient disruption of attachment relationships may be normal, indicating that individuals responding relatively soon after coming out may be expected to report higher levels of alienation from attachment figures. Although LGB respondents were asked to respond to the alienation portion of the survey as they were thinking and feeling while they were coming out, previous research suggests this time variable may effect attachment group membership for those responding fairly close in time after disclosure of sexual orientation.

Bearing all this in mind, discriminant function analyses were conducted to determine if either of the two time variables (time since coming out to attachment figure and time elapsed between self-identifying as LGB and disclosing sexual orientation to a significant attachment figure) predicted attachment group membership. Specifically, this analysis assumed that neither time elapsed since coming out to an attachment figure nor time elapsed between self-identification of LGB orientation and disclosure to a significant attachment figure predicted attachment group membership. As such, the null hypotheses were:

- a) Time elapsed since disclosure to attachment figures will not predict attachment group membership;
- b) Time elapsed between self-identification as LGB and disclosure to a primary attachment figure will not predict attachment group membership.

As with previous analyses, results were categorized as significant if results reached the 95% confidence interval.

### *Research Procedures*

*Participants.* This research was designed as a correlational study at a single point in time, with all participants recruited via the Internet and the surveys delivered via the Internet. The target population for this research was LGB individuals who have come out to at least one important person in their lives. Although fear of rejection by or alienation from attachment figures may have the capacity to affect the attachment relationship, until an LGB individual actually begins the process of coming out, any influence on the attachment system is likely the result of imagined rather than real reactions. Because this research attempted to determine possible damage to the attachment system arising from perceived rejection from attachment figures (rather than feared rejection), LGB individuals need to have placed themselves at risk for that rejection by revealing their sexual orientation to mother, father, or peers. Because coming out is a process that extends over time rather than existing as a single event, respondents who endorsed having disclosed their sexual orientation (by self or another) to at least one of the significant people in their lives (mother, father, or close friend) were included in the analysis. This is not to suggest that the interplay between the attachment system and the fear or expectation of rejection because of sexual orientation is not important prior to disclosure. As discussed earlier, attachment related anxiety and avoidance is related to more difficulty with

self-acceptance of sexual orientation, but for the purposes of this study, it was specifically the potential relationship between parents and/or peers during that portion of the coming out process and attachment orientation that was examined.

Of greater concern with studies of this nature is how to access the target population. Sexual orientation is not readily apparent, and studies with this population have been unable to answer with certainty what percentage of the population qualifies as homosexual. As previously discussed, there are issues unique to this population in terms of defining and finding research participants. Soliciting LGB individuals on a large scale for research is fraught with complications that can affect the conclusions drawn from the research.

Given the method of survey delivery (online), this narrows the accessible population from all LGB individuals who have come out to at least one significant person to those who also have consistent Internet access. According to 2012 data, approximately 78% of the U.S. population uses the Internet (Internet World Statistics, 2012), although these figures do not provide information on frequency of usage. Still, the currently available data suggest that a majority of the target population (at least within the U.S.) has Internet access, and therefore the capability to participate in this research.

The final part in determining how to recruit a representative sample was determined by how to best reach at least some LGB individuals. An obvious solution was to reach out through publications or websites that are directly marketed to the LGB community or are LGB-friendly. Although there are a variety

of organizations, magazines/newspapers or other publications, and websites that are in some way LGB oriented, the researcher wanted an individual or organization with a relatively wide reach to a variety of individuals through different media platforms. Given the purpose of this study, casting a wide net in terms of demographics as well as reaching a large audience was crucial.

Due to the investigator's desire to reach a diverse online LGB community, a prominent advice columnist, blogger, podcaster, author, and LGB activist (Dan Savage) was contacted, and permission to use at least one of his media outlets to solicit respondents was requested and granted (personal communication, 2011). As a result, an approved request for study participants and a link to the actual survey was released via his weekly advice column and on his Twitter account. Given the nature of his business (sex and relationship advice), his own status as a gay man and advocate for LGBT rights, and the fact that his audience includes many gay, lesbian, and bisexual readers and listeners, this platform was chosen to recruit participants for this research. In addition, recruiting via this platform also reached heterosexual subjects as well, which allowed the researcher to investigate the research questions related to levels of attachment comparing the LGB and heterosexual communities.

This further limits the accessible population for this research to LGB and heterosexual individuals with online access that are part of Savage's audience, which has obvious implications for generalization to the population as a whole. There may be ways in which individuals who have consistent online access vary

from those who do not, or ways in which those who are familiar with Savage differ from those who are not familiar with him, or from those who are not members of his audience. There are also documented differences between those who tend to volunteer for studies and those who do not, namely that those who volunteer have higher education levels, higher intelligence and social class, and a higher need for approval (LaFountain & Bartos, 2002). It is important to acknowledge these issues with respect to the volunteer sample this study utilized, and to understand that, because of this sample type, generalizability to other samples or the general population cannot be claimed.

However, the paucity of research on this topic, the need to reach a relatively large sample of LGB individuals, and the financial, time, and anonymity restraints of conducting any type of systematic random sampling of this population are overriding concerns for this study. Given these realities, a volunteer sample recruited from the audience of a popular gay activist and writer, along with an online method of delivering the survey, were reasonable methods of achieving the goals for this study. All limitations of the methods utilized are acknowledged and the ramifications of these limitations on the research results, including the lack of generalizability, are discussed in more detail in the final chapter of this dissertation.

Sample size was difficult to measure precisely for this study. The sampling frame of readers/followers of Mr. Savage is not a known quantity, as there is no way to accurately measure how many unique individuals follow Mr. Savage

through his media outlets. However, some rough estimates based on available media data can be derived. For example, Mr. Savage has over 113,000 followers on Twitter, and his weekly podcast (Savage Love) is consistently one of the most frequently downloaded podcasts in the health category on iTunes. His weekly sex advice column is nationally syndicated. Given these factors, estimating Mr. Savage's audience as over 100,000 people appears reasonable. With this sampling frame, a sample size of at least 383 participants was necessary to ensure that the sample was reflective of the population at the 95% confidence interval.

*Sampling procedure.* Solicitation for survey participation was released via the weekly column and via the Twitter account of sex advice columnist/podcaster and LGBT blogger and activist Dan Savage. The solicitation message included a brief description of the study and a link to the survey website. The message was attached to one weekly column and sent once on Twitter with no additional follow-up. The invitation to participate was only released twice, but as it was attached to a weekly column that is still archived with Mr. Savage's other columns, it was viewable indefinitely.

Exclusion criteria were failure to complete at least 80% of the sections applicable to that participant, being under the age of 18 or over the age of 49, and inability to read English at the sixth grade level. The first of these exclusion criteria was based on the inability to generate reliable analysis if large portions of the survey were omitted. Surveys omitted for this reason were analyzed to

determine if specific demographic categories were correlated with lack of complete survey submission. In total, 538 surveys were excluded because of insufficient completion, the vast majority (92.3%) of which were surveys where the participant completed only a few demographic questions before abandoning the survey. As such, there is no way to know if something was different about these participants that resulted in their decision to start, then almost immediately abandon, the survey. No participants were excluded on the basis of race, gender, sexual orientation, socioeconomic status, or other demographic variables other than age.

The exclusion based on age was made for two reasons. The lower age of 18 was used because the Internet delivery and anonymity of this survey precludes obtaining parental consent for the participation of minors. The upper age of 49 was made in consideration of the effects of time on retrospective analysis of relationships, as well as the increased likelihood, once participants reach a certain age, that one or both of their parents are deceased. This may have unexpected effects on the recollections of their relationship with that parent. In all, 155 surveys were excluded because the participant was outside the specified age span. All but seven of these excluded surveys were from participants above the age of 49. Other than age, these excluded surveys did not vary demographically from surveys there were included. Finally, the exclusion criteria of being capable of reading and comprehending English with at least sixth grade proficiency was a natural result of the survey being delivered in English. In

addition, the IPPA has been validated on adolescents as young as 12, providing a floor for the reading proficiency necessary to complete the survey.

Study participants were directed to the survey website, where they read a description of the study, the possible risks and rewards of participation, and all measures taken to safeguard anonymity and confidentiality. Choosing to proceed with the survey was taken for informed consent, as there was no other way to obtain consent with an anonymous survey. The survey itself was comprised of three main sections (demographics, attachment, and alienation), with the survey programmed to allow participants who did not need to answer certain portions to easily skip those pages. Once completed, participants saw a brief thank you message and the contact information for the primary researcher.

*Instruments.* To assess attachment, it was necessary to choose between instruments that categorizes attachment into three categories (such as the Adult Attachment Interview [AAI] or the Hazan-Shaver questionnaire) or four. As long as the instrument chosen has been properly constructed and tested for reliability and validity, research suggests that these instruments all assess attachment, and that compatibility across studies based on surveys utilized is not a major deterrent to instrument selection (Bartholomew & Shaver, 1998). As measures based on Bartholomew's four-factor design appear to take into account the potential for two different types of avoidant attachment (dismissing and fearful), and because our current understanding of attachment predicts four attachment types in infancy, utilizing an instrument that includes four adult attachment types

appears to be less restrictive to potential respondents while remaining consistent with the underlying attachment theory.

*Experiences in Close Relationships-Revised (ECR-R)*. The instrument chosen to measure attachment for this study is the Experiences in Close Relationships-Revised (ECR-R) Questionnaire, which was first introduced in 2000 by Fraley, Waller, and Brennan. The ECR-R consists of 36 items, with 18 questions each for the two subscales (anxiety and avoidance), and is scored on a 7-point Likert scale ranging from 0 (disagree strongly) to 6 (agree strongly), such that higher scores are associated with a higher level of that trait. The scores for the two subscales can be subsequently used to categorize the respondent into one of four attachment categories (Fraley, Waller, & Brennan, 2000).

Standard scoring of the ECR-R was used for this research. This is accomplished by averaging the scores for the attachment-based anxiety and avoidance subscale questions for each individual (reverse scoring as appropriate) and using these two subscale scores to categorize each participant. Those whose averages fell below four were categorized as “low” for that subscale; those with an average of four or above were categorized as “high.” Using these subscale categorizations, individual participants were coded as either secure (low anxiety/low avoidance), avoidant (low anxiety/high avoidance), fearful (high anxiety/high avoidance) or anxious/preoccupied (high anxiety/low avoidance). For each subscale, the span of possible average responses is one to

seven, with lower averages being associated with lower levels of attachment anxiety or avoidance.

In 1998, Brennen, Clark, and Shaver developed the Experiences in Close Relationships (ECR) Questionnaire. The original measure contained 323 items and 60 separate subscales. Later principal component analysis yielded two primary components formed from the ECR items, which were labeled anxiety and avoidance, and the 18 items with the highest absolute structure weights for each component were retained. Confirmatory factor analysis using a sample of 429 undergraduate students revealed general support for this two-factor solution (Fairchild & Finney, 2006).

The ECR was subsequently revised by utilizing item response theory. The original 323-item data set was reanalyzed and the 18 selected items per subscale were retained on their discriminatory value alone. This resulted in the Experiences in Close Relationships – Revised (ECR-R), and subsequent IRT analysis indicated substantial improvement in the scale's measurement precision of the dimensions as well as good individual item functioning. The stability of the ECR-R, using a data set of item responses from 1,085 undergraduate students, estimated the shared variance in repeated measures of both anxiety and avoidance to be about 90%. This suggests that temporal stability estimates of the ECR-R are not biased by measurement imprecision (Fraley et al., 2000).

Research on the efficacy of the ECR-R has generally been quite favorable. Sibley and Liu (2004) analyzed the factor structure and short-term temporal

stability of the ECR-R. One hundred and forty-two participants took the ECR-R twice, six weeks apart. Principal components exploratory factor analysis with varimax rotation was performed on the data collected after the first completion of the instrument. Two factors, which explained 52% of the total variance, were extracted, and although a number of factors with eigenvalues greater than one were reported, a two factor solution was the most parsimonious given the steeply decreasing trend after the second value. A confirmatory factor analysis was subsequently performed on the data gathered with the second completion of the instrument, and fit indices suggested that the data were best described by a two factor solution. This interpretation was supported by a chi-squared differences test, which demonstrated that a two-factor solution described the data significantly better than either a single or three factor solution. Finally, the repeated measures of the anxiety and avoidance subscales were entered into separate latent variable path analyses, which revealed a high degree of temporal stability. Eighty-six percent of the variance of the avoidance subscale was shared across the six-week time period, as well as 86.5% of the variance for the anxiety subscale (Sibley & Liu, 2004).

Sibley, Fischer, and Liu (2005) examined the ECR-R's performance across a wider range of psychometric criteria. The first was designed to examine the temporal stability and factor structure of the questionnaire. Three hundred undergraduate students were given the ECR-R and the Relationship Questionnaire (RQ) three weeks apart, and the results analyzed to see if the

ECR-R and RQ measures both loaded on the same factors, as well as what levels of stability the ECR-R latent indices would display across time. The principal components exploratory factor analysis with direct oblimin rotation was conducted and the eigenvalues displayed a steeply decreasing trend which leveled out after the second value, supporting a two-factor solution that explained 48% of the scale variance. In addition, analyses of the initial model in which Time 1 latent ECR-R avoidance and anxiety loaded on their respective Time 2 measures indicated high levels of stability across time (.90 and .92, respectively) (Sibley et al., 2005). Sibley et al. (2005) also performed a confirmatory factor analysis (CFA) on the same data to determine if the ECR-R adequately fit the hypothesized two-factor (anxiety/avoidance) attachment model. Participants were given the ECR-R, and the subsequent CFA analysis revealed that the two-factor solution provided an excellent fit to the data, and a single-factor solution was a significantly poorer fit.

The cited evidence suggests that the ECR-R has construct validity and is stable over time, meaning that the scores generated by the ECR-R should be able to provide this research with a valid approximation of an individual's global attachment style. Further, all of the above validation studies were performed on undergraduate students, the general age of which encompassed a healthy percentage of this research as well. In short, although there are a variety of attachment instruments to choose from, the ECR-R is optimal for this research, given its validity, reliability, and a format that lends itself to an online delivery.

Although there are various instruments designed to assess attachment, there are very few that specifically examine perceived rejection or alienation (by either parents or peers) experienced by LGB individuals during the coming out process. This researcher could find only one such instrument, and was unable to secure its usage for this study. Because of this, it was decided to find an instrument that assessed some facet of rejection as it pertains to the attachment system in general. A well-established instrument of this nature has been used since 1987, and it assesses attachment related alienation in relation to one's mother, father, and close peers, making it a highly satisfactory instrument for usage in this study.

*The Inventory of Parent and Peer Attachment (IPPA).* The Inventory of Parent and Peer Attachment (IPPA) was developed by Armsden and Greenburg (1987). It is a 75-item questionnaire that assess attachment related communication, trust, and alienation to three primary attachment figures (mother, father, and close friend), with 25 items for each attachment figure. Responses are scored on a 5-point scale from 1 (almost never or never true) to 5 (almost always or always true). The highest possible score on the IPPA for overall mother, father, and peer attachment is 125, with a possible low score of 25. For the subscales, the span of possible scores is as follows: 10-50 for Parental Trust; 10-50 for Peer Trust; 9-45 for Parental Communication; 8-40 for Peer Communication; 6-30 for Parental Alienation; and 7-35 for Peer Alienation.

Scores are achieved by summing the score for the items for that scale or subscale.

The IPPA was specifically designed for use with older adolescents, although it has been used with adolescents as young as 12 (Greenburg, 2010). Item content of the instrument was derived from attachment theory's formulations concerning feelings toward attachment figures, and was originally tested on 179 college students (aged 16-20), predominately Caucasian and middle class. Questions were designed to assess felt security, whether attachment figures understand and respect the respondent's needs and desires, perceptions of sensitivity and responsiveness to emotional states, and anger toward or emotional detachment from attachment figures (Armsden & Greenburg, 1987). Although the authors were interested in developing an instrument that assessed perceptions of positive and negative affective and cognitive experiences of their relationships with parents and peers more broadly, these type of attachment concerns may also be issue specific. An LGB individual during the coming out process would have legitimate concerns about whether or not his or her attachment figures would provide the same type of understanding, sensitivity, and support as they had in the past.

Original analysis of the IPPA utilized a sample of 179 undergraduate students. Factor analysis using principal factoring with iteration and Varimax rotation led to loading patterns that suggested the appropriateness of separating items assessing attachment to parents from those assessing attachment to

peers. Varimax rotation for parental measures found three factors which emerged with eigenvalues greater than one, together accounting for 92% of the total variance and with readily interpretable patterns of factor loading (trust, communication, and alienation). These factors accounted for 84% of the total variance for the peer measure. Examination of the range of scores revealed that at least 68%, and on average 80% of the possible score ranges of the scales, were utilized by the sample, indicating acceptable differentiation of topics, and corresponding parent and peer scales were not strongly related (Armsden & Greenburg, 1987).

A follow-up study after the development of the IPPA revealed three-week test-retest reliability ( $N = 86$ ) of .93 for the parental measures and .86 for the peer measure, indicating acceptable reliability over time (Armsden & Greenburg, 1987). Overall, the available psychometric data for the IPPA suggest that it provides valid data on the attachment dimensions of trust, communication, and alienation for late adolescence and early adulthood, and has since been adapted for use with children ages 9-15 as well (Gullone & Robinson, 2005). Given the reliability and validity of the instrument over many years, the age range it was designed to assess, its grounding in attachment theory, and the incorporation of a scale which specifically measures whether or not respondents perceived any alienation from both parents and peers, the IPPA appears to be useful for the present research in the absence of a self-report measure specifically designed to measure rejection of LGB persons by attachment figures during the coming out

process. Since the original development of the IPPA in 1987, it has been revised to its current three section, 75-item format.

To provide data more specific to the coming out time frame, LGB participants were asked to respond to the IPPA as they experienced these relationships during the coming out process. This was an imperfect solution to the problem of assessing a relationship time period that, for some respondents, was decades past. There is also the fact that this process often takes a fairly significant length of time. For example, the average age at which a male first experiences same-sex attraction is 13.8 years, yet the average age of first adoption of a gay identity is 19.7 years, a gap of almost six years (standard deviations were not provided). The average age of adoption of current sexual identity is 25.6 years (Rust, 2003). Given this wide age range for the identification process, targeting an age group to find those who have recently “come out” is problematic. Although there are obvious limitations in asking participants to answer questions retrospectively, including maturation and the distortions of memory over time, given the complications in drawing a large enough LGB sample to begin with, the decision was made to instruct participants to respond retrospectively rather than to restrict the LGB sample to those who have come out within a particular amount of time with regard to responding to the survey.

#### *Data collection and analysis*

For this project, the surveys were delivered to participants via the Internet, utilizing the survey website Survey Monkey. These data were reviewed, the raw

data downloaded, surveys with 20% or more of the data missing or outside the stipulated age ranges discarded, and the data processed using the SPSS software program (21<sup>st</sup> edition). The necessary demographic data were analyzed, grouped, and coded before any statistical tests were performed.

Once the raw data were entered, the attachment survey responses of the ECR-R were scored and the subtest scores were used to place each participant into one of the four attachment categories (secure, anxious/preoccupied, fearful, and avoidant). Each individual participant's scores were tabulated and categorized by the SPSS software, and the relevant attachment code then added to that participant's data record. The full ECR-R can be found in Appendix A. Next, the responses to the IPPA were scored. Scores for the three separate subscales (trust, communication, alienation) for each, were tabulated. The full IPPA, along with scoring guide, can be found in Appendix B. Once the entire sample was scored and coded, the relevant scores were added to each participant's data set.

The demographics section of the survey was developed primarily using questions from the U.S. Census. Some modifications were made, or questions added, to meet the specific needs of this research, such as questions about "coming out". Questions about disclosure of sexual orientation were based on those from previous research (Garcia, Lechuga, & Zea, 2012). The author's research committee reviewed all questions prior to survey release. Some

questions were used to create categories to aid in the analysis (for example, creating age groups). The demographics questions can be found in Appendix C.

After the standard IPPA scoring was completed, the alienation subscale scores were further coded. As previously mentioned, the scores for this instrument are obtained using a rating scale. Responses increase in the frequency with which the participant experienced what is described in that question, so that responses of 1 indicate that something is “almost never or never true,” and responses of 5 indicate that something is “almost always or always true”. The median response of 3 indicates that something is “sometimes true.” As such, lower average response scores are indicative of lower self-reported perception of alienation from that attachment figure.

Those surveys missing specific data points from the demographics section were excluded only from those statistical tests requiring that demographic data. If a participant was missing enough data from a key variable in this study, such as attachment style, the entire survey was discarded. The number of surveys excluded for this reason (six) was very small.

To facilitate certain statistical tests (namely chi-square tests of independence between alienation and attachment), the alienation scores were split into three categories for those tests. The average score for each participant’s alienation subscale was computed, the possible averages spanning from 1.00 to 5.00. Averages of 1.00 to 2.49 were coded as “low,” averages of 2.50 to 3.50 were coded as “medium,” and averages of 3.51 to 5.00 were coded

as “high.” These cut-offs were established by examining the survey responses themselves. An average of 3.00 would indicate that the participant was reporting that he or she perceived the alienation behaviors described at least some of the time, or a medium or moderate level of alienation. Including a full point around this medium score (from 2.50 to 3.50), anyone below this cut-off would be categorized as low, anyone above it categorized as high.

All demographic and survey scores were tabulated and coded as needed. Upon completion of all scoring and coding for the entire sample, a random number of the sample ( $N = 50$ ) was selected for coding verification prior to statistical testing. Corrections continued until a random sampling of the data set revealed no inputting or coding errors. Nine samplings were necessary until no inputting or coding errors were found.

Basic descriptive statistics were conducted on the data set as a whole. Percentages of participants by various demographic category and attachment style are reported. None of the demographic variables (other than age) were found to affect the research variables in any significant way, meaning that only the age variable was found to have any correlation with either attachment group membership or sexual orientation. Details of how the age variable affected the research are discussed in depth in Chapters IV and V.

To answer the first research question (if heterosexual and LGB respondents have significantly different rates of endorsing the different attachment strategies), a chi-square test of independence was run. This is

appropriate because both the independent variable (sexual orientation) and the dependent variable (attachment style) are nominal in nature as a result of the coding. Although the ECR-R survey items provide ordinal level data, categorical items were created, as attachment research is typically presented with either three or four discrete attachment styles. A chi-square test of independence was therefore appropriate (Cohen, Cohen, West, & Aiken, 2003).

The second research question asked whether or not perceived alienation from parents or peers during the coming out process was related to attachment insecurity. To examine this question, the alienation subscale scores of the IPPA served as the independent variable, and attachment type as determined by the ECR-R served as the dependent variable. As before, attachment type was nominal in nature due to the coding, and alienation scores were ordinal in nature after coding. Again, the appropriate statistical application for this type of data was a chi-square test of independence (Cohen et al., 2003). Results were not considered significant unless they reached the 95% confidence interval.

As a correlation was found between attachment orientation and perceived alienation from parents and/or peers, additional tests were conducted to determine if time elapsed since coming out to that particular attachment figure, or time between self-identifying as LGB and coming out to a significant attachment figure, were related to attachment group membership. Discriminant function analysis to determine if either time variable predicted attachment group membership were conducted and reported if results were significant at the .05

level. All necessary descriptive statistics about the data and conclusions are also discussed in detail in Chapter IV (Results).

#### *Human Participants and Ethics Precautions*

The largest ethical concern of this study was ensuring confidentiality. Although the issue of sexual orientation is sometimes seen as a sensitive one, this survey only asked that participants identify their orientation. In addition, the survey was administered online and did not include names or other significant identifying information, helping to ensure anonymity and to ease concerns that individual participants had about sensitive personal information becoming known. Other than asking individuals to identify their sexual orientation and answer questions about to whom they have come out (if the participant identified as LGB), only general demographic information (e.g., age, ethnicity, residence type) and attachment questions (which are not generally considered troublesome or upsetting) were asked. Finally, the Institutional Review Board of the George Washington University approved this research. Approval by an ethics board ensured that appropriate measures were taken to protect participants and prevent any harm, physical or emotional, from occurring due to participation in the study.

Another ethical concern of this study was potential stress caused by responding to the survey. Although the risk was low, given the noninvasiveness of the questions, participants were provided with contact information for the primary researcher, so that any concerns could be addressed. The other primary

ethical concern was the risk of the information becoming public. This was partially alleviated by the nature of the Web-based survey. There was no place for respondents to list their names or other primary identifying information, and the database did not track the location from which responses were entered. Data analysis consisted of aggregate data only, and access to the raw data was restricted to the investigator and other relevant academic personnel involved in the research.

## Chapter IV: Results

### *Demographics*

A total of 4,544 people responded to the online survey. Seven hundred and three were excluded from the final analysis, mostly because they fell outside the stipulated age range ( $n = 155$ ) or failed to complete at least 80% of the appropriate questions ( $n = 548$ ). A total of 3,841 respondents were included in at least some part of the analysis. Demographics are presented in Table 1. The majority of the sample reported being Caucasian (94.5%), female (60.8%), living in an urban area (67.0%), married or in another committed relationship (56.6%), and relatively well educated (16.9% at least some college, 39.9% bachelors, 23.5% masters). The average age of the sample was 31.55 years of age, ( $SD = 7.60$ ).

These demographics are markedly different from the samples on which both the Experiences in Close Relationships-Revised (ECR-R) and Inventory of Parent and Peer Attachment (IPPA) were validated. As such it is reasonable to question whether the surveys were indeed appropriate for this sample, or if the reliability of the instruments was compromised by the sample differences. For the ECR-R, Cronbach's alphas are generally reported as .90 or above (Sibley & Liu, 2004; Fraley et al., 2000). For this study, the Cronbach's alphas for both the ECR-R as a whole and the anxiety and avoidance subscales were also high, with scores of .945, .937, and .939, respectively.

For the IPPA, Cronbach's alphas for maternal, paternal, and peer attachment were originally reported as .87, .89, and .92, respectively, in the original research (Armsden & Greenberg, 1987). Results here were similar but slightly lower, particularly for the peer category, with alphas of .83 for maternal attachment, .82 for paternal attachment, and .79 for peer attachment with this sample. Although this is not surprising, given that the present research required participants to answer the questions retrospectively and sometimes many years removed from the "coming out" process, it is still important to acknowledge that the demographics of this sample resulted in reliability scores somewhat lower than the sample on which the IPPA was originally validated. However, the Cronbach's alpha scores for this research still indicate an acceptable level of internal reliability for the measure within this sample.

The majority of the respondents reported living in the U.S. ( $n = 2924$ , 76.1%). In all, 49 states (only South Dakota was not represented), the District of Columbia, the U.S. Virgin Islands, and 52 other countries were represented by at least one respondent. However, the fact that the respondents were overwhelmingly Caucasian and needed to be proficient in written English to complete the survey indicates that the sample is not representative of the population of any of the respondent nations. Overall, the sample was skewed significantly in terms of many demographic variables. This was expected given the sampling procedure, but because of this the results cannot be generalized.

Table 1  
*Demographics of Survey Participants*

Demographic Variable	<i>n</i>	Percentage (%)
Gender		
Male	1492	38.8
Female	2336	60.8
Age		
18-29	1767	46.0
30-39	1387	36.1
40-49	678	17.7
Location		
United States	2924	76.1
Canada	398	10.4
UK/Ireland	134	3.5
Europe	218	5.7
Australia/New Zealand	71	1.8
Africa	5	.1
South America	20	.5
Asia	42	1.1
Relationship Status		
Single/casually dating	1443	37.6
Married/committed relationship	2174	56.6
Separated/divorced	101	2.6
Widowed	2	.2
Other	114	3
Race		
White/Caucasian	3631	94.5
Black/African American	85	2.2
Asian/Pacific Islander	133	3.5
Middle Eastern	32	.8
Indian/Native American	69	1.8
Other	77	2.0
Hispanic/Latino/Spanish origin		
No	3524	91.7
Yes	219	5.7
Highest education level		
Less than HS diploma	13	.3

HS diploma or equivalent	137	3.6
Some college	648	16.9
Associates degree	135	3.5
Bachelors degree	1530	39.8
Masters degree	899	23.4
Professional degree (e.g., JD, MD)	237	6.2
Doctoral degree	231	6.0
<b>Residence</b>		
City/urban community	2575	67.0
Suburban community	978	25.5
Rural community	270	7.0
<b>Sexual Orientation</b>		
Heterosexual/Straight	1532	39.9
Lesbian/Gay/Homosexual	1136	29.6
Bisexual	933	24.3
Other	205	5.3

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*Note.* Numbers/percentages do not include missing responses. Participants could check all racial categories that applied, so totals for that category may exceed 100%.

Of particular interest to the research questions at hand, the proportion of heterosexual versus lesbian, gay, or bisexual (LGB) or other respondents was skewed in favor of nonheterosexual respondents. Slightly less than 40% of the sample identified as heterosexual, 29.6% identified as gay or lesbian, 24.3% identified as bisexual, and 5.3% identified as “other.” This allowed for a comparative sample of heterosexual respondents to investigate differences in self-reported attachment style based on sexual orientation. Within the LGB sample, the vast majority (95.5%) reported that at least one significant family member (defined for this study as mother or father) or close friend(s) was aware of their orientation.

Table 2  
*Participant Demographics – Heterosexual vs. NonHeterosexual*

	Heterosexual (n = 1532)	NonHeterosexual (n = 2269)
Age (Mean, SD)	32.35, 7.093	31.06, 7.868
Gender (female)	67.3%	56.7%
Country (US)	76.4%	76.4%
Residence		
Urban	65.7%	68.5%
Suburban	26.5%	24.9%
Rural	7.7%	6.6%
Race (Caucasian)	95.0%	94.2%

Demographic variable percentages were remarkably similar regardless of sexual orientation. Although this sample overall is different from the general population, within the survey, demographics were not affected by respondents' reported sexual orientation, so it is unlikely that other demographic variables might be responsible for any difference found between the heterosexual and nonheterosexual samples within the analysis of the research questions.

The majority of LGB respondents were “out” to both parents, with 73.6% “out” to mother and 63.1% “out” to father. The majority of LGB respondents who were “out” reported that they personally had disclosed their orientation to their mother and/or father (89.6% versus 77.6% respectively). For those whose mothers were aware of their sexual orientation but did not self-disclose, 2.5% reported that someone else told her with permission and 8% reported that someone had told their mother without their permission. Almost 10% of respondents reported that their father was aware of their sexual orientation and

that it had been disclosed to him without their permission. Another 12.5% reported that another had told their father with their permission. The vast majority of LGB respondents (95%) were “out” to their best friend(s), and had self-disclosed their orientation (98.7%).

One final concern was examined within the demographics prior to analyzing the specific research questions. This survey included participants from many countries; because of this, it seemed prudent to examine first whether or not non-U.S. participants differed significantly from U.S. participants on the key variables (attachment scores, sexual orientation, and alienation). Should any of these variables differ significantly when comparing U.S. and non-U.S. participants, separate analysis of the research question for these two groups would be conducted.

First, a chi-square test of independence was run for attachment and participant country, the later of which was dummy coded into two options (1: U.S., 2: non-U.S.). Both of these variables are categorical, so a chi-square is the appropriate test. Assumptions for this chi-square are sufficient sample size, that the observations of the dependent variable are independent of each other, that the categories are exhaustive and mutually exclusive, and that no more than 20% of expected cell values will be fewer than five. Unless otherwise specified, these assumptions will apply to all chi-square analysis conducted in this study, and all assumptions were met unless noted. Results demonstrated that attachment was not related to country of residence ( $n = 3841$ ,  $\chi^2 = .624$ ,  $df = 3$ ,  $p = .891$ ). The

same test was used to examine any relationship between sexual orientation and participant country; again, the results demonstrated no significant relationship between sexual orientation and country ( $n = 3777$ ,  $\chi^2 = 1.155$ ,  $df = 3$ ,  $p = .764$ ).

Finally, alienation from mother, father, and peers was each examined to determine if scores differed based on participants being from the U.S. or any other country. An independent t-test was utilized. Assumptions of the t-test are that each observation of the dependent variable is independent, that the dependent variable has a normal distribution, and that the variable variances are equal. All assumptions were met. Alienation was the dependent variable in this analysis. As seen in Table 3, results indicated that country of residence did not influence any of the alienation variables (lack of Levene's Test significance), which also demonstrates that the equality of variance assumption was met. Because the participant country influenced none of the major variables of the research questions, non-U.S. participants were grouped with their U.S. peers for the purposes of analysis.

Table 3  
*Analysis of Alienation Scores Between U.S. and Non-U.S. Samples (t-test)*

Alienation	Levene's Test		t	df	Sig. (2 tailed)
	F	Sig.			
Maternal	.135	.713	-.400	1536	.689
Paternal	.480	.489	.026	1264	.979
Peer	.025	.874	.657	1940	.511

Finally, some basic descriptive statistics for the primary variables used in this research are provided. Table 4 includes the means and standard deviations

for attachment anxiety and alienation, alienation scores from mother, father and peers, and the time variables used. The bivariate correlations between attachment, sexual orientation, and maternal, paternal, and peer alienation are provided in Table 5.

Table 4  
*Descriptive Statistics for Major Study Variables*

Variable	Mean	Standard Deviation
Age (years)	31.550	7.601
Attachment Anxiety	3.589	1.192
Attachment Avoidance	3.577	1.148
Maternal Alienation	15.401	5.283
Paternal Alienation	16.408	4.263
Peer Alienation	16.277	5.467
TSOM (months)	116.978	86.846
TSOF (months)	115.456	85.026
TSOP (months)	113.233	82.133
TBTW (months)	27.989	44.332

*Note.* TSO refers to “time since out” to mother (M), father (F) or peer (P). TBTW refers to the amount of time between self-realization of sexual minority status and first disclosure to a significant person in life.

Table 5  
*Pearson Correlations for Major Survey Variables*

	Attachment	SO	MAlien	FAlien	PAlien
<b>Attachment</b>					
Correlation	1	.020	.386*	.359*	.503*
Significance (two-tailed)		.216	.001	.001	.001
N	3841	3806	1548	1276	1959
<b>SO</b>					
Correlation	.020	1	-.017	-.016	-.002
Significance (two-tailed)	.216		.509	.573	.940
N	3806	3806	1542	1270	1951
<b>MAlien</b>					
Correlation	.386*	-.017	1	.436*	.357*
Significance (two-tailed)	.001	.509		.001	.001
N	1548	1542	1548	1205	1454
<b>FAlien</b>					
Correlation	.359*	-.016	.436*	1	.314*
Significance (two-tailed)	.001	.573	.001		.001

N	1276	1270	1205	1276	1227
PAlien					
Correlation	.503*	-.002	.357*	.314*	1
Significance (two-tailed)	.001	.940	.001	.001	
N	1959	1951	1454	1227	1959

Notes. \* Correlation is significant at the .01 level. SO refers to sexual orientation. MAlien refers to maternal alienation, FAlien to paternal, and PAlien to peer.

### *Attachment Security and Sexual Orientation*

The first research question this study addressed is whether or not self-reported sexual orientation is related to self-reported attachment orientation.

Preliminary descriptive analysis of attachment scores within the sexual orientation categories as measured by this survey (heterosexual, gay/lesbian, bisexual, or other) demonstrated similar averages of the scores for the two attachment subscales ( $n = 3841$ ). Scores normally distributed for both subscales, and skewness scores fell well below one for each category, indicating the frequency distributions are symmetrical.

Chi-square analysis was then used to determine if there was a relationship between sexual orientation (using the four categories identified previously) and attachment scores. Using the avoidance and anxiety subscale scores, attachment scores were generated for respondents (1:secure; 2:dismissing/avoidant; 3:anxious/preoccupied; 4:fearful) and were analyzed to determine if sexual orientation was statistically significant in determining attachment status. Chi-square test of independence of these two variables determined that there is no statistically significant relationship between sexual orientation and self-reported attachment category within this sample ( $\chi^2 = 16.181$ ,

$df = 9, p = .063$ ). As discussed, this confirms findings from previous studies and samples.

However, given the underlying theoretical foundation of this research and the postulation that attachment may be influenced by factors during the coming out process, which typically occurs in late adolescence or early adulthood, the researcher decided to split the sample by age. For this post hoc analysis, three categories were created and dummy coded (1:18-29; 2:30-39; 3:40-49). Separate chi-square tests of independence were run on each of these new samples. When separated by age, a significant relationship between attachment and sexual orientation emerged. Within the 18-29 age group ( $n = 1767$ ), sexual orientation did indeed predict attachment status ( $\chi^2 = 17.526, df = 9, p = .041$ ). The effect size was small (.10), but the relationship was significant, albeit weak. Table 6 shows the analysis with expected and actual counts within each cell. It is important to note that the standardized residuals within each individual cell only exceeded 2.0 in one cell (heterosexual respondents with secure attachment), so overall the relationship was not robust. Some qualified discussion of the trends demonstrated by these data can be found in Chapter V.

In contrast, neither of the other two age groups showed a relationship between sexual orientation and attachment category. In the 30-39 age category ( $n = 1387$ ) the analysis failed to show a relationship between the variables ( $\chi^2 = 8.142, df = 9, p = .520$ ), and similar results were obtained for those aged 40-49 ( $n$

= 667,  $\chi^2 = 11.123$ ,  $df = 9$ ,  $p = .267$ ). A relationship between sexual orientation and attachment status was found only in those aged 18 to 29.

Table 6  
*Crosstabulation Examination of Sexual Orientation and Attachment (18-29)*

Sexual Orientation	Attachment				Total
	Secure	Avoidant	Preoccupied	Fearful	
<b>Heterosexual</b>					
Count	305	88	114	119	626
Expected	270.4	92.6	123.1	139.9	
StdR	2.1	-.5	-.8	-1.8	
<b>Gay/Lesbian</b>					
Count	221	83	98	126	528
Expected	228.1	78.1	103.8	118.0	
StdR	-.5	.5	-.6	.7	
<b>Bisexual</b>					
Count	189	71	102	120	428
Expected	208.2	71.3	94.7	107.7	
StdR	-1.3	.0	.7	1.2	
<b>Other</b>					
Count	41	17	30	26	114
Expected	49.2	16.9	22.4	25.5	
StdR	-1.2	.0	1.6	.1	

*Note.* StdR refers to the Standardized Residual.

The null hypothesis for this research question stated that there would be no relationship between self-reported sexual orientation and self-reported attachment style. Based on the results detailed here, the null must be rejected. For participants aged between the ages of 18 and 29, a significant relationship was found. However, for the sample as a whole, and for participants aged 30 through 49 (the upper age limit for this study), no relationship between these two variables was found, ergo the null hypothesis is rejected. Possibilities for future

research and implications for the findings here are discussed in more detail in Chapter V.

#### *Attachment Security and Perceived Alienation*

The second research question examined self-reported alienation from mother, father, and/or peers during the coming out process and self-reported attachment orientation to see if there was any relationship between the two variables. Alienation scores were derived from the alienation subscale of the Inventory of Parent and Peer Attachment (IPPA). Only LGB participants completed this portion of the survey. Again, because of the coding of the data, chi-square test of independence was the appropriate statistical test.

Sample sizes vary for each analysis due to individuals completing the alienation responses only for individuals to whom they are “out.” As previously described in Chapter III, alienation scores were coded into low, medium, and high categories. Using these forced categories, chi-square tests were run with alienation as the independent variable and attachment as the dependent.

Results demonstrated that for each alienation category (mother, father, peers), higher self-reported alienation scores were significantly related to insecure attachment. Results for each are reported in Table 7, including Pearson’s chi-square values, effect size, observed versus expected values, and standardized residuals. Zero cells in any of these analyses violated expectations. Standardized residuals within each alienation cell were fairly robust.

Table 7  
*Crosstabulation Comparison of Alienation and Attachment*

Alienation	Attachment				Total
	Secure	Avoidant	Preoccupied	Fearful	
<b>Maternal (n = 1550)</b>					
Low					
Count	351	89	41	38	519
Expected	247.4	75.3	93.1	103.1	
StdR	6.6	<b>1.6</b>	-5.4	-6.4	
Medium					
Count	352	125	200	209	886
Expected	422.4	128.6	158.9	176.1	
StdR	-3.4	<b>-.3</b>	3.3	2.5	
High					
Count	36	11	37	61	145
Expected	69.1	21.0	26.0	28.8	
StdR	-4.0	-2.2	2.2	6.0	

Chi-Square:  $\chi^2 = 206.001$ ,  $df = 6$ ,  $p < .0001$ , effect size .365

**Paternal (n = 1276)**

Low					
Count	344	82	59	40	525
Expected	258.0	75.7	90.9	100.4	
StdR	5.4	<b>.7</b>	-3.3	-6.0	
Medium					
Count	208	76	96	121	501
Expected	246.2	72.2	86.8	95.8	
StdR	-2.4	<b>.4</b>	<b>1.0</b>	2.6	
High					
Count	75	26	66	83	250
Expected	122.8	36.1	43.3	47.8	
StdR	-4.3	<b>-1.7</b>	3.4	5.1	

Chi-Square:  $\chi^2 = 149.724$ ,  $df = 6$ ,  $p < .0001$ , effect size .343

**Peer (n = 1958)**

Low					
Count	726	187	180	121	1214
Expected	543.1	185.4	230.0	255.4	
StdR	7.8	<b>.1</b>	-3.3	-8.4	

Medium					
Count	142	110	166	248	666
Expected	298.0	101.7	126.2	140.1	
StdR	-9.0	<b>.8</b>	3.5	9.1	
High					
Count	8	2	25	43	78
Expected	34.9	11.9	14.8	16.4	
StdR	-4.6	-2.9	2.7	6.6	

Chi-Square:  $\chi^2 = 400.228$ ,  $df = 6$ ,  $p < .000190$ , effect size .452

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*Note.* StdR refers to the Standardized Residual. StdR that are less than 2.0 are in boldface.

The majority of cells (28/36) within this analysis had standardized residuals with a value of 2.0 or greater, indicating that those cells were contributing to the results. Interestingly, of the nine avoidant attachment cells, only two had standardized residuals indicating they were contributing disproportionately to the overall results. With the exception of the medium paternal alienation and preoccupied attachment cell, all of the cells with standardized residual values below 2.0 (indicating they were not contributing as much to the overall result) were within the avoidant attachment category. Finally, the effect size for each analysis was between .3 and .5, indicating moderately strong relationship between the variables.

To further explore the data, the analyses were re-examined with a sorting criteria in place; namely, if the disclosure of sexual orientation was done by the individual, or by someone else (with or without consent). It seems natural to wonder if self-disclosure versus disclosure by another, particularly if that disclosure was not consented to, might play some role in the relationship

between attachment and perceived alienation. The data were split for each of the three attachment figures.

For the peer group, the number of participants who reported that their sexual orientation had been disclosed to a peer by someone other than themselves was so small (22 total cases; 1,897 self-disclosed) that all cells violated expectations. No meaningful results could be generated. For the maternal category, 154 participants reported that they had not personally disclosed their orientation, with 114 of those reporting that the disclosure to mother was without their consent. For the paternal category, 274 participants reported that they had not disclosed their sexual orientation personally, and 116 of those reported that the disclosure to father was without consent. Although the vast majority of people in the study reported that they personally had disclosed to their mother (1,374) or father (973), it seemed prudent to determine if self versus other disclosure of sexual orientation had any effect on the relationship between perceived alienation and attachment style.

Not surprisingly, for those participants who reported that they had not personally disclosed their orientation to either their mother or father but had given someone else permission to do so, lack of self-disclosure had no effect on the chi-square analysis on the relationship between alienation and attachment for either mother ( $\chi^2 = 8.134$ ,  $df = 6$ ,  $p = .228$ ) or father ( $\chi^2 = 7.694$ ,  $df = 6$ ,  $p = .261$ ). The analyses demonstrated that for those who had not given another permission to disclose their sexual orientation, this did have a significant effect on the

relationship between attachment group and perceived alienation for both mother ( $\chi^2 = 13.055$ ,  $df = 6$ ,  $p = .002$ ) and father ( $\chi^2 = 19.411$ ,  $df = 6$ ,  $p = .004$ ).

There were problems with these results, however. One-third of the cells within the maternal analysis violated expectations for the disclosed without permission (DWP) group, and 16.7% violated expectations within the paternal analysis. Further, not a single standardized residual within the parental analyses reached 2.0 for the DWP group. These issues are likely the result of the relatively small numbers of those who reported that their sexual orientation had been disclosed without their permission. Although the results were significant and did trend in the expected direction, the relatively small numbers of those reporting this along with the statistical issues of violated expectation and small standardized residuals indicate the need for a larger sample of these type of participants before any conclusions about the relationship between DWP, perceived alienation, and attachment style can be drawn.

Given these results, the null hypothesis for the second research question was rejected. The conclusion drawn was that there is a relationship between perceived alienation from attachment figures during the coming out process and attachment style. Further discussion of these findings occurs in Chapter V.

#### *Time Variables in the Attachment/Alienation Models*

The third and final research question involves the potential effect of time variables on predicting attachment style. Respondents were asked two questions related to time and attachment figures; how long did they wait between self-

identifying as LGB and telling a significant person in their life (hereafter referred to as TBTW), and approximately how long the important people in their life had known about their LGB orientation (hereafter referred to as time since out [TSO]). Responses for TBTW were coded into months, with a span of .25 (anyone indicating it took them a week or less to disclose their sexual orientation to another significant person in their life) to 456 months. The average length of time it took respondents in this sample to disclose their sexual orientation was just under 28 months, with a standard deviation of 44.33 months.

For TSO, responses were placed into three distinct categories; length of time “out” to mother (TSOM), length of time “out” to father (TSOF), and length of time “out” to close friend(s) (TSOP). This was done to facilitate analysis of the possible influence of the passage of time on reported alienation scores. The span of responses for each category was identical to the other time question (.25 to 456 months). The average length of time respondents had been “out” to their mothers was just under 117 months ( $SD = 86.85$ ), average length of time “out” to father was 115.46 months ( $SD = 85.03$ ), and average length of time “out” to close friend(s) was 113.23 months ( $SD = 82.12$ ).

Survey questions were originally in the form of fill in the blank answers, and because of this, there were responses from individuals expressing the belief that the questions asked were not representative of the LGB experience. Most notably, certain respondents answered that they had always been “out,” even from a very young age, and so disclosure of sexual orientation to friends and

family was never an issue. Some also pointed out that they disclosed multiple times to the same person, which made providing an exact time since “out” to that individual problematic. Although the majority of respondents who chose to answer this time-related question did so in the expected way, the experiences of a subset of the LGB community who identified no coming out process as such may not have been adequately represented by the questions asked in this survey. The vast majority answered the time questions regardless of any misgivings they may have had (only 87 respondents reported having disclosed to a significant attachment figure but provided no usable time information). This issue will be revisited in Chapter V.

To examine the third research question, a discriminant function analysis was utilized. This test determines if attachment group membership (the dependent variable) was predicted by the time variables (independent variables). There are basic assumptions of this test. The first is that population variances and covariances among the dependent variable are the same across all levels of the factor. This assumption can be tested via the *F* test from the Box’s *M* statistic. The second is that participant scores for any one variable are independent of other participant scores for that variable. Given that this survey was delivered online and anonymously, and that participants were not provided with any information about prior responses before taking the survey, it is assumed that all participant responses are independent and unique to the individual participant. Finally, it was assumed that the independent variables were normal for each level

of the grouping variable, increased correlation between predictor variables would decrease predictive power.

The discriminant function analysis was conducted for mother, father, and peers. The Box *M* statistic for each of the three analyses indicated that the first assumption was not violated. Originally, alienation scores were included in the analysis as a predictor variable as well as the time variables. However, as the results of the second research question already indicate that perceived alienation is related to attachment category, and because the results of the discriminant function analysis with alienation included as a predictor produced results that showed alienation as the most dominant predictor variable for attachment group with both mother, father, and peer, alienation scores were then removed as a predictor variable to examine if the time variables by themselves predicted attachment group membership.

The overall Wilk's lambda for all three analyses were significant (Mother:  $\Lambda = .97$ ,  $p = .003$ ; Father:  $\Lambda = .98$ ,  $p = .003$ ; Peer:  $\Lambda = .98$ ,  $p = .0001$ ), indicating that overall the time predictors differentiated between the attachment groups. The residual Wilk's lambda for each of the analyses, however, were not significant, which means that the predictors did not differentiate between the three attachment groups after controlling for the effects of the first discriminant function. The within-group correlations between the predictors and the discriminant functions as well as the standardized weights for the three analyses are presented in Table 8.

Table 8  
*Standardized Coefficients and Correlations of Predictor Variables*

Predictors	Correlation coefficients	Standardized coefficients
Mother ( <i>n</i> = 1454)		
TSO	-.440	-.482
TBTW	.876	.899
Father ( <i>n</i> = 1226)		
TSO	-.516	-.562
TBTW	.828	.858
Peer ( <i>n</i> = 1465)		
TSO	.734	.758
TBTW	-.653	-.679

*Note.* Time Since Out (TSO) refers to the amount of time passed since first significant disclosure of sexual orientation; Time Between (TBTW) refers to the amount of time between self-identification as LGB and disclosure to a significant person.

Based on these coefficients, the TBTW variable demonstrated the strongest relationship with the discriminant function for mother and father, indicating that it contributed more to the ability of the time variables to determine attachment group membership than did TSO. This is reversed for the peer analysis, where TSO contributed to attachment group membership. Canonical correlation for the discriminant function for each analysis also showed the relative importance of the time variables to the variability in attachment group scores, and is more illuminating than the simple significant result of the Wilk's lambda.

The eigenvalues and canonical correlation (by squaring the later, the eta square that would result from running a one-way ANOVA on the discriminant function is obtained) demonstrate that although the results of the discriminant

function analysis are significant, the time variables are not contributing a great deal to attachment group membership. For the peer analysis, an eigenvalue of .02 and a canonical correlation (CC) of .15 show that only 2.3% of the variability of the scores for the discriminant function are accounted for by differences among the attachment groups. Results were similarly small for the paternal (1.4%) and maternal analyses (1.2%).

Although the results of the discriminant function analysis indicate that the time variables are contributing to attachment group membership (TBTW contributing for the maternal and paternal relationships, TSO contributing for the peer relationship), it appears that the relative amount contributed by time variables is small. Given the previously mentioned complications with assessing these variables with this sample, it is unclear if the time variables are simply a very small part of the complex relationship between experiences of alienation or rejection, sexual orientation, and attachment, or if the survey was inadequate in measuring the variable. A more detailed exploration of these issues, as well as possible theoretical reasons why the time variables appeared to contribute differently depending on the attachment figure in question, will be discussed in more depth in Chapter V. Because the discriminant function analysis did indicate that the time variables were contributing significantly (albeit to a relatively small degree), the null hypotheses are rejected for each attachment figure, with the full understanding that this result is extremely tentative and may be the result of the data collection rather than a genuine relationship between the variables.

## *Conclusion*

The data discussed in this chapter presents the findings of this study. Included are the demographics, which demonstrate that the sample used here is unique in several respects, and therefore the results cannot be generalized to other populations. The data also show that within the sample, attachment category was correlated with sexual orientation for those aged 18 to 29, a finding not seen in other studies. Sexual orientation was also related to perceived alienation from attachment figures for LGB participants. This relationship was moderately strong (as measured by effect size) and with the exception of the avoidant attachment cells, standardized residuals demonstrated that all other cells were contributing to the relationship between the variables. Finally, the attachment group membership was predicted by time variables, but the weakness of the finding combined with issues measuring the time variables make this finding extremely tentative.

## Chapter V: Interpretations, Conclusions, and Recommendations

### *Discussion of the findings*

All discussion of the findings of this research must be prefaced with an acknowledgement of the limitations of the sample generated by the methods used for this study. This sample was not representative of the general population in a number of ways. As seen in Table 1 (Chapter IV), the sample was predominately female, between the ages of 18 and 29, Caucasian, well educated, and significantly skewed in terms of sexual orientation. The sampling procedure provided a fairly robust lesbian, gay, and bisexual (LGB) sample, which was useful for this research, but it is important to bear in mind that this sample was not representative of the general heterosexual or LGB populations of the United States or any other country. For this and other reasons, findings cannot be generalized.

### *Attachment security and sexual orientation*

The results of this research provided some interesting and unexpected answers to the research questions. The first research question examined the relationship between sexual orientation and attachment status. The LGB sample in this study did not differ significantly from the heterosexual sample in any of the demographic variables, which allowed the two groups to be compared without the findings being influenced by the accounted for demographics. Unlike previous findings, in this sample a correlation between sexual orientation and self-reported attachment status was found, specifically for participants between the ages of 18

and 29. The relationship was not seen for the entire sample or the other two age groups, which means that the null could not be rejected in this research, and the relationship was weak, but the difference in findings by age is interesting nevertheless.

Previous studies (Elizur & Mintzer, 2001; Gaines & Henderson, 2002; Mohr & Fassinger, 1997; Ridge & Feeney, 1998) have not included different age categories. Ridge and Feeney's (1998) sample included gays and lesbians ages 17 through 50, and the gay and lesbian couples in Gaines and Henderson's (2002) study had an average age in their mid-30s with standard deviations of almost nine and a half years. None of the few studies that have examined heterosexual and nonheterosexual rates of attachment security have compared various age groups, which may explain why this relationship has never been seen before. It is also possible that the sampling procedure in this study, which was not random, is responsible for the finding. Further replication is necessary.

The relationship between sexual orientation and attachment in those aged 18 to 29 was not robust, however. As seen in Table 6 (Chapter IV), the standardized residual for all but one of the cells within the chi-square analysis of this age group did not exceed 2.0, indicating that those cells were not contributing much to the relationship. The relationship that contributed the most to the findings was the heterosexual/secure cell. Within this sample, heterosexual respondents endorsed having a secure attachment style more than would be expected if the two variables were unrelated. In contrast, those who

endorsed being bisexual or having an “other” sexual orientation were relatively less likely to have a secure attachment style, although, as indicated, the relationship was not a strong one.

It is also noteworthy that the entire avoidant attachment category contributed very little to the relationship between attachment security and sexual orientation within this age group. Observed scores were only minimally divergent from expected scores, with standardized residuals never exceeding .5 in either direction. As one of the hallmarks of avoidant attachment is a conscious dismissal or downplaying of the importance of interpersonal relationships, it may be that factors with the potential to strain relationships with significant people in their lives, such as having a minority sexual orientation, has relatively little effect on the prevalence of an avoidant attachment style. This will be addressed in more detail within the discussion of the results of the second research question.

The gay/lesbian sexual orientation category also contributed relatively little to the relationship between sexual orientation and attachment. Those who endorsed being gay or lesbian were slightly more likely to be categorized with an avoidant or fearful attachment style, and slightly less likely to have a secure or preoccupied attachment style. The reasons why at least some of the residuals for the bisexual and “other” sexual orientation categories suggested at least a moderate contribution to the relationship between sexual orientation and attachment style, with the gay/lesbian relationship contributing much less, is unclear. One possible explanation is that those who identify as bisexual may

potentially experience rejection by both the heterosexual and lesbian/gay communities, increasing the opportunities for their sexual orientation to have an effect on attachment style. There is nothing in this data set, however, to explain this finding.

The relationship between sexual orientation and attachment style within this sample has a number of possible interpretations. There may be other variables for those aged 18 to 29 that are disproportionately present in this LGB sample that also affect attachment status. For example, previous research has found that conflict frequency between parents and offspring peaks in adolescence (Collins & Steinberg, 2006). It may be that LGB individuals here were disproportionately in conflict with parents for reasons other than sexual orientation, skewing the results. There may be differences in the attachment histories of those who disclose to significant persons relatively early in their LGB identity formation versus those who disclose later that cannot be accounted for in this study. The heteronormative status of many cultures, higher levels of stress, self-doubt/questioning, and the host of other possible interpersonal and psychological consequences of being a sexual minority may have the potential to affect attachment status. It may be that there is a variable mediating the relationship found between attachment and sexual orientation that is not accounted for in this research, such as stress or internalized homophobia. Further research designed to examine possible mediators, control for other

variables that might be influencing sexual orientation and attachment style, and to better understand the relationship between these two variables is warranted.

As previously discussed during the review of the literature on attachment and sexual orientation, late adolescence and early adulthood are generally critical periods for the transferring of attachment functions and relationships from parents to peers and/or romantic partners (Hazan & Zeifman, 1994; Nickerson & Nagle, 2005; Scharf & Mayseless, 2007), and also the general age span during which self-identification of sexual orientation and disclosure of the same to others also typically occur (Rust, 2003). Although causation cannot be concluded from this research design, current understanding of sexuality suggests that sexual orientation is an innate characteristic (although discovery and acknowledgement of nonheterosexual orientation may come much later), and as such it seems unlikely that attachment security could have any effect on sexual orientation. Therefore, it makes more sense theoretically that sexual orientation affects attachment security in some way. In this sample, participants aged 18-29 showed a correlation between attachment security and sexual orientation. One possible interpretation of the correlation is that the LGB portion of the sample had higher rates of insecurity because of reactions by others to disclosure of their LGB status, which typically occurs during this time frame.

If true, the lack of a correlation for the sample at large or for the other two age groups specifically suggests that any disruption to the attachment system created by reactions of others to disclosure of LGB status is transient. LGB

individuals aged 30 or older in this sample were no more likely than their heterosexual peers to report lower rates of secure attachment or higher rates of insecure attachment. It may be that any disruption to the attachment system is therefore confined generally to the age range in which disclosure of sexual orientation is most likely to occur, although individual variation is to be expected. This would also explain why previous research (Elizur & Mintzer, 2001; Gaines & Henderson, 2002; Mohr & Fassinger, 1997; Ridge & Feeney, 1998), which has not specifically examined attachment and orientation in different age categories, has failed to find any correlation between these two variables. It is also similar to findings from the Ridge and Feeney study (1998), which specifically found poorer relationship quality immediately after disclosure with attachment relationships returning to previous levels of functioning after a period of time.

It is important to recognize that although the findings in this sample suggest that any increase in the use of insecure attachment strategies during a specific time period is transient rather than permanent, this is still a potential issue of concern. The attachment system is fluid and dynamic across the lifespan. Individuals do not become secure or insecure at a specific age and then remain within that category for the rest of their lives regardless of future experiences. Attachment behaviors and strategies are adaptable and malleable. Individuals who may utilize insecure attachment strategies during period of high stress (such as while “coming out” for LGB individuals), even if this is not a permanent attachment style for them, would still experience the interpersonal disruptions

that result from insecure attachment behaviors for as long as their insecure approach to significant others persisted. They may then experience some of the risks of insecure attachment previously discussed. Given this, even if rejection of LGB individuals by significant attachment figures does not cause long term changes to the attachment system, programs and interventions that incorporate an understanding of attachment theory and its effect on personal and interpersonal systems could be tailored to help alleviate the stress on LGB individuals and their attachment support network during this critical time.

*Attachment security and perceived alienation*

Findings based on the second research question suggest that perceived alienation from mother, father, and/or peers was related to attachment security in the LGB sample. Respondents who reported medium or high levels of alienation during the period immediately after revealing their sexual orientation to that attachment figure also reported higher levels of insecure attachment. As with the previous discussion of attachment security and sexual orientation, the avoidant attachment category stood out from the rest of the analysis.

The majority of cells within this analysis had standardized residuals with a value of 2.0 or greater, indicating that those cells were contributing to the results of the analysis (Table 7). Those individuals who reported low levels of alienation from mother, father, and/or peers during the coming out process were more likely to report a secure attachment style than would be expected if the two variables were not related. Respondents who reported either medium or high levels of

alienation from mother, father, and/or peers were less likely to endorse a secure attachment style. Conversely, respondents who reported low levels of attachment figure alienation were less likely to report insecure attachment, and those who reported moderate or high levels of alienation were more likely to report insecure attachment (preoccupied or fearful). Broadly, the expected results were obtained; those with more positive relationships with significant attachment figures during the coming out process were more likely to endorse a secure attachment strategy, which is in keeping with attachment theory.

A closer examination of the results demonstrates some diversity within this general template, however. As discussed in Chapter IV, most of the cells that were contributing less to the alienation/attachment relationship were within the avoidant attachment category. Also, the direction of the relationship between alienation and attachment within the avoidant category mirrored that of secure attachment, not of the other two types of insecure attachment (preoccupied and fearful). Those participants who reported lower levels of maternal, paternal, and/or peer alienation were more likely to endorse an avoidant attachment strategy, and those with medium or higher levels of alienation were less likely to report an avoidant strategy. This is an unexpected finding, as a closer inspection of the individual cells within the chi-square analysis demonstrates that LGB individuals in this sample who reported lower levels of alienation from attachment figures were more likely to report a secure attachment and slightly more likely to

report an avoidant attachment style than would be expected if the variables were not related.

The reasonable question, then, is why the avoidant attachment category differs from the other insecure attachment types within this analysis. Although this cannot be answered definitively, attachment theory offers a possible explanation. The avoidant/dismissive attachment style is characterized by high levels of attachment avoidance and a concurrent lack of anxiety about attachment relationships (Crittenden, 1997). In general, individuals with this attachment style place relatively less importance on the value of close interpersonal relationships, preferring not to be that close to others and denying that a lack of close relationships causes them distress. One possible explanation for the findings in this research is that participants may need to be sensitive to a change in the attachment relationship in order to report alienation after self-disclosing their sexual orientation to that attachment figure.

Individuals who were avoidant in orientation prior to coming out may not have perceived an increase or change in alienation from attachment figures and therefore may have reported that these levels were “low” relative to the norm for that attachment relationship. Or, if they did perceive a change, they may have downplayed or denied it as unimportant, as it involved an attachment relationship, which they perceive as relatively less important than those with other types of attachment styles. Also, because avoidant individuals place lower relative worth on interpersonal relationships (Rust, 2003), perhaps they are less sensitive to

questions designed to assess issues that would be important or stressful to others, and this lack of relative relationship sensitivity may have led to the reported low levels of alienation in those classified as avoidant.

Finally, as discussed previously, attachment can be conceptualized as a continuum rather than in discrete categories. Secure and avoidant attachment categories share a common trait within the model of attachment as an intersection of relationship avoidance and anxiety. Both attachment types are relatively low on relationship related anxiety (secure individuals are also low on relationship avoidance, whereas avoidant individuals are high on avoidance). This commonality may explain why secure and avoidant individuals exhibit similar patterns when examining another variable that, at least on the face of it, would also be related to relationship anxiety, namely alienation from significant attachment figures. Although nothing can be concluded definitely from the data collected, there are theoretical reasons from attachment theory that may explain these findings.

Although attachment style and alienation are correlated here, perceived alienation cannot be said to have caused the differences observed in the attachment styles of the participants. It is as likely, theoretically, that LGB individuals with insecure attachment styles prior to disclosure of sexual orientation reported higher alienation than their secure peers because their attachment system was more prone to negative reactions to stress, or because they feared such a reaction and so interpreted reactions through the lens of their

own expectations. It is also possible that an attachment figure may discern an individual's nonheterosexual orientation and reject him or her prior to disclosure, potentially causing insecure attachment strategies to be utilized before disclosure occurs.

Another variable, such as depression, may be responsible for the findings; previous research, for example, has found a correlation between preoccupied attachment and depression (Collins & Steinberg, 2006). Someone depressed may view interactions more negatively than they would have otherwise, resulting in a perception of alienation that might not otherwise be there, mediating the current findings. Finally, the method of disclosure, either self-disclosure or disclosure by another, particularly without a person's consent, may influence perceived alienation, attachment behaviors, and the relationship between these variables.

As any of these are possible, so then it is possible that attachment style resulted in the higher perceived alienation in response to the disclosure of sexual orientation. However, in general the LGB and heterosexual portions of this sample only reported differing rates of secure versus insecure attachment for the 18-29 age category. Perhaps the LGB community is vulnerable to higher rates of insecurity during this critical age. This may or may not be connected to the coming out process, but that the overlapping time frame of the average age of coming out with the 18-29 age category in this survey makes that a theoretical possibility. The coming out process may provide a time frame where attachment

relationships and models are vulnerable to possible change, similar to becoming a parent represented a time when men experienced less attachment stability (Crowell & Waters, 2005). Further study, particularly including measurements of attachment to significant figures both before and after disclosure of sexual orientation, may help clarify this issue. A greater understanding of how all of these variables interact has implications for counseling, public policy and advocacy efforts, and a broader understanding of how discrimination and rejection of LGB family and friends may affect their lives and communities.

#### *Time variables and attachment security*

Finally, the third research question investigated the effect of two time variables on the relationship between perceived alienation and attachment security. Previous research has linked attachment insecurity to having a negative identity of self and nondisclosure of sexual orientation, whereas parental support for gay and lesbian orientation is related to current romantic attachment security, positive self-identity, and level and comfort of self-disclosure, even when memories of early caregiving are controlled for (Elizur & Mintzer, 2003; Mohr & Fassinger, 2003). Research has also suggested that attachment security with parents may suffer after initial disclosure of an LGB identity, so length of time since coming out to attachment figures may also affect relationship specific attachment security (Ridge & Feeney, 1998). As the analysis of the second research question demonstrated that within this sample, perception of alienation from parents and peers during the time period immediately following disclosure

was (for the most part) positively correlated with insecure attachment, the possible effect of these time variables was also investigated.

The results of the discriminant function analysis, with attachment group as the dependent variable and both time since out (TOS) to attachment figure and time between self-identification of sexual orientation and first disclosure of sexual orientation (TBTW) as the predictor variables were significant, indicating that the time variables were contributing to attachment group membership. The TBTW predictor was contributing more for the maternal and paternal analyses, and TSO was contributing more to the peer analysis. So although the results of the analysis suggest that the null hypothesis should be rejected, as at least one of the time variables could be shown to be contributing to attachment group membership, there are several caveats that make this conclusion more problematic than the results from the two previous research questions addressed in this study.

First, the eigenvalues from the analysis demonstrated that any effect of the time variables on group membership was low. As defined and measured in this study, it would appear that these time variables have only a limited effect on attachment orientation. However, due to the previously discussed issues that some respondents of the survey noted, such as the difficulty in pinning down exact times for coming “out” when their sexual orientation had always been evident, requiring multiple disclosures to be fully “out” to a significant person, or having experienced the death of a primary attachment figure prior to disclosure of

sexual orientation, the researcher acknowledges that the survey utilized may not have been adequate to fully examine the question. The results of the analyses must, therefore, be considered extremely tentative.

For the sake of further discussion, let us assume the time variables do play a role in attachment group membership. One natural question that would arise would be why the TBWT variable was the primary predictor for the parental analyses and TSO was primary for the peer analyses. The TBWT variable was intended to determine the length of time between when individuals self-identified as LGB and when they first disclosed to a significant person in their lives. Previous research has linked attachment insecurity to having a negative identity of self and nondisclosure of sexual orientation, which would theoretically delay disclosure to significant attachment figures. Parental support for gay and lesbian orientation is related to current romantic attachment security, positive self-identity, and level and comfort of self-disclosure, even when memories of early caregiving are controlled for (Elizur & Mintzer, 2003; Mohr & Fassinger, 2003), which suggests that lack of parental rejection or alienation should predict more prompt disclosure of sexual orientation.

Theoretically, the longer lengths of time between self-identification and disclosure to a significant attachment figure could indicate a negative self-LGB identity or fear of the recipient's reaction. It makes sense, then, that this variable would potentially affect attachment group membership with parents, who are usually the first attachment figures in life. Even with the transfer of attachment

functions that begins to take place in late childhood and early adolescence, parents usually still remain important attachment figures, and an LGB individual delaying disclosure to parents is suggestive of either a negative self-identity or feeling that support would be lacking.

In contrast, the TSO variable was more important for the peer analysis. This variable measured how long it had been since the participant disclosed to the attachment figure in question (from the current time), as previous research has suggested that relationships may suffer immediately after disclosure of sexual orientation and then return to previous functioning after some time (Ridge & Feeney, 1998). This variable was the primary one in the discriminant function analysis for peers only, although the cited research examined parental attachment rather than peer attachment. As noted previously, because peers are chosen (rather than parents, who are not chosen), perhaps the TBTW variable was not primary for peers because most peer relationships are neither as lengthy or as important (from an attachment perspective) as parental relationships, and therefore peers were safer targets, relatively speaking, for disclosure of sexual orientation. Individuals may therefore be less concerned about peer rejection and more willing to disclose to peers even if they feared rejection, allowing the TSO variable to be more dominant in the peer analysis. They may also abandon peers who they perceive as rejecting and retrospectively decide they were never friends in the first place. This issue is complicated by the length of time for many

participants between their “coming out” experiences and their participation in this study.

Finally, a natural question that might arise is whether or not the time variables and the possible relationship they demonstrated with attachment group membership is simply a function of age. As participants age, time since disclosure to attachment figures naturally increases, and for those participants who have not yet disclosed to a significant attachment figure, increased age would also rise naturally with increased time between self-identification of sexual orientation and disclosure to that attachment figure. The time related variables discussed herein could, therefore, theoretically be nothing more than an artifice of a participant’s age.

Previous research has shown insecure attachment was related to delays in sexual orientation disclosure, and parental support was related to attachment security and comfort with self-disclosure (Elizur & Mintzer, 2003; Mohr & Fassinger, 2003). Ridge and Feeney (1998) demonstrated that parental relationships with lesbian and gay children tended to be poorer after disclosure, but also tended to return to normal functioning after some time. These suggest that individuals with relatively longer lengths of time between self-identification of sexual orientation and disclosure to significant persons experience higher levels of insecure attachment and discomfort with either their identity or the disclosure process. Those with longer lengths of time since disclosure should report that relationships with key attachment figures are the same (attachment wise) as they

were before disclosure, as any transient disruptions caused by “coming out” would have time to dissipate. So when considering the TBTW variable, greater lengths of time (which may also correspond with higher ages) would suggest more insecurity, but for the TSO variable, longer lengths of time (and higher ages) would be matched with baseline levels of attachment security.

As was seen in this study, increased age was not associated with attachment insecurity. For the two older age groups (30-39 and 40-49) and for the sample as a whole, no correlation was found between sexual orientation and attachment style. Although the discriminant function analysis only determined that TSO was affecting attachment group membership (it did not determine if longer or shorter TSO lengths were related to secure or insecure attachment specifically) it may be that for the peer relationship, which the discriminant function analysis determined was influenced by the TSO variable, could be adequately determined by age rather than a separate time variable.

For the TBTW variable, the influence of age is more difficult to answer, because the length of time it took someone to reveal his or her orientation to another person after he or she self-identified as LGB is not a function of current age unless that person is still in the disclosure process. Once disclosure is complete, the TBTW variable becomes static while chronological age continues to increase, and this research design did not include an examination of any differences between the various age groups for the influence of the TBWT variables. However, those with relatively long TBTW intervals would theoretically

be spread throughout the age categories. Results from this study suggested that the TBTW variable was having an effect, however minor, on attachment group membership within the parental analyses, a not unexpected finding given previous research (Elizur & Mintzer, 2003; Mohr & Fassinger, 2003). Future research that looks to examine the intricate relationships between disclosure of sexual orientation, attachment, and time may be able to parse this out more fully.

In conclusion, the results of this study confirmed some expectations and seemed to refute others. For the first research question (whether there is a relationship between attachment security and sexual orientation), in this sample the two variables were correlated for the 18-29 age group but not for the other age groups or the sample as a whole, meaning that the null hypothesis is rejected but a possible avenue of investigation provided for future research. For the second research question (examining the relationship between attachment security and perceived alienation from parents and peers after disclosure of sexual orientation), a consistent relationship was found between the two variables for mother, father, and peers, generally demonstrating that low perceived alienation was associated with attachment security and high perceived alienation was associated with attachment insecurity (although some variation was found specifically with the insecure-dismissive attachment style). In this case, the null hypothesis is rejected and the conclusion drawn that in this sample, attachment security and perceived alienation are significantly correlated. Finally, analysis of data based on the third research question examined whether two time

variables (TSO and TBTW) predicted attachment group members. Discriminant function analysis demonstrated that the time variables were contributing to attachment group membership, that the TBTW variable was primary for both parental analyses, and that the TSO variable was primary for the peer analyses. However, because of the relatively limited contribution of the time variables and concerns about the method used to measure them, the rejection of the null hypotheses for this research question is tentative.

### *Implications*

Potential implications for the field of counseling are an important consideration of research like this, as practical applications to further the field have the potential to help professionals and clients alike. The correlation between sexual orientation and attachment security in the 18-29 year old category has some clear implications for the field of counseling. If disruption to the attachment system is indeed correlated with sexual orientation, it suggests potential new directions for advocacy experts, school counselors, and other mental health professionals that come into contact with LGB individuals during this critical period.

Particular attention may be paid to how significant attachment figures are reacting to an LGB individual's disclosure of orientation, and increased support and interventions that specifically address attachment relationships and difficulties may be introduced or increased in usage. An increased understanding of how rejection by attachment figures may disrupt interpersonal and

psychological functioning may be used to help educate others to the potential short and long term risks of alienating LGB family and friends, and thereby potentially ameliorate or reduce these effects. Counseling strategies based on attachment theory, such as emotionally focused therapy (Johnson, 1999), could also be adapted to improve the attachment relationship between LGB clients and significant attachment figures.

This is particularly relevant if rejection by or alienation from primary attachment figures because of an individual's sexual orientation is a mechanism of disruption to the attachment system. Despite advances in recent years in acceptance of LGB individuals, rejection by family members and society in general is still a very real obstacle for sexual minorities. A better understanding of how that rejection may affect LGB individuals and the psychological and interpersonal risks that may arise may help with counseling, educational, and advocacy efforts. Such knowledge can also be used to increase general awareness in the public of the real and potentially adverse consequences that come not only from outright rejection of LGB individuals, but also from the more insidious and pervasive forms of homonegativity.

A better understanding of how sexual orientation, attachment security, and personal and interpersonal variables such as self-esteem and rejection by others are intertwined would also be useful for counseling professionals. The findings in this study demonstrate a correlation between perceived alienation from attachment figures and self-reported attachment style in the LGB portion of the

sample. The specific pathways of which variable or variables are causative cannot be determined here. However, understanding how these issues may interact may assist counseling professionals and others working in fields likely to bring them into contact with LGB adolescents and young adults in appreciating the unique stressors and risks associated with this population. Knowing these risks, and how self-identity and the reactions of others may affect sexual minorities, provides the counseling field with additional resources to better help potential clients.

### *Limitations*

The use of a convenience sample for this research, although allowing for a relatively large respondent pool, has obvious implications for the generalizability of this study. Although the findings discussed generally fit with attachment theory, extreme caution must be used in making any broader statements with these data. Replication with more representative samples is needed before any concrete conclusions can be drawn.

The potential difficulty with other sampling procedures in examining issues within the LGB community is the fact that LGB individuals constitute a relatively small percentage of the population at large. A random sample of the population would require a relatively large number of respondents to ensure a sufficient number of LGB respondents. Future researchers should find ways to ensure a large enough LGB sample while also utilizing more rigorous sampling procedures to expand on the results of this study and allow for generalization of results.

Another major limitation of this study was that it represents data from a single point in time, which negates the ability to determine causation, specifically with regard to the order of attachment insecurity and either development of LGB identity or alienation from significant attachment figures during disclosure of LGB orientation. Attachment theory posits the development of the attachment system from infancy; although the exact mechanism of how nonheterosexual orientation develops is unknown, our current understanding suggests genetic and/or very early developmental influences as well (Bailey, 2003). To determine how the attachment system may influence or be influenced by sexual orientation, longitudinal research beginning much earlier in life would be ideal, although determining sexual orientation early in life is fraught with potential issues. However, research over time, particularly with a measurement of attachment orientation prior to disclosure (or prior to self-identification, if possible), would help to increase our understanding of how these systems interact. At the very least, research with adolescents that tracks a sample through the formative years of identity formation and consolidation, including LGB identity in sexual minority youth, may help in understanding how the variables are affecting each other, and what that means for the physical, mental, and emotional growth and health of the LGB community.

Finally, although the usage of self-report surveys and data is commonplace, they carry inherent limitations. Self-report data is susceptible to deliberate and unintentional distortions, as asking people to report on their own

feelings or behaviors may lead individuals to distort or manipulate their responses for a variety of reasons. Participants providing responses they believe researchers desire to receive, omitting or adding behaviors or characteristics in order to “look good”, or simply not accurately recalling the phenomenon they are reporting on are all very real risks when using self-report data (LaFountain & Bartos, 2002). Although there is little alternative when asking people to describe their internal thoughts or feelings, it is still important to acknowledge that the usage of such data is inherently biased by the very people providing the data.

#### *Future Research*

Research replicating the findings of this research with different samples, particularly true random samples, is necessary to be confident in the conclusions drawn from the data presented here. Samples drawn from younger cohorts may prove particularly salient given the finding here that age may be a factor in the relationship between sexual orientation and reported attachment style. Research over time, specifically to determine if attachment security changes as development of an LGB identity and disclosure occur, would also be essential in further investigating the relationship between these two important systems.

One of the primary difficulties for potential research in this area is the recruitment of LGB individuals, particularly recruitment prior to disclosure of sexual orientation. Although anecdotal statements by LGB individuals that they always knew their orientation are not uncommon, there are still social (and sometimes peer and familial) repercussions attached to disclosure of a

nonheterosexual identity. This usually (but not always) means that there is a period of time between self-identification as LGB and disclosure to others. Ideally, samples would be drawn from the population of LGB individuals who have privately acknowledged their sexual minority status but not yet revealed this information to anyone else.

There are difficulties with this, however. The first is that if persons have not publically identified as LGB, they are not readily identifiable to be recruited. Then too, as they have not yet disclosed their sexual orientation to others in their lives, they may be reluctant to do so to researchers, even when confidentiality protections are relatively strong. Finally, the general age range for when LBG individuals typically begin to self-identify is adolescence (Rust, 2003). Although there is a great deal of individual variation, a significant portion of the target population may not yet have reached legal adulthood. Recruiting from a population that is likely to contain a relatively large amount of children and adolescents and who may be motivated to hide their sexual orientations are serious obstacles to future research into the issues raised in this research.

Another issue that needs to be addressed in psychosocial research is the paucity of instruments designed to specifically measure aspects of the LGB experience. Also, there are issues with standard research instruments in terms of having options appropriate for LGB respondents as well as others who do not fit the standard gender and sexual orientation responses. For example, demographics sections in psychosocial research usually ask for a respondent's

gender with dichotomous options for male or female, which does not allow for individuals to endorse transsexual or other gender options. Sexual orientation is often not included within the standard demographic variables such as gender, socioeconomic status, and race, which sends the message that sexual orientation is not being considered as a potential factor in such studies.

Instruments measuring experiences potentially unique to the LGB community, such as the reactions of family and friends when sexual orientation is disclosed, are difficult to find or have issues with development, or have insufficiently demonstrated reliability or validity. Until psychosocial instrumentation takes greater care to be more inclusive of the LGB community and a wider spectrum of possibility for gender and sexual expression, certain portions of the population will continue to be marginalized within the psychosocial research community.

### *Summation*

Although the results of this research are tentative and cannot be generalized, they raise some interesting questions about the possible relationship between the attachment system and sexual orientation, and the potential ramifications of LGB individuals being rejected by those who are most important to them. This research suggests that the relationship between sexual orientation and attachment category may be more complex than previous research has found. The findings also demonstrate a correlation between attachment category and perceived alienation from attachment figures after “coming out” for LGB participants. Finally, length of time since disclosure of sexual orientation to

attachment figures, as well as length of time since self-identification as LGB and disclosure to others, may be related to attachment category, but the weakness of the findings as well as issues with the survey questions mean that this finding is extremely tentative.

More research is necessary to understand how these systems interact and to address the gaps in both the attachment literature and in how lesbians, gays, bisexuals and other sexual and gender minorities are included in psychosocial research. Inclusion of individuals who are different than the norm is a worthwhile goal in psychosocial research, for without attempting to understand the experiences of those who are different, we as counselors and educators cannot hope to work with these communities. It is the hope of the investigator that our understanding of the issues faced by the LGB community will continue to grow, and that this knowledge will be used by the counseling profession to help and to educate.

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## APPENDIX A

### Experiences in Close Relationships – Revised (ERC-R)

The ERC-R is a self-report measurement designed to assess adult attachment. The first 18 questions comprise the attachment related anxiety scale, while questions 19-36 comprise the attachment related avoidance scale. For true test administration, the questions are usually randomized (as was done in this research). Questions are scored on a 7 point Likert scale where 1 = strongly disagree and 7 = strongly agree. The average for the anxiety and avoidance subscales are then tabulated and used to determine a participant's attachment classification. The follow items are reverse scored: 9, 11, 20, 22, 26, 27, 28, 29, 30, 31, 33, 34, 35, and 36.

1. I'm afraid that I will lose the love of others in my life.
2. I often worry that others will not want to stay with me.
3. I often worry that others don't really love me.
4. I worry that others won't care about me as much as I care about them.
5. I often wish that others feelings for me were as strong as my feelings for them.
6. I worry a lot about my relationships.
7. When others are out of sight, I worry that they might become interested in someone else.
8. When I show my feelings for others, I'm afraid they will not feel the same about me.
9. I rarely worry about others leaving me.
10. Important people in my life make me doubt myself.
11. I do not often worry about being abandoned.
12. I find that others do not want to get as close as I would like.
13. Sometimes others change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once others get to know me, they won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from others.
17. I worry that I won't measure up to other people.
18. Others only seem to notice me when I'm angry.

19. I prefer not to show others how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with others.
21. I find it difficult to allow myself to depend on others.
22. I am very comfortable being close to others.
23. I don't feel comfortable opening up to others.
24. I prefer not to be too close to others.
25. I get uncomfortable when others want to be very close.
26. I find it relatively easy to get close to others.
27. It's not difficult for me to get close to others.
28. I usually discuss my problems and concerns with others.
29. It helps to turn to others in times of need.
30. I tell important others in my life just about everything.
31. I talk things over with others I feel close to.
32. I am nervous when others get too close to me.
33. I feel comfortable depending on others.
34. I find it easy to depend on others.
35. It's easy for me to be affectionate with others.
36. Others I am close with really understand me and my needs.

## APPENDIX B

### Inventory of Parent and Peer Attachment (IPPA)

The IPPA is a self-report instrument used to measure attachment related trust, communication, and alienation to specific attachment figures. There are 25 questions each for mother, father, and close peer(s). All responses are scored on a 5 point Likert scale, where 1 = Almost never or never true and 5 = Almost always or always true. Total attachment and attachment subscale scores for each attachment figure are determined by averaging the total (or subscale) scores, with categorization of high or low levels of trust, communication, and/or alienation based on the participant's average. Parental Trust items are 1, 2, 3, 4, 9, 12, 13, 20, 21, and 22, with items 3 and 9 reverse scored. Parental Communication items are 5, 6, 7, 14, 15, 16, 19, 24, and 25, with items 6 and 14 reverse scored. Parental Alienation items are 8, 10, 11, 17, 18, and 23. Peer Trust items are 5, 6, 8, 12, 13, 14, 15, 19, 20, and 21, with item 5 being reverse scored. Peer Communication items are 1, 2, 3, 7, 16, 17, 24, and 25. Peer Alienation items are 4, 9, 10, 11, 18, 22, and 23.

#### Mother:

1. My mother respects my feelings.
2. I feel my mother does a good job as my mother.
3. I wish I had a different mother.
4. My mother accepts me as I am.
5. I like to get my mother's point of view on things I'm concerned about.
6. I feel it's no use letting my feelings show around my mother.
7. My mother can tell when I'm upset about something.
8. Talking over my problems with my mother makes me feel ashamed or foolish.
9. My mother expects too much from me.

10. I get upset easily around my mother.
11. I get upset a lot more than my mother knows about.
12. When we discuss things, my mother cares about my point of view.
13. My mother trusts my judgment.
14. My mother has her own problems, so I don't bother her with mine.
15. My mother helps me to understand myself better.
16. I tell my mother about my problems and troubles.
17. I feel angry with my mother.
18. I don't get much attention from my mother.
19. My mother helps me to talk about my difficulties.
20. My mother understands me.
21. When I am angry about something, my mother tries to be understanding.
22. I trust my mother.
23. My mother doesn't understand what I'm going through these days.
24. I can count on my mother when I need to get something off my chest.
25. If my mother knows something is bothering me, she asks me about it.

Father:

1. My father respects my feelings.
2. I feel my father does a good job as a father.
3. I wish I had a different father.
4. My father accepts me as I am.
5. I like to get my father's point of view on things I'm concerned about.
6. I feel it's no use letting my feelings show around my father.
7. My father can tell when I'm upset about something.
8. Talking over my problems with my father makes me feel ashamed or foolish.
9. My father expects too much from me.
10. I get upset easily around my father.
11. I get upset a lot more than my father knows about.
12. When we discuss things, my father cares about my point of view.
13. My father trusts my judgment.
14. My father has his own problems, so I don't bother him with mine.
15. My father helps me to understand myself better.
16. I tell my father about my problems and troubles.
17. I feel angry with my father.
18. I don't get much attention from my father.
19. My father helps me to talk about my difficulties.
20. My father understands me.
21. When I am angry about something, my father tries to be understanding.
22. I trust my father.
23. My father doesn't understand what I'm going through these days.
24. I can count on my father when I need to get something off my chest.

25. If my father knows something is bothering me, he asks me about it.

Close Friend(s):

1. I like to get my friends point of view on things I'm concerned about.
2. My friends can tell when I'm upset about something.
3. When we discuss things, my friends care about my point of view.
4. Talking over my problems with my friends makes me feel ashamed or foolish.
5. I wish I had different friends.
6. My friends understand me.
7. My friends encourage me to talk about my difficulties.
8. My friends accept me as I am.
9. I feel the need to be in touch with my friends more often.
10. My friends don't understand what I'm going through these days.
11. I feel alone or apart when I am with my friends.
12. My friends listen to what I have to say.
13. I feel my friends are good friends.
14. My friends are fairly easy to talk to.
15. When I'm angry about something, my friends try to be understanding.
16. My friends help me understand myself better.
17. My friends care about how I am feeling.
18. I feel angry with my friends.
19. I can count on my friends when I need to get something off my chest.
20. I trust my friends.
21. My friends respect my feelings.
22. I get upset a lot more than my friends know about.
23. It seems as if my friends are irritated with me for no reason.
24. I can tell my friends about my problems and troubles.
25. If my friends know something is bothering me, they ask me about it.

## APPENDIX C

### Demographics

Directions: Please complete all questions in this section that apply to you.

1. What is your gender?

female       male

2. Are you transgendered?

yes       no

3. If yes, please identify your current state of transition:

- contemplating transitioning
- currently transitioning
- transitioned
- other (please specify)

4. What is your age? \_\_\_\_\_ years

5. What state do you live in? If not living in the US, please specify your country of residence:

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6. In what type of community do you live?

- City or urban community
- suburban community
- rural community

7. What is your relationship status?

- never married
- in a married/other committed relationship
- separated/divorced
- widowed
- other (please specify)

8. Please describe your race (check all that apply):

- White/Caucasian                       Middle Eastern  
 Black/African American             Indian/Native American  
 Asian/Pacific Islander             Other (please specify)\_\_\_\_\_

9. Are you of Hispanic, Latino, or Spanish origin?

- No, not of Hispanic, Latino, or Spanish origin  
 Yes, of Hispanic, Latino, or Spanish origin

10. What is your approximate monthly income (in dollars)?

\_\_\_\_\_

11. What is the highest level of school you have completed or the highest degree you have received?

- Less than high school degree  
 High school degree or equivalent  
 some college but no degree  
 associates degree  
 bachelor degree  
 masters degree  
 professional degree  
 doctorate

12. How many years of schooling have you completed?

\_\_\_\_\_

13. Do you identify with a specific religious tradition? If so, please identify:

\_\_\_\_\_

14. Please select the sexual orientation that best fits your self-identity:

- straight/heterosexual  
 lesbian or gay/homosexual  
 bisexual  
 other (please specify): \_\_\_\_\_

**IF YOU SELF-IDENTIFY AS STRAIGHT/HETEROSEXUAL, PLEASE  
PROCEED TO SECTION II.**

15. If you identify as any sexual orientation other than straight, is at least one parent or close friend aware of your sexual orientation?

yes             no

16. Is your mother aware of your sexual orientation?

yes             no

17. If your mother is aware of your sexual orientation, how did this occur?

I told her

Someone else told her with my permission

Someone else told her without my permission

18. Is your father aware of your sexual orientation?

yes             no

19. If your father is aware of your sexual orientation, how did this occur?

I told him

Someone else told him with my permission

Someone else told him without my permission

20. Is your best friend(s) aware of your sexual orientation?

yes             no

21. If your best friend(s) is aware of your sexual orientation, how did this occur?

I told him/her

Someone else told him/her with my permission

Someone else told him/her without my permission

22. For every significant family member or friend who is aware of your sexual orientation, please list that person by role (mother, father, friend, etc.) and indicate approximately how long they have been aware of your sexual orientation (example: Mother, 6 months):

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23. To the best of your recollection, approximately how long did you wait prior to disclosing your sexual orientation to the first significant person in your life after you self-identified as gay, lesbian, or bisexual? (Example: 3 weeks)

\_\_\_\_\_ days/weeks/months/years