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Examining Consensual Non-Monogamy among Emerging Adult Samples: A Collection of Studies

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To the Graduate Council:

I am submitting herewith a dissertation written by Kayla Marie Sizemore entitled "Examining Consensual Non-Monogamy among Emerging Adult Samples: A Collection of Studies." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Child and Family Studies.

Spencer B. Olmstead, Major Professor

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**Examining Consensual Non-Monogamy among Emerging Adult Samples:
A Collection of Studies**

**A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville**

**Kayla Marie Sizemore
August 2016**

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ABSTRACT

Using multiple methodologies, this collection of manuscripts examined various components of CNM during the period of emerging adulthood. Manuscript one presents a systematic review and critique of the methodology used in research on CNM attitudes and desire among emerging adults between 1974 and 2016. Several methodological characteristics were reviewed across 18 empirical articles, including sample characteristics, recruitment and sampling strategy, measurement, and overall methodology and focus. Despite general commentary among researchers in this field, this review concludes that CNM research has shown little improvement with regard to its methodological limitations since the 1970's.

The second manuscript contributes to the extant CNM literature by addressing several limitations within the field. Specifically, this paper is among the first to qualitatively measure CNM desire. A mixed-methods approach was used to examine a sample of emerging adults' (ages 18-29; $N = 549$) responses to a question about CNM desire. Results from a qualitative content analysis revealed three distinct groups (*Unwilling*, *Willing*, and *Open-Minded*). Further, several subthemes emerged within each group that helped illuminate *why* emerging adults are (or are not) willing to engage in CNM. Quantitative analyses considered the relationship between group membership, gender, and perceived adulthood status. A greater proportion of women were in the *Unwilling* group, and a greater proportion of men were in the *Willing* group. No group differences were found for comparisons based on perceived adulthood status.

Manuscript three utilized multi-group structural equation modeling to test a conceptual model of CNM desire among emerging adults (ages 18-29; $N = 890$). Based on the theory of emerging adulthood and the extant literature, proposed correlates included experimentation/possibilities during emerging adulthood, sexual identity exploration, and casual sex attitudes. Results indicated that these predictors were all related to willingness to engage in

CNM. Also, the pathway from emerging adult experimentation/possibilities to willingness to engage in CNM was differentially mediated across gender. For women there was a positive indirect pathway from experimentation/possibilities to CNM through sexual identity exploration. However, for men this path was mediated through casual sex attitudes. Together, this collection of manuscripts sought to identify and address important limitations in CNM methodology.

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CHAPTER 1:

Introduction

Emerging adulthood (ages 18-29; Arnett, 2015) is a period in the life course that has garnered growing attention. Identity exploration and commitment were once thought to be hallmarks mid- to late-adolescence, whereas young adulthood was considered a time of settling down (e.g., marrying, having children; Erikson, 1994). Historical changes regarding the availability of contraception have allowed young adults to postpone marriage and childbearing to pursue an extended period of identity exploration, particularly in the areas of romantic relationships, work, and world views (Arnett, 2015). Social movements have also resulted in greater sexual liberation and have increased opportunities for contemporary emerging adults to explore and seek variety in their romantic and sexual relationships before settling into adult roles. Claxton and van Dulmen (2013) suggested that delayed marriage has resulted in greater sexual permissiveness among emerging adults.

Researchers in the field of human development and sexual and romantic relationships (e.g., Claxton & van Dulmen, 2013; Lyons, Manning, Longmore, & Giordano, 2014) have found that individuals in this developmental period engage in various forms of sexual non-monogamy (e.g., dating infidelity, casual sex, hookups, and friends with benefit relationships); however, research has yet to consider the extent to which emerging adults are willing to engage in consensual non-monogamy (CNM). CNM is a type of romantic relationship in which extradyadic sexual and/or romantic encounters are permitted or encouraged to occur. Although CNM researchers have yet to examine this phenomena using a life course theory approach, scholars suggested that CNM may look very different across each stage of the life course (e.g., Conley, Ziegler, Moors, Matsick & Valentine, 2012). Conley and colleagues (2012) also suggested that CNM may be a more accepted relationship style than serial monogamy during the emerging adulthood period.

Given that emerging adulthood is characterized by the pursuit of romantic and sexual variety, in addition to experimentation (Arnett, 2015), facets of CNM among those in this developmental period is worthy of examination. Further, given the prevalence of participation in other non-monogamies, it is surprising that emerging adulthood scholars have yet to examine facets of CNM among those in this developmental period. Finally, it has been posited that the “hookup culture” (Garcia, Reiber, Massey, & Merriwether, 2012) may actually be changing the structure of future relationships, and may lead college age adults to potentially prefer CNM relationships (Woik, 2015).

With rising prevalence rates of this relationship type, scholars have noted that CNM could be at the center of “the next moral and legal debate about sexuality and relationships” (Conley, Moors, Matsick, & Ziegler, 2013, p. 7). It has been estimated that 4-5% of individuals are engaged in CNM relationships (Rubin, Moors, Matsick, Ziegler, & Conley, 2014). More recently, studies have shown that these estimates may be closer to 20% (Hauptert, Gesselman, Moors, Fisher & Garcia, 2016). Engagement in CNM relationships, however, is only one of the three major components of research within this field.

The larger body of research on CNM can be conceptualized as including three central components: behavior, attitudes, and desire. The majority of research in this field has focused on CNM behavior, examining the characteristics of individuals engaged in CNM relationships, and outcomes associated with these relationships. Much less research has examined attitudes toward CNM (CNM attitudes) or willingness to engage in CNM (CNM desire).

CNM desire and attitudes are particularly important constructs to measure among emerging adults, as each of these constructs may be measured among non-participants. Further, CNM desire is theoretically predictive of future engagement in CNM behavior (Strong, 1978).

CNM desire is also positively associated with CNM attitudes (Moors, Conley, Edelstein, & Chopik, 2015). Examining these two constructs may shed light on the growing preference and acceptance of CNM among emerging adults. The study of CNM desire among individuals who have never participated in this relationship type may also help illuminate what pathways lead to future CNM behavior.

Whereas CNM has not been associated with risky sexual behavior among middle-aged adults (Rubel & Bogaert, 2014), we currently lack understanding of the sexual health risks associated with engagement in this relationship type during emerging adulthood. As many studies on sexual health behavior in CNM relationships have focused on middle-aged individuals, research cannot generalize such findings to those in emerging adulthood. Emerging adults may be less educated on concurrent partnerships, and may be generally less responsible in managing multiple relationships. It is unclear whether emerging adults would differentiate their sexual health practices for hook ups and CNM relationships.

Scholars in the field have noted important methodological limitations in research on CNM behavior (Rubel & Bogaert, 2014). One critique is that such research has overrepresented middle-aged identities and underrepresented emerging adults (Rubin et al., 2014). Rubel and Bogaert (2014) conducted a systematic review which provided researchers with important considerations for improving future research on CNM behavior; however, a critique of the methodology used in research on CNM attitudes and desire has yet to be conducted. The first manuscript in this collection contributes to the broader literature by systematically and critically reviewing 18 empirical articles, with the purpose of evaluating the methodological strengths and limitations of research in the field of CNM attitudes and desire. Specifically, this review focused on studies that included emerging adults in their samples.

It is notable that among the three components of CNM (i.e., behavior, attitudes and desires), CNM desire has received the least attention and is also the least understood. Several studies of CNM desire were conducted between 1975 and 1986 (e.g., Billingham & Sack, 1986; Jurich & Jurich, 1975; Strong, 1978; Wise & Strong, 1980). These studies all examined CNM desire in the context of marriage. With the exception of one mixed-methods study (Jurich & Jurich, 1975), these studies used quantitative measures of CNM desire. Recently, Moors and colleagues (2015) developed a scale to measure CNM desire outside the marital context. This measure may be more appropriate for assessing this phenomenon among emerging adults, given that emerging adults are delaying marriage into the late 20s. Conversely, this new measure still does not assess the reasons *why* emerging adults may or may not be willing to engage in CNM. At present no published research was found that qualitatively examined CNM desire outside of a marital context. The second manuscript in this collection addresses this limitation by examining emerging adults' (18-29; $N=549$) responses to an open-ended question about willingness to engage in CNM. Qualitative content analysis was used to consider the extent to which emerging adults are willing or unwilling to engage in CNM, as well as their reasons why they are or are not willing to engage in CNM. This study also used quantitative group comparisons to consider gender differences and differences based on perceived adulthood status.

It is notable that prior research on CNM desire has found evidence of gender differences, with men reporting more willingness to engage in CNM (Moors et al., 2015). Apart from gender, attachment anxiety has been the only other correlate tested for the CNM desire construct (Moors et al., 2015). The third manuscript in this collection proposed and tested a conceptual model of CNM desire using a large sample of emerging adults (18-29; $N=890$). This model proposed that emerging adulthood experimentation, sexual identity exploration, and casual sex attitudes were

positively associated with CNM desire. Because gender has been found as a notable point of variation in CNM desire, this study examined gender as a moderator for all paths in the proposed model.

CHAPTER 2:

A Systematic Review of Research on Consensual Non-Monogamy (CNM) Attitudes and Desire among Emerging Adults: Methodological Issues Considered

Abstract

Research on consensual nonmonogamy (CNM) has gained increased attention over the last decade (Barker & Langdridge, 2010). Scholars have noted that research on CNM behavior has encountered important methodological challenges (Rubel & Bogaret, 2014). Attitudes toward CNM and desire to engage in CNM are two components that have received comparatively less attention. Whereas others have reviewed the methodological limitations of research on CNM behavior (Barker & Langdridge, 2010; Rubel & Bogaret, 2014) a critical examination of the methodological trends in research on CNM attitudes and desire has yet to be conducted. We systematically review and critique the methodology used in CNM research between 1974 and 2016. Specifically, we examined research on CNM attitudes and desire during the developmental period of emerging adulthood. Several methodological trends were found across 18 empirical articles, including sample characteristics, recruitment and sampling strategy, measurement, and overall methodology and focus. Despite general commentary among researchers in this field, this review concludes that CNM research has shown little improvement with regard to addressing limitations in methodological approaches since the 1970s. We conclude with discussion of future research that includes study replication, sampling, and measurement.

Introduction

Mononormativity is a term used to identify the assumed naturalness and normality of monogamy (Finn, 2012). In Westernized cultures such as the U.S., monogamy is synonymous with the dominant discourse about relationships. As such, scholars of relationships and sexuality often reproduce this discourse in their research measures, procedures, and theories (Conley, Ziegler, Moors, Matsick & Valentine, 2012). Also paramount in the literature are dyadic theories about marriage, dating and sexuality (Barash & Lipton, 2009). This hegemony of monogamy in

research prevents scholars from critically examining the costs and assumed benefits of monogamy (Anderson, 2012; Drigotas & Barta, 2001) and creates difficulties when studying relationships structures that serve as alternatives to monogamy.

Over the past decade research on non-monogamous relationship structures has gradually gained a greater presence within the romantic relationship and sexuality literature (Barker & Lagdridge, 2010). One type of relationship that has received increased attention is consensual non-monogamy (CNM), a broad category that encompasses a variety of open relationships (Frank & DeLamater, 2010). Generally, CNM can be defined as a committed relationship in which all partners agree that extradyadic romantic and/or sexual relations may occur. Conservative estimates are that roughly 4-5% of individuals are engaged in CNM relationships (Conley et al., 2012). Recent findings from two nationally representative samples suggested that these estimates may be low, indicating that approximately 20% of individuals report engagement in CNM relationships (Hauptert, Gesselman, Moors, Fisher & Garcia, 2016). Within the CNM literature, researchers have begun delineating the correlates, predictors and outcomes associated with involvement in CNM relationships (Conley et al., 2012; Frank & DeLamater, 2010; Moors, Conley, Edelstein & Chopik, 2015), such as gender and attachment orientation.

Despite the knowledge gained regarding CNM relationships, research on CNM has encountered important methodological challenges (Rubel & Bogaert, 2014). Although most studies discuss these limitations, there appears to be little shift toward addressing these limitations in subsequent research. Despite the general commentary about these methodological challenges, there has yet to be a critical systematic review of the quality of this research. If the study of CNM is to successfully grow as a content area, it is critical for future research to be informed regarding the major methodological trends and limitations in this field. The purpose of

this review is to identify methodological strengths and limitations in the CNM literature, particularly in the areas of attitudes and desire.

The Life Course and Participants in CNM Research

Rubel and Bogaret (2014) noted sampling as one of the most significant issues in CNM research. They reported that many CNM studies had small sizes (e.g., de Visser & McDonald, 2007). They also noted that CNM research utilizes unrepresentative samples due to community based recruitment strategies, which rely heavily on CNM networking sites (Rubel & Bogoret, 2014). CNM networking sites often target White, married, older, and middle class couples, resulting in homogenous samples that limit generalizability of findings.

Another issue with sampling is the overrepresentation of middle-aged identities in CNM research (Rubin, Moors, Matsick, Ziegler & Conley, 2014). The recruitment strategies discussed above have been attributed to this sampling bias. This bias has resulted in a notable underrepresentation of emerging adults in CNM research (Rubin et al., 2014). Emerging adulthood is a period in the life course referring to individuals between the ages of 18-29 (Arnett, 2015). Some studies include emerging adult samples; however, it is rarely the case that these individuals are the focus in the study (for exceptions see Billingham, 2008; Strong, 1978).

A limitation that has yet to be addressed in CNM research is that many studies often use samples in which participants' age ranges from the late teens to middle- or late-adulthood. A cursory review of CNM research indicated that some studies may include an age range of 18-85, and do not control for this wide range (Moors et al., 2015). From a life course perspective, such a range is potentially problematic, as each life course stage presents unique developmental tasks and challenges (Elder, 1998), which may interact with attitudes and desires for involvement in CNM relationships.

CNM during emerging adulthood. It has been argued that CNM looks very different across various life course stages (Conley et al., 2012), thus grouping these participants together without adequate consideration for these age or cohort differences presents an important limitation. Some researchers have suggested that different life stages may actually be more conducive to a CNM lifestyle, specifically the life course stage of young [or emerging] adulthood (Conley et al., 2012).

An increased interest for CNM among emerging adults seems plausible, as emerging adulthood has been conceptualized as a time of experimentation and identity exploration, particularly with regard to romantic relationships (Arnett, 2015). Claxton and van Dulmen (2013) reported findings that suggested generational trends in delaying the age of marriage that have resulted in greater sexual permissiveness among emerging adults. Emerging adults have also been found to endorse and engage in other forms of sexual and relational nonmonogamy, such as hooking up and friends with benefits relationships (Claxton & van Dulmen, 2013; Lyons, Manning, Longmore, & Giordano, 2014). Recent estimates suggested that 54-67% of emerging adults engage in casual sex or hookup relationships (Lyons et al., 2014).

Scholars in the field of CNM have asserted that the hookup culture on college campuses may be changing the structure of future relationships (Woik, 2015). Further, because contemporary emerging adults have more sexual freedom than any other generation (Arnett, 2015), the current cohort may be more likely to endorse or engage in CNM compared to previous generations. By collapsing several cohorts or generations of adults together, one is not able to adequately examine these potential generational shifts related to CNM.

Given these limitations, we focus this review on studies that have included emerging adults in their sample. Although research on CNM has yet to use life course theory as a guiding

lens, we find it particularly useful in examining this phenomenon among emerging adults. Because there is a lack of research focusing exclusively on individuals within this life course stage, any study that included participants between the ages of 18-29 were included (given that the study meets all other inclusionary criteria).

Systematic Methodological Review

The purpose of this review was to provide a systematic and critical discussion of the methodologies used in CNM research with emerging adult samples between 1970 and 2016. The year 1970 was chosen because, to our knowledge, the first CNM study was published this year (Smith & Smith, 1970). Our review represents the first comprehensive assessment of the strengths and limitations of existing CNM research from a methodological standpoint. Through the critique and identification of methodological limitations in the field, we provide CNM scholars with clear directions and guidelines for improving future research in this area.

A systematic methodological review should aim to evaluate research methodology used for an existing body of research (Petticrew & Roberts, 2008). These reviews can be differentiated from traditional literature reviews, as their primary focus is on procedures, sampling, and measures rather than the content of research findings. Blow and Hartnett (2005) asserted that methodological reviews are particularly effective in identifying areas of methodological limitations for a specific body of research. Dickerson (2002) also noted that this particular type of review is useful in identifying directions for future research. Our approach follows Baumeister and O’Leary’s (1997) description of a literature review characterized by “problem identification” (p. 312). Consistent with this notion, this review is primarily focused on raising questions for further research.

Although efforts to grow this body of research are increasing, the field of CNM is

relatively young. An abundance of literature and methodological reviews detailing decades of research dedicated to understanding other non-monogamies exists. For example, such reviews have been conducted for studies on infidelity (Blow, & Hartnett, 2005; Luo, Cartun, & Snider, 2010) and casual sex relationships (Garcia, Reiber, Massey, & Merriwether, 2012). For CNM, only two reviews have been published (Barker & Langdridge, 2010; Rubel & Bogaret, 2014).

Previous CNM reviews. In their review, Barker and Langdridge (2010) focused on the content of prior CNM research; however, they do not discuss methodological issues in their review. Their specific focus was to categorize prior research studies into celebratory or critical perspectives. Rubel and Bogaret (2014) directed minimal attention to methodology in their review, and instead focused on research findings. Specifically, they reviewed psychosocial wellbeing and relationship quality as correlates and outcomes associated with CNM relationships. Because their review focused on these specific outcomes, several key studies from the larger body of CNM literature were excluded from their review. The majority of articles in their review were quantitative (Rubel & Bogaret, 2014). Thus, their brief discussion of methodological concerns may not be representative of the limitations present in the larger body of CNM research. With this caveat, the three methodological challenges that Rubel and Bogaret (2014) identified included sampling, lack of random assignment, and measurement issues.

Conceptualizing and defining CNM. In this review we also attended to the ways in which CNM is conceptualized and defined across studies. Although Rubel and Bogaret's (2014) review has been instrumental in providing some insight regarding the methodological limitations associated with research on CNM behavior, little is known regarding the methodological trends and limitations for studies examining other components of CNM. Moors and colleagues (2015) outlined three components of CNM: (a) behavior, (b) attitudes and (c) desire and operationalized

these components by measuring *actual engagement in CNM* (behavior), *attitudes toward CNM* (attitudes) and *willingness to engage in CNM* (desire). In conceptualizing CNM as consisting of these three unique components, we are better equipped to consider the current state of this larger body of literature.

Whereas the majority of research in this field has attempted to delineate both predictors and outcomes associated with CNM behavior (Rubel & Bogaret, 2014), much less has examined the other two components (i.e., attitudes and desire). A more recent, and smaller, subset of this literature focused on nonparticipant's attitudes and perceptions of others engaged in CNM, validating the issue of stigma within the CNM community (Conley, Moors, Matsick, & Ziegler, 2013; Moors et al., 2015). The third component, CNM desire, has received comparatively much less attention (Moors et al., 2015; Moors, Rubin, Matsick, Ziegler, & Conley, 2014) than the behavioral and attitudinal components.

Attitudes about and willingness to engage in CNM are particularly important constructs to consider, as they both have the benefit of being measured among non-participants (meaning individuals who have never engaged in CNM). Moors, Matsick, Ziegler, Rubin, and Conley (2013) asserted that CNM attitudes was worthy of additional research, as they found a high prevalence of stigma towards individuals in CNM relationships. Specifically, Moors and colleagues (2013) reported that individuals engaged in CNM relationships were perceived as less satisfied with their relationships, at a greater risk for sexually transmitted infections, and lonelier than monogamous individuals. They also reported that study participants believe CNM is generally less acceptable than monogamy. Negative attitudes toward CNM has been found to related to gender (Moors et al., 2015), conservative political views and religiosity (Hutzler, Giuliano, Herselman, & Johnson, 2015). CNM desire is also related to CNM attitudes (Hutzler et

al., 2015; Moor et al., 2015). Gender and attachment anxiety have also been found to be associated with CNM desire (Moors et al., 2015). Further, CNM desire is theoretically predictive of future CNM behavior (Strong, 1978).

Researching these phenomena among emerging adults is particularly relevant to social policy and research, as it may shed light on the increasing acceptance of CNM among this generation of emerging adults. The study of these phenomena may also assess the growing preference for CNM as a relationship type among contemporary emerging adults. Finally, such research is valuable in informing how this potential social movement will progress. We note that in Rubel and Bogaret's (2014) and Barker and Langdridge's (2010) reviews, only CNM behavior was addressed. No reviews were found that examined CNM across the other two components, attitudes and desire. Further, no review has critically considered the methodology used in these studies.

Contributions to the Field

In this paper we review relevant research on emerging adults across two domains of CNM: attitudes and desire. We focused specifically on the methodological strengths and limitations of CNM research. This review contributes to the broader CNM literature in two ways.

First, to date there has not been a review that has systematically or critically examined methodological trends in research on CNM attitudes or desire. Because it was suggested that researchers often reproduce the hegemony of monogamy in their methods (Conley et al., 2012) and theories (Barash & Lipton, 2009; Conley et al., 2012), it is essential to examine these topics critically. The current paper addresses the need for a systematic review of CNM methodology, consistent with suggestions made by CNM scholars. Additionally, the current paper outlines specific areas of research that are lacking for each component and makes suggestions for

enhancing future research in these areas. Second, little research has examined CNM attitudes and desire among emerging adults. Critically examining the current state of research on CNM among emerging adults is important in guiding future researchers. In particular, it is important to examine the number of studies that focused exclusively on emerging adults and to identify how often researchers collapse participant data across life course stages. In doing so we aimed to identify methodological trends in the existing literature and illuminate specific directions for future research.

Methods

Study Selection Procedures

A systematic approach was used to identify studies using original data on CNM desire, and/or attitudes. This review included academic, peer-reviewed articles from the following databases: PsycINFO and PsycARTICLES, between 1970 to 2016. The year 1970 was chosen because it is the year the first study on CNM was published (Smith & Smith, 1970). To perform a comprehensive search on CNM, we first considered the types of relationships the umbrella term of CNM captures. Frank and DeLamater (2010) reported that CNM is a broad category that encompasses swingers, polyamorous and other wise open relationships. To be sure this review inclusively examined all types of CNM, a variety of search terms were used. Specifically, the following search terms were used to define consensual non-monogamy and search for published studies: “CNM,” “consensual non-monogamy,” “alternative marital and family forms,” “co-marital sex,” “extra-dyadic sex,” “variant life styles,” “open relationship,” “open marriage,” “swinging,” “swingers,” and “polyamory.” Searches were performed in the titles, abstracts, subjects, and as keywords or subject-word headings of all articles in these databases. Reference lists from the articles identified through this search were then reviewed for inclusion of

additional articles.

Study Exclusion Criteria

After identifying the total, maximum number of manuscripts identified in the electronic search, we narrowed the list to be reviewed. We did not consider review papers, commentaries, meta-analyses, and news reports. Also, as previously discussed, studies that did not include participants between the ages of 18-29 were also excluded from this review. This initial search resulted in 55 empirical articles that examined CNM among emerging adults.

Several studies examined CNM exclusively using samples of participants who identified as sexual minorities, particularly gay men. Scholars in this field have concluded that CNM may be a qualitatively different phenomenon for heterosexuals than for sexual minorities (Moors, Rubin, Matsick, Ziegler & Conley, 2014). Thus, our review included studies with samples that also included heterosexual participants. As such, if a study did not include heterosexual participants it was excluded from our review. These exclusionary criteria resulted in 13 articles be removed from the review, which narrowed our list to 42 articles. Because the topic of interest for this review was methodology in the field of CNM attitudes and desire, we also excluded studies that only focused on CNM behavior. After removing an additional 24 articles that focused solely on CNM behavior, we arrived at a total of 18 empirical articles for our systematic methodological review.

Results

Overall, 18 empirical articles between 1974 and 2016 met our selection criteria and were included in our review. Within these 18 empirical articles, 25 studies were presented and discussed: 12 studies examined CNM attitudes, 9 examined CNM desire, and 4 examined both CNM attitudes and desire. Descriptive information for these studies is summarized in Table 1.

Our methodological review was organized in the following order: (a) sample characteristics, (b) recruitment and sampling technique, (c) measures, and (d) overall methodology and focus.

Sample Characteristics

Rubel and Bogaert (2014) noted in their review that research on CNM behavior often used small samples. We found that many studies on CNM attitudes and desire did not suffer this limitation. The sample sizes across the 25 studies we reviewed ranged from 100 to 2,395. The average sample size across these studies was 433 ($SD = 516.39$). The participants described across these studies were predominantly White, and samples tended to be comprised of more women than men. Four studies had samples that included a majority of male participants (Hutzler et al., 2015; Johnson, Giuliano, Herselman, & Hutzler, 2015; Strong, 1978; Wise, & Strong, 1980). Four additional studies exclusively examined these phenomena in women only (Billingham & Sack, 1986; Billingham, Perera & Ehlers, 2005; Billingham, 2008). We also note that although most samples had a majority of female participants, there were several studies in which samples had a nearly even split among men and women. Specifically, seven studies had samples that fell within a 45-55% range for men and women (Hutzler et al., 2015; Johnson et al., 2015; Matsick et al., 2014; Jurich & Jurich, 1975; Spanier & Cole, 1975; Strong, 1978; Wise & Strong, 1980). Among the studies that presented information on sexual orientation, the large majority of participants were heterosexual (Grunt-Mejer & Campbell, 2016; Matsick et al., 2014; Rubin et al., 2014). Only two studies exclusively examined heterosexual participants (Billingham & Sack, 2005; Moors et al., 2015)

Regarding age, this review focused on studies that included participants within the developmental period of emerging adulthood (ages 18-29). Although all of the studies reviewed included participants in the period of emerging adulthood, few focused exclusively on emerging

adults. It was not clear how many studies exclusively examined individuals within this age range, as many did not report a mean or range for age (e.g., Billingham & Sack, 1986; Jurich & Jurich, 1975; Wise & Strong, 1980); however, 11 of the 25 studies indicated that participants were college students, so we inferred that many of these studies had participants within the age range of 18-29. Specifically, 10 studies did not report information on age, but all of these studies indicated that participants were college students. Six of these studies were published in the 1970s and 1980s.

When the mean or range of participants' age was reported, it was more common that emerging adults were examined among individuals in other periods of the life course. In six studies (e.g., Conley et al., 2013; Hutzler et al., 2015; Johnson et al., 2015), participants' mean age was beyond the period considered to be emerging adulthood; however, the standard deviation was large enough to make the inference that the age range of the sample included individuals between ages 18-29. One notable methodological limitation was related to the age range reported across studies. First, 16 studies did not report participants' age range. Six studies reported a mean and standard deviation in place of the range (e.g., Conley et al., 2013; Grunt-Mejer & Campbell, 2016; Matsick et al., 2014), five of which had a standard deviation between 10.5 and 13.8 (e.g., Conley et al., 2013; Matsick et al., 2014). Although the range cannot be computed with this information, we inferred that a sample with a mean age of 34 years and a standard deviation of 13.8 (e.g., Conley et al., 2013) had an age range from at least 20-47 years. We also inferred that the true range was larger. We found that nine studies in our review provided an age range for their sample (Hutzler et al., 2015; Johnson et al., 2015; Moors et al., 2015; Rubin et al., 2014; Spanier & Coler, 1975). Among these studies, the largest age range reported was 17-93 years (Spanier & Coler, 1975). With the exception of one study, which had

an age range of 18-31 years ($M = 20.2$, $SD = 1.77$; Johnson et al., 2015), the other eight studies had an age range of 18-63, although most were greater. We note that these studies also had large standard deviations, ranging from 7.24 to 15.00.

Recruitment & Sampling

Regarding participant recruitment and sampling, the studies reviewed drew upon a variety of strategies. Rubel and Bogaert (2014) reported in their review of CNM behavior that most studies used community based recruitment strategies that targeted CNM specific networking sites, in addition to snowball sampling. This sampling strategy has been criticized as it leads to selection bias and often a homogenous sample of white, middle class, and middle-age participants (Rubin et al., 2014). Our review of the recruitment and sampling in research on CNM attitudes and desire revealed that the most frequently reported strategy was an internet-based recruitment strategy used to obtain convenience samples via social networking and online advertising sites (e.g., Conley et al., 2013; Hutzler et al., 2015; Johnson et al., 2015; Matsick et al., 2014; Moors et al., 2015; Rubin et al., 2014). Specifically, eight studies reported recruitment strategies that used Facebook.com and the volunteer sections of Craigslist.com. Additionally, four studies reported that they used Amazon Mechanical Turk (MTurk) to recruit participants. It appears that this recruitment technique has been effective in reducing the homogeneity of samples, at least with regard to age. This is a positive attribute, considering that much of the research on CNM behavior has focused on middle age individuals. However, we have also noted significant methodological issues related to samples with a large range in age.

The second most frequently reported sampling methodology was convenience sampling that used the classroom setting to advertise and recruit university students (e.g., Burris, 2014; Billingham, 2008; Billingham, Perera & Ehlers, 2005; Billingham & Sack, 1986). Five studies

discussed this recruitment strategy. Using university classrooms may be a particularly optimal recruitment strategy for individuals interested in studying these phenomena among college attending emerging adults. While there are notable limitations regarding the generalizability of findings using convenience samples, compared to samples obtained via internet based recruitment, studies that recruit from classroom settings may have some advantages (discussed later in the review).

Among the most ideal sampling and recruitment strategies are those that result in a random sample, which has the benefit of being more generalizable to a given population. Two articles were found that used random sampling. Jurich and Jurich (1975) randomly selected participants from telephone directories and also recruited participants via telephone calls. Rao and Rao (1980) randomly selected participants from a university directory and invited participants to join their study. Another technique employed used a proportionate stratified random sampling technique. This is particularly useful for ensuring that the proportion of participants with any given demographic characteristic is the same in the sample as it is in the population. In this study, Strong (1978) randomly selected university students who were either delivered or mailed survey materials. Spanier and Cole (1978) also reported a stratified area probability sample. We note that these two studies were also among those that had a relatively even proportion of men and women in their samples.

Four articles (Edward & Stinnett, 1974; Grunt-Mejer & Campbell, 2016; Stinnett & Taylor, 1976; Wise & Strong, 1980) did not report a recruitment or sampling strategy. However, these articles did report that their participants were college students. We inferred that these studies also used convenience samples, possibly recruited from university classrooms.

Measuring CNM Attitudes and Desire

The studies in this review most frequently used quantitative methods to measure CNM attitudes and desire. Among these methods were experimental manipulations, scales, and Q-sort tasks. Qualitative methods were infrequently used to measure these constructs.

CNM attitudes. Rubel and Bogaert (2014) noted that an important limitation for research on CNM behavior was lack of random assignment; we found a few studies on CNM attitudes that used random assignment. To measure CNM attitudes, the most common method was a procedure that involved the experimental manipulation of relationship vignettes. Specifically, participants were randomly assigned to read a passage describing a relationship (monogamy or CNM) and were then asked to rate the individuals in that relationship on a variety of positive and negative character traits using a Likert-type scale (e.g., Conley et al., 2013). Four studies used this measure; however, the traits that participants rated varied across these articles. Others later adapted this approach to assess CNM attitudes. Matsick and colleagues (2014) randomly assigned participants to read a definition describing a particular type of CNM (i.e., polyamory or swinging), and then asked to rate the individuals in that relationship on various character traits. Another adapted version of this measure involved a perspective taking manipulation and scenario. Specifically, Burris (2014) instructed participants to “put yourself in [character’s] place and experience the situation from [his/her] perspective” (p. 261). Scenarios included characters pursuing polyamory and an affair. Similar to the measures discussed above, participants were then asked to rate the vignette character on a variety of positive and negative traits. Hutzler and colleagues (2015) also cited the traits rated in Conley and colleagues (2013) study. However, in their study traits were modified to be specific to polyamorous individuals (Hutzler et al., 2015).

Attitudes toward CNM was also measured with several scales. The first known scale developed was the Alternative Life Styles Perceptions Scale (ALPS; Edwards & Stinnett; 1974). This scale used 35 items to measure the perception of seven alternatives to traditional monogamy, three of which described CNM relationships. This scale was also used in a study by Stinnett and Taylor (1976). More recently, Moors and colleagues (2014) developed a six-item scale to measure CNM attitudes. The psychometric properties of these two scales have not been published. Johnson, Giuliano, Herselman and Hutzler (2015) published a study that evaluated the reliability, validity, and psychometric properties of a measure of CNM attitudes. We note that the Attitudes Towards Polyamory Scale (ATP; Johnson et al., 2015) is the only measure of CNM attitudes that has published data on its validity and psychometric properties. This scale includes seven items and measures attitudes toward polyamory, which we note is only one type of CNM relationship. One additional study has used the ATP scale (Hutzler et al., 2015).

One study included questionnaire items (rather than scales) to inquire about attitudes toward CNM. Specifically, Spanier and Cole (1975) included survey questions about participants' attitudes toward mate swapping. In a few mixed-methods studies that examined CNM attitudes, participants were sometimes asked to define different types of CNM in an open-ended format (e.g., Grunt-Mejer & Campbell, 2016 Hutzler et al., 2015). However, this was a qualitative measure of CNM knowledge, not CNM attitudes. As such, no qualitative measures were found that examined CNM attitudes.

CNM desire. With regard to methods used to measure CNM desire, these were also most frequently quantitative in nature. Jurich and Jurich (1975) asked 128 participants to complete a Q-sort task wherein they ranked 10 alternatives to traditional monogamy. Specifically, participants were asked to rank the 10 cards in the order that would provide them with the

opportunity for “maximum growth,” then they ranked the cards in the order that they thought was most “feasible.” Following each of these tasks, participants were asked why they ranked the cards in that particular order and their responses were recorded qualitatively. This mixed-method study is the only published study to date that has utilized qualitative methods for examining CNM desire.

Later studies deviated from the Q-sort methodology to measure CNM desire. Rather than ranking alternatives to monogamy, Strong (1978) revised this method so that participants rated each alternative to monogamy independently on a Likert-type scale. In this study, participants rated 12 alternatives to monogamy. Strong claimed that the language of “maximum growth” and “feasibility” used for other measures was vague and ambiguous. This revised methodology asked participants about their “willingness to participate in alternative marital and family forms” using a 6-point Likert-type scale. Responses ranged from (1) *very willing to participate* to (6) *very unwilling to participate*. Strong (1978) suggested that this revised language was indicative of a greater level of behavioral commitment.

In subsequent years, six additional studies (Billingham, 2008; Billingham, Perera, & Ehlers, 2005; Billingham & Sack, 1986; Rao & Rao, 1980; Wise & Strong, 1980) adopted the methodology suggested by Strong (1978). Of the studies we reviewed, this was the most common measure of CNM desire. Although some studies expanded the number of “alternative marital and family forms” to be rated, these studies all examined willingness to participate in CNM within the context of a marital relationship.

Moors and colleagues (2015) recently developed a similar measure; however, they did not specify a marital context in their assessment of CNM desire. They asked participants to rate their “willingness to engage” in various scenarios characteristic of different CNM relationships

using a Likert-type scale. A few additional studies have included questions in their surveys to ask participants about their personal interest in specific types of CNM. For example, Spanier and Cole (1975) included questions about interest in mate swapping. Hutzler and colleagues (2015) also had participants respond to Likert-type scale items about their personal interest in polyamory. We note that although Moors and colleagues (2015) reported adequate inter-item reliability for their scale, none of the CNM desire measures reviewed have published data on their psychometric properties (e.g., convergent validity, discriminant validity).

Overall Method and Focus

With regard to overall methodology, all of the papers reviewed here were either mixed-methods or quantitative in their approaches to CNM attitudes and/or desire. The majority of articles were quantitative ($N = 14$), although there were a few that employed both qualitative and quantitative methods ($N = 4$). Of those that were quantitative, five articles focused only on CNM attitudes, seven focused only on CNM desire, and two focused on both. Of the studies that used a mixed-methods design, two articles focused solely on CNM attitudes, one article focused on CNM desire, and one article focused on both. All studies in this review examined these constructs using cross-sectional designs. We did not find evidence of research on CNM attitudes or desire that examined the same sample of participants longitudinally.

Discussion

The majority of the research within the field of CNM has focused on behavior, and two reviews have been published on this CNM component (Barker & Langdridge, 2010; Rubel & Bogaret, 2014). Much less is known about CNM attitudes, and even less is known about CNM desire. Although research in the field of CNM has increased over the past few decades, little focus has been dedicated to individuals in the period of emerging adulthood. Some scholars have

called for a need to examine CNM at different stages in the life course (Conley et al., 2012). To address the aforementioned limitations, the purpose of this review was to examine the methodological approaches to CNM research involving emerging adults. Further, because other reviews have already been conducted on CNM behavior, we focused our review on studies that have examined CNM attitudes and desire.

Recommendations for Future Research

Our review of this literature noted several methodological limitations within the field. Although recruitment and sampling strategies varied across studies, we found that convenience samples were the most common approach to sampling. Among these, the most frequent form of recruitment was internet-based. Some studies also recruited convenience samples through university courses. Only four studies in our review reported the use of another sampling strategy. These four studies that used random sampling and stratified probability sampling were all published in the 1970s and 1980s. Future research should use more sophisticated recruitment and sampling strategies, as there are notable limitations to internet-based recruitment and convenience sampling strategies. For example, internet-based recruitment and online surveys run the risk of repeated participation and multiple submissions, which may be particularly true for online surveys that offer monetary reimbursement (Birnbaum, 2004). Additionally, Birnbaum (2004) notes that internet surveys have also been found to have higher dropout rates than surveys conducted in the presence of another person (e.g., research staff). It has been noted that samples obtained via internet recruitment can almost never be guaranteed as representative of any given population, which is particularly true when participants self-select into a study (Birnbaum, 2004; Stanton, 1998). We note that in the studies reviewed, internet-based recruitment strategies have

been effective in recruiting relatively large convenience samples (Conley et al., 2013; Moors et al., 2015; Rubin et al., 2014).

We also found that the participants across these studies were largely homogenous in terms of demographic characteristics. Similar to research on CNM behavior, participants in these studies were also predominantly White and heterosexual. With regard to sexual orientation, there is a niche of research on CNM that examines sexual minorities exclusively, as was the case with the 13 articles we excluded from our review. However, it seems that when heterosexual participants are included in a sample with those who identify as sexual minorities the balance is highly disproportionate. That is, most studies are at least 90% heterosexual. Future research should make a more concerted effort to include more racial/ethnic and sexual minorities in their research. Doing so may call for different recruitment and sampling strategies. For example, stratified random disproportionate probability sampling would enable researchers to over sample racial and sexual minorities, which would allow more power for group comparisons.

Based on the findings of our systematic review, we recommend that future researchers use multi-group confirmatory factor analysis to examine measurement invariance across sexual orientation, race, and gender. That is, future studies should consider the extent to which current measures operate the same or measure the same construct across individuals who identify with these various demographic characteristics. It is particularly important to examine CNM desire across sexual orientation using these methods, as it has been conceptualized as a potentially different construct for heterosexuals and sexual minorities (Moors et al., 2014). As future studies begin testing correlates and developing conceptual models, multi-group structural equation models may be a useful tool to assess how the relationships among proposed constructs differ as a function of race, sexual orientation and gender. We also note that there is evidence for gender

differences in CNM attitudes and desire, with men being more likely to endorse both, compared to women (Moors et al., 2015). Thus, we recommend that gender also be considered as a moderating variable when testing such models.

Recruiting larger samples is also recommended, as it would allow researchers to perform more advanced analyses. Although the average sample size across the 25 studies reviewed was 433, this mean was skewed by a few studies that had unusually large samples (e.g., $N = 1,101$, Conley et al., 2013; $N = 1,281$, Moors et al., 2015; $N = 2,395$, Rubin et al., 2014). Nearly half of the studies reviewed had fewer than 250 participants, and although this is not necessarily a small sample size, it is not large enough to have power to conduct more advanced statistical analyses (e.g., tests of factorial invariance, structural equation models, or growth curve models).

Another limitation we noted was that many of the studies reviewed used samples in which participants' ages spanned across several different stages in the life course, and the majority did not control for age or cohort effects. We found that only one study controlled for age (Rubin et al., 2014). This may be problematic in CNM research, as others have posited that CNM may be more conducive at certain life stages (e.g., emerging adulthood; Conley et al., 2012). It would be beneficial for future research to be more cognizant to control for age or to examine emerging adults as a separate population. We note that the limitation is not in collecting data among individuals across the life course, but rather it is the lack of attention to potential age and cohort effects. Given that many researchers have already collected data on CNM attitudes and desire using samples that span various stages in the life course, we recommend that researchers utilize existing data to examine how CNM varies across different life stages.

A variety of measurement of constructs were also found across studies in this review. For example, several studies cited a revised version of Conley and colleagues' (2013) experimental

manipulation of the relationship vignettes measure, wherein participants later rated the characters on relationship relevant or arbitrary traits. If CNM is to successfully grow as a content area, full replication studies are needed. Across studies, authors cite each other's methodology, revising it for their own study purposes. The inconsistency in the CNM methods is a notable limitation, as no study has fully replicated previous studies. Moving forward, authors should consider full replications to further validate previous study findings.

With regard to the various scales developed to measure CNM attitudes and desire, there is also much work to be done. Only one scale has published data on its reliability, validity, and psychometric properties (ATP; Johnson et al., 2015). We note that this scale measures attitudes toward polyamory, which is only one type of CNM relationship. Scholars should consider more critical evaluations of the other available scales. Published research on convergent and divergent validity are needed, as well as testing the factorial invariance of these measures across different sub-populations. Again, examining whether these scales are measuring the same construct across gender, sexual orientation, age cohorts, and racial groups is a necessary step in advancing the field and ensuring that validated measures are being used.

In our review of the overall methodology and focus, no studies were found that solely used qualitative methods and only four papers used mixed-methods. Future research should consider incorporating qualitative methodologies into the study of CNM attitudes and desire. This is a particularly important consideration for studying this phenomenon among emerging adults, as little is known about CNM attitudes and desire during this developmental period. Finally, we note that 44.4% of the papers reviewed were published between 1974 and 1986. That nearly half of the studies found on CNM attitudes and desire in emerging adulthood were published over three decades ago is indicative of a much needed focus on this population.

Further, many of these earlier studies used college students as their primary source of participants, whereas current scholars have been less likely to recruit from university settings. Researchers interested in college attending emerging adults should consider exploring CNM attitudes and desire among this population, as only a few current scholars have done so.

Limitations

The current review should be consider in light of several limitations. We note that this review excluded studies that focus exclusively on sexual minorities. A critical review of the methodology used in research that consists exclusively of sexual minorities is also needed. We also note that our review did not include CNM behavior. While others have attended to some of the methodological limitations in this body of research (Rubel & Bogaert, 2014), a more systematic and critical examination of the methodologies used in research on CNM behavior is warranted. Finally, we acknowledge that our review focused on individuals in the stage of emerging adulthood. We recognize that this resulted in the exclusion of many studies relating to CNM attitudes and desire. As such, we discourage readers from generalizing our findings from this review to the larger field of research on CNM attitudes and desire.

This paper represents the first critical review of the methodological approaches to research on CNM attitudes and desire. Taken together, this review adds to the current body of CNM literature by bringing to light the methodological strengths and limitations within this field. We also contribute to the broader literature by outlining several avenues for future research. Overall, we conclude that there exists a lack of consensus within the field regarding how best to measure CNM attitudes and desire. We also found that overlap of methodology was rare across these various studies. We recommend that future CNM researchers conduct studies to validate existing measures and attempt to fully replicate existing finding.

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CHAPTER 3:

Emerging Adults' Willingness to Engage in Consensual Non-Monogamy:

A Mixed-Methods Analysis

Abstract

Over the past decade, research on consensual non-monogamy (CNM) as a relationship type has increased. However, willingness to engage in CNM is an understudied phenomenon within this field. At present, the Willingness to Engage in CNM Scale (Moors, Conley, Edelstein, & Chopik, 2015) is the only known measure for assessing this construct among individuals who have not engaged in CNM outside the context of marriage. Research has yet to consider examining this phenomenon using qualitative methods. As such, little is known about *why* individuals may or may not be willing to engage in CNM. Further, research on CNM more broadly, and with respect to this phenomenon specifically, has devoted little attention to those in the period of emerging adulthood. The current study used a mixed-methods approach to examine a large sample of emerging adults' (ages 18-29; $N = 549$) responses to a question about their willingness to engage in CNM. Results from a qualitative content analysis revealed three distinct groups that emerged from the data (*Unwilling*, *Willing*, and *Open-Minded*), and several subthemes emerged within each group that help explain *why* emerging adults are (or are not) willing to engage in CNM. Quantitative analyses considered the relationship between group membership, gender, and perceived adulthood status. A greater proportion of women than men were in the *Unwilling* group and a greater proportion of men than women were in the *Willing* group. No group differences were found for comparisons based on perceived adulthood status. Implications for CNM research and methodology are discussed.

Introduction

The study of consensual non-monogamy (CNM) has experienced tremendous growth over the last decade, promoting awareness about this alternative relationship structure. CNM is a committed relationship wherein partners consent to extradyadic romantic or sexual encounters

while remaining committed to the primary relationship (Conley, Ziegler, Moors, Matsick, & Valentine, 2013). Recent estimates are that 4-5% of individuals engage in CNM relationships (Conley, Moors, Matsick & Ziegler, 2013; Rubin, Moors, Matsick, Ziegler, & Conley, 2014).

Prevalence estimates regarding engagement in CNM are likely underreported. One important methodological limitation noted by scholars is that much of the CNM research has relied on community based recruitment strategies (Conley, Ziegler, et al., 2013). Specifically, many studies have recruited participants from CNM networking sites, which typically target married, middle-aged individuals (Rubin, et al., 2014). Conley, Ziegler, and colleagues (2013) discussed the over-representation of middle age identities in CNM research, and further proposed that CNM may be an attractive relationship structure for young adults. Despite this suggestion, little research has examined CNM using young adult samples.

Moors, Conley, Edelstein and Chopik (2015) identified three distinct components of CNM relationships. These included CNM desires, attitudes, and behavior. These three components are operationalized by measuring willingness to engage in CNM (i.e., desire), attitudes toward CNM (i.e., attitudes) and actual engagement in CNM (i.e., behaviors). Compared to CNM attitudes and behaviors, CNM desires (willingness) has received the least attention (Moors et al., 2015; Moors, Rubin, Matsick, Ziegler, & Conley, 2014). The purpose of this study was to address these limitations in the literature by examining college attending emerging adults' willingness to engage in CNM.

A Life Course Perspective of CNM

One theoretical lens that may prove useful when considering whether CNM is an attractive relationship style for young adults is life course theory (Elder, 1998), specifically examining the period of emerging adulthood. Emerging adulthood is a developmental period that

refers to individuals between the ages of 18 and 29 and is thought to be a time of uncertainty, instability, experimentation, and possibilities (Arnett, 2015). From a developmental standpoint, emerging adulthood is also characterized by identity experimentation, and contemporary youth have more sexual freedom than other generations (Arnett, 2015). CNM may represent a venue for sexual exploration for some emerging adults as they explore and compare various relationship formations (Conely, Ziegler, et al., 2013).

A comprehensive review of the literature indicated that scholars have yet to examine this relationship modality drawing upon a life course perspective. A key concept in life course theory is historical time and place (Elder, 1996). Historical time and place refers to the notion that individuals' lives are shaped by changes in society and history. Societal changes that have shaped this cohort of emerging adults includes increased pursuit of higher education, increased access to birth control, and postponement of marriage and child bearing (Lyons, Manning, Longmore, & Giordano, 2014). Shulman and Connolly (2013) asserted that emerging adults today are delaying marriage to accomplish developmental tasks such as educational and career related goals. Further, emerging adults experience greater economic insecurity and are more likely to prefer short-term sexual and romantic encounters until they feel they are able to financially support themselves (Shulman & Connolly, 2013). Claxton and van Dulmen (2013) posited that this change in marital timing has in turn resulted in greater sexual permissiveness, which is also likely a result of greater sexual freedom compared to earlier generations. Using a life course lens, this study considered how perceived adulthood status was associated with emerging adults' willingness to engage in CNM.

In the absence of research examining CNM in emerging adulthood, we rely on research that has examined other forms of non-monogamy during this developmental period. For

example, a great deal of research has been dedicated to examining casual sex and romantic relationships during this period (e.g., Claxton & van Dulmen, 2013; Lyons et al., 2014; Shulman & Connolly, 2013). Studies show that casual sex is common in emerging adulthood, particularly among college attending emerging adults (Owen, Rhoades, Stanley, & Fincham, 2010). Many have been found to engage in casual sex because they feel they are too young to be committed to one partner (Lyons et al., 2014). It is estimated that between 54% and 67% of emerging adults have engaged in casual sex (Lyons et al., 2014). Emerging adult scholars have posited that the “hookup culture” may be changing the structure of romantic relationships for this generation of emerging adults, resulting in increased preference for relationships that allow concurrent romantic/sexual partners (Woik, 2015). Given the prevalence of sexual non-monogamy among emerging adults, it is possible that many may be willing to engage in consensually non-monogamous relationships. Further, given that this period is characterized by the pursuit of romantic and sexual variety before settling into adult roles (Arnett, 2015), it is conceivable that emerging adults may find CNM to be a conducive lifestyle for this period in their lives. Based on developmental theory on emerging adulthood and research on the prevalence of casual sex behavior, we expected that those who did not view themselves as having achieved adulthood would be more willing to engage in CNM (Hypothesis 1).

Willingness to Engage in CNM and Gender

Recent research suggested that there may also be gender differences in CNM desire. Specifically, men have been found to be more willing to engage in CNM (Moors et al., 2015) as well as other forms of non-monogamy (e.g., casual sex, infidelity; Lyons et al., 2014; Seal, Agostinelli, & Hannett, 1994) compared to women. Emerging adult men, more so than women, also report feeling too young to be tied down (Lyons et al., 2014) and a greater willingness to

engage in various marital arrangements characterized by CNM (Jurich & Jurich, 1975; Strong, 1978). Further, when men were asked why they desired CNM, most reported that CNM afforded them greater room for “maximum growth” as an individual; however, the women in this study reported a desire for the security offered by traditional monogamy (Jurich & Jurich, 1975). Thus, the current study also examined gender differences in emerging adults’ willingness to engage in CNM. Specifically, we expected that men, compared to women, would report being more willing to engage in CNM (Hypothesis 2).

Reconsidering Quantitative Methodology in CNM Research

A key methodological issue to consider, based on previous studies, is that CNM has typically been examined using quantitative methods. In Westernized cultures the dominant discourse of society is one that assumes monogamy is the normative way of partnering (Pieper & Bauer, 2005). A potential concern regarding quantitative studies dominating the field is that many researchers inherently reproduce this discourse in their measures, procedures, and theories (Conley, Ziegler, et al., 2013). As such, it is important to draw upon other methodologies (e.g., qualitative methods) that allow researchers to gain a broader understanding of CNM.

Methodological history of willingness to engage in CNM. Research on CNM desire is limited; only three studies were found that examined CNM desire exclusively (Moors et al., 2015; Moors et al., 2014; Rubin et al., 2014). These studies used the Willingness to Engage in CNM scale (Moors et al., 2015). There also exists a larger body of research (dated several decades) that examined willingness to engage in “alternative marital and family forms” or “variant life styles” (Jurich & Jurich, 1975; Strong, 1978; White & Wells, 1973).

White and Wells (1973) published one of the first studies to examine attraction to “alternative marital and family forms” using a Q-sort task wherein participants ranked their

“interest” in eight alternatives to monogamy. Jurich and Jurich (1975) asked participants to rank ten alternatives to traditional monogamy, however, they also qualitatively recorded participant’s reasons for ranking the various options as they did. This mixed-method study is the only study that has used a qualitative measure for assessing willingness to engage in CNM. In addition to the Q-Sort task, researchers have also utilized Likert-type scales. Specifically, Strong (1978) asked participants about their “willingness to participate in alternative marital and family forms” using a 6-point Likert-type scale. We note that these methods (Jurich & Jurich, 1975; Strong, 1978; White & Wells, 1973) solely asked about CNM desires in the context of marriage. It may be the case that emerging adults would be more inclined to report greater willingness to engage in CNM under less committed circumstances (e.g., in committed dating relationships). Marriage may be too distant for emerging adults to consider this type of relationship structure. As Conley and colleagues (2012) suggested, CNM may represent a period of exploration of possible relationships, en route to monogamy. Therefore, individuals who plan to monogamously partner later in life may not report willingness to engage in CNM marital arrangements.

Willingness to engage in CNM scale. The only measure of willingness to engage in CNM, in the context of a non-marital relationship, was developed by Moors and colleagues (2015). Rather than asking about desire for future marital arrangements, participants were asked to respond to hypothetical scenarios involving a romantic partner. Specifically response options range from 1 (*very unwilling*) to 7 (*very willing*). While this scale examines the degree to which individuals are willing to engage in CNM in a non-marital context, it does not consider the reasons *why* participants are willing to engage in CNM. Further, it is difficult to make meaningful distinctions between the different points on this 7-point scale. To address these methodological limitations, the current study uses qualitative methodology to more thoroughly

understand willingness to engage in CNM. This approach promotes an opportunity to gain additional insights as to *why* emerging adults may (or may not) be willing to engage in CNM.

Current Study

The current study used a mixed-methods approach to examine willingness to engage in CNM using a large sample of emerging adult men and women. This study was guided by the following research questions and hypotheses, which were developed based on life course theory and the extant CNM literature:

RQ1: How do emerging adults vary in their willingness to engage in CNM?

RQ2: Do participants with differing perceived adulthood statuses differ in their willingness to engage in CNM?

H1: We expected that those who reported having achieved adulthood status would be less willing to engage in CNM compared to those who did not.

RQ3: Do men and women differ in their willingness to engage in CNM? If so, is this consistent with previous research?

H2: We expected that men, compared to women, would be more willing to engage in CNM.

RQ4: What are prominent reasons participants report for their willingness (or unwillingness) to engage in CNM?

Our study contributes to the literature on CNM desires in two important ways. First, CNM desire is an understudied phenomenon compared to the other components of CNM, and has dedicated little attention to those in the period of emerging adulthood. We contribute to the larger literature by using a life course lens and specifically focusing on emerging adults. Previous studies indicated a need to examine CNM across different life stages (Conley, Ziegler,

et al., 2013); however, many studies combined emerging adults with individuals in other life course stages (sometimes into later adulthood). To understand this unique period it is important for research to focus exclusively on emerging adults. Additionally, given demographic trends among emerging adults towards delaying marriage (Shulman & Connolly, 2013), it is critical to understand emerging adults' willingness to engage in CNM outside of the context of a marital relationship. Emerging adults may view CNM as a venue to explore their sexual or relationship identity rather than as an ideal marital arrangement. To address this limitation, the current study examines CNM desires in emerging adults without reference to the context of marriage.

Second, two methodologies have dominated the field of CNM desire: the Q-sort task and Likert-type scales. One study used an open-ended question (Jurich & Jurich, 1975); however, this study reported limited information regarding participant's responses and did not identify a clear qualitative analytic strategy. To expand upon these approaches, the current study uses qualitative and quantitative methods. Specifically, we examined *how* and *why* emerging adult men and women differ in their willingness to participate in CNM relationships using a qualitative content analytic approach. This approach offers a more complete understanding of willingness to engage in CNM among emerging adults, which is important for informing sexual and relationship education programs for those in this developmental period.

Methods

Procedures and Participants

The population of interest for this study was college attending emerging adults (ages 18-29). Participants were undergraduate students enrolled in communications studies courses at a large public Southeastern university in the U.S. Participants were recruited through the university communications studies research pool to participate in an online survey about emerging

adulthood, relationships, and sexuality. The project was approved by the university's institutional review board prior to recruitment. Participants self-selected into the study and received partial course credit for participation. Survey information was anonymously reported to the researchers and included demographic information, measures, and open-ended items.

Data was collected during the fall 2014 semester from a convenience sample of 660 emerging adults. After screening the data, 111 participants were removed due to either uncodable or non-responses (e.g., N/A). Thus, 549 participants (168 men and 381 women) were included in our analyses. Participants were on average 19.2 years of age ($SD = 1.54$, $range = 18-29$) and identified as White/Caucasian (86.1%), Black/African American (5.3%), Asian American (3.8%), Latino/a (2.2%), and 2.6% identified as "Other." The majority were freshmen (49%), followed by sophomores (33.9%), juniors (10.6%) and seniors (6%), and 0.5% reported year in school as "Other." The majority identified as heterosexual (94%) and just under half (45.9%) were in a romantic relationship at the time of the study.

We conducted a series of chi-square analyses to compare participants dropped from the study to those who were retained. Participants who were dropped did not differ from those retained by gender, $\chi^2(1) = .194$, $p = .66$; sexual orientation, $\chi^2(1) = .250$, $p = .62$; or relationship status, $\chi^2(1) = .006$, $p = .94$. A greater proportion of racial/ethnic minorities (24.75%) were dropped compared to White/Caucasian (15.29%) participants, $\chi^2(1) = 5.49$, $p = .02$.

Qualitative Item and Analyses

Willingness to engage in CNM. CNM desire was measured using a single open-ended question. Participants were provided with the following stem: "Some individuals agree that it is okay to go on dates with, have sex with, and pursue romantic attractions with other partners. These individuals engage in what is called consensual non-monogamy, because both partners

agree to engage in a non-exclusive relationship.” Participants then responded to the following open-ended question: “If your current partner (or if you met someone you really liked) was very interested in a non-monogamous relationship, how willing would you be to engage in this style of relationship? Please explain.” Participants were then provided with a text box and were able to write as much as they desired to respond to the question.

Qualitative analyses. Data were analyzed using qualitative content analysis (Krippendorff, 2013). This approach was inductive in nature, as prior research has not examined the *how* or *why* of this construct. This approach integrated a modified grounded theory approach, which has been used for the analysis of similar data (Olmstead, Negash, Pasley, & Fincham, 2013). Following LaRossa’s (2005) discussion of the constant comparative method, the authors conducted open and axial coding. Selective coding was not conducted as developing theory was not an aim of this project. Instead, the authors considered how findings were consistent with, or differed from, the dominant discourse in the relationship literature regarding the normative nature of monogamous relationships.

During the process of open coding, the first author analyzed the data for indicators (parts of participant responses) which signaled various group memberships. Specifically, the first author coded one-third of the women’s responses, then one-third of the men’s responses, and repeated this pattern until all responses were coded. Consistent with qualitative methodology, written coding notes and memos were kept as a reference throughout analysis of the data (Stemler, 2001). For this first step in analysis the groups were defined by the narrative that emerged from the data. In other words, this process reduced participant data into a smaller subset of *themes* (Creswell, 2007). Inter-rater reliability was established by having a second coder code 20% of the responses randomly drawn from each established group. The second coder was blind

to the coded groups. The overall measure of inter-rater agreement was acceptable (Cohen's Kappa = .82). Participants' responses to the open-ended item ranged from 1-97 words. The average number of words per participant was 15.04. Examples of one word responses included "never," "depends," "yes," and "very."

During axial coding, each group was examined for variation within the group. Here, various *subthemes* emerged that provided additional depth in understanding why participants were (or were not) willing to engage in a consensually non-monogamous relationship. It was also during axial coding that gender was examined as a point of variation. Specifically, language that was used that differed between men and women was noted in addition to conducting analyses that considered proportional differences (i.e., chi-square analyses) based on the groups that emerged from the open coding process. We also note that given the quantity and quality of our data we were confident that no new codes existed and saturation was reached (LaRossa, 2005).

Quantitative Measures and Analyses

Following the qualitative content analysis, the emergent groups were quantified into three groups and compared based on gender and perceptions of having reached adulthood.

Gender. Gender was measured using a single item that asked participants, "What is your biological sex?" Response options included (1) *Male*, (2) *Female*, and (3) *Other*, please specify. All participants responded that they were either *Male* or *Female*.

Adulthood status. Adulthood status was measured using responses to a single item: "Do you think that you have reached adulthood?" Response options included (1) *Yes*, (2) *No*, and (3) *In some respects yes, in some respects no*. This measure has been widely used in other studies on emerging adulthood (e.g., Nelson & Barry, 2005).

Social desirability. Given the non-traditional nature of the qualitative item and the conservative region in which data was collected, we examined a measure of social desirability to help provide context for participants' responses. That is, we were interested to see if specific groups differed in their levels of socially desirable responding as a potential point of bias to the qualitative data. Social desirability was measured using the 10-item Marlow-Crowne Social Desirability Scale (Strahan & Gerbasi, 1972). Sample items included, "I never hesitate to go out of my way to help someone in trouble" and "I am always courteous, even to people who are disagreeable." Response options were (1) *True* and (0) *False*. The range of this composite scale was 0-10; higher scores indicated a greater level of responding in a socially desirable manner.

Quantitative analyses. Groups that emerged from our qualitative analyses were compared with regard to gender, adulthood status, and social desirability. Comparisons were made using chi-square tests for gender and adulthood status. A one-way between-subjects ANOVA examined mean differences on the social desirability scale. All analyses were conducted using SPSS.22.

Results

Responses were analyzed from 549 participants, 381 women (69.4%) and 168 men (30.6%). Three prominent groups emerged from our qualitative analyses: *Unwilling* ($n = 432$, 78.7%), *Willing* ($n = 71$, 12.9%), and *Open-Minded* ($n = 46$, 8.4%). A number of subthemes also emerged within each group.

Unwilling to Engage in CNM

The majority (78.7%) of participants reported that they were not willing to engage in consensual non-monogamy. This group was comprised of the majority of women (83.8%) and men (68.4%) in the sample. Participants' responses indicated a complete rejection of the idea of

engaging in CNM. Whereas some participants in this group responded in 1-4 words (e.g., “never,” “not likely,” “not willing at all”), many reported *why* they were unwillingness to engage in CNM (73.1% of participants in this group). Specifically, similar proportion of men (74.8%) and women (72.6%) reported reasons for not being willing to engage in CNM. Four prominent reasons emerged. We specify here that some responses overlap across these reasons. Specifically, of those that gave a reason for not engaging in CNM, 14.2% had responses that spanned more than one reason.

Mononormativity. Of those that reported a reason for not engaging in CNM, 52.2% discussed the dominant discourse of monogamy. These participants indicated a general sense of buying into the dominant discourse of monogamy and several aspects of this reason are discussed below.

One specific way this group of participants discussed mononormativity was in stating how all relationships *should* be monogamous, declaring monogamy as a natural state, and commenting on how anything deviating from this was considered “abnormal” or “weird.” For example, one woman suggested if you can’t commit to one person, you should remain single:

Hell no! because I am not going to be having my man wine and dine other girls when he should be doing that only with me. If he wants to be with other girls then why would you want to date someone right now. Just live a single life. (19 years old)

Mononormativity also pertains to the idea that monogamous relationships are by nature “better than” other relationship configurations, such as CNM. This has been described as the halo effect of monogamy (Conley, Moors, et al., 2013). This reason emerged in participants’ responses that discussed CNM as though it were less than monogamy. For example, participants indicated that they felt CNM was, by default, less serious, only about sex, unsafe, less loving,

less romantic, and less committed, and that such relationships were less meaningful. A male participant reported views consistent with mononormativity by situating CNM as less serious than monogamy: “Not interested, there’s no point in having multiple partners unless they are not serious. If you are with someone in a romantic relationship, then there shouldn’t be any other romantic relationships with anyone else” (19 years old).

Another manifestation of this reason was unique to women’s responses. Some women discussed their unwillingness to enter a CNM relationship in light of their fear of getting sexually transmitted infections (STIs). This perception is consistent with the halo effect of monogamy, wherein individuals view monogamy as a method for protecting against STIs. One woman illustrated this clearly when she said, “I would be scared to accept because of fear of getting a disease” (20 years old).

Mononormativity also manifested in the rejection of the existence of CNM as a relationship altogether. These individuals indicated that CNM was “not a real relationship.” One man stated this explicitly: “Not at all. I think that having a partner naturally implies exclusivity so it isn’t a real relationship if it isn’t monogamous” (19 years old). Others rejected CNM as a real relationship by equating it with cheating and adultery. For example, one woman stated:

Absolutely not. This relationship is a type of adultery and you are meant for 1 person not 1 person plus a few on the side that satisfy your needs with good sex. If you are not satisfied with that 1 person you are “committed” to like I said break it off and see other people. (19 years old)

Negative emotionality. Jealousy, possessiveness, neediness and insecurity have been described as bedfellows in the area of negative emotionality with respect to romantic relationships. Within the *Unwilling* group, 29.7% gave this reason. Specifically, they described

their unwillingness to engage in CNM in light of their propensity to experience negative emotionality in romantic relationships.

One of the most prominent ways this was illustrated was in the discussion of jealousy. For example one woman stated: “Not at all. I wouldn’t want to because I don’t like getting jealous and I know I would” (18 years old). A male participant shared similar concerns, adding that CNM would also breed the need for competition: “I would not want to engage, I would be too jealous and feel as though I have to be better and create too much competition and I would feel cheated” (20 years old).

Along with anticipated jealousy, many also indicated that they were too possessive to share their partner in a CNM relationship. One woman indicated this by stating: “I probably wouldn’t be willing because I am inclined to be possessive. If someone wants to date me then they should only date me, not anyone else while they are dating me” (18 years old).

A third manifestation of this reason was unique to female respondents. This was illustrated by women who stated CNM would make them feel as if they were “not good enough.” For example, one woman stated:

I would not be interested. If I’m dating someone I wouldn’t want to worry about if he’s with someone else. Him wanting to also date someone else would make me feel like I’m not enough or not as good as her and I would just keep getting hurt. (18 years old)

Offensive, break-up imminent. Of those that gave a reason for not being will to engage in CNM, 16.1% discussed how a partner who suggested CNM was offensive, selfish, disrespectful, and had poor character. Further, a large majority of these participants also stated that they would break-up with their partner for suggesting CNM.

Several participants indicated that such a request was offensive and disrespectful. For example, one man stated: “Not very likely, I would not know who else they are hooking up with and would feel offended if they asked me if that was ok” (19 years old). Offense was also demonstrated in a women’s responses, for example: “NO NO NO! It is very disrespectful – you should only want me to yourself and vice versa!!”(19 years old).

Others stated that such a proposition was grounds for terminating the relationship. Women and men both reported that they would break-up with their romantic partners if they suggested CNM. For example, one woman stated: “I would not be okay with that and would break off the relationship. I believe a person should know what he or she wants” (19 years old). Men expressed similar feelings: “Zero tolerance policy. Break-up imminent” (18 years old).

Against beliefs, morals or religion. The least frequent reason given in the *Unwilling* group was a personal conflict with the CNM life style. This personal conflict included participant stating that CNM was against their morals, religious views and beliefs. Specifically, 13.9% of those in the *Unwilling* group reported this reason.

First, many indicated that CNM conflicted with their morals. For example one female stated: “I would never be willing to do this because it is morally wrong” (19 years old). Others referenced a conflict with their religious views, for example one woman responded: “I would not be willing at all. It is not the religious views I see. It is one man for one wife not one man to numerous wives or one wife to numerous husbands” (19 years old).

Some individuals stated that CNM was against their personal beliefs and values. For example, one man stated: “I would not be. This goes against my beliefs and values” (20 years old). Other participants discussed monogamy as a personal value or belief system. This is

illustrated in one woman's response when she said, "Not willing. I believe in monogamy and will only be in a relationship with monogamy" (19 years old).

Willing to Engage in CNM

The second largest group (12.9%) of participant reported a willingness to engage in CNM. The group was comprised of 8.1% of women, compared to 23.8% of men in the sample. Participants in this group responded with a high degree of endorsement and desire for engaging in CNM. Over a fourth (26.8%) of respondents in this category indicated their degree of endorsement with only a few words such as: "very," "very willing," or "I would be okay with it." However, a large proportion of participants in this group (73.2%) also provided reasons for their willingness to engage in CNM. Within this group, 61.5% of men and 87.5% of women gave a reason. Note that 13.5% of participant in this group had responses that included multiple reasons.

Rejection of monogamy. Many individuals in this group rejected monogamous ideals in favor of CNM (44.2%). Rejection of monogamy emerged in various ways. One man simply said he would like to experience various relationships: "Very. I would like to experience various types of relationship styles" (19 years old). Other participants stated that their willingness to engage in CNM was related to the time in their lives. More specifically, some indicated that monogamy was ideal during college, as one man stated: "Willing, I'm in college supposed to be the time of your life" (18 years old). Another man reported that he didn't want anything serious during this time in his life: "I would be pretty willing. I personally don't see myself in a serious kind of relationship at this time in my life" (19 years old).

Along similar lines, others simply rejected the monogamous ideals of exclusivity. One man stated: "Yes, I believe in science and that mean as many sex partners as possible to

reproduce” (18 years old), while another responded: “Very willing, because I am not interested in an exclusive or committed relationship” (19 years old).

Finally, rejection of monogamous ideals also included the denial of possessiveness in relationships. One woman stated:

Fairly willing. I like to hookup with girls but not be in relationships with them. Most guys, like my boyfriend, are okay with this. If they aren’t they aren’t good for me bc that means they’re either A: too jealous/protective/controlling. Or B: don’t except girls hooking up with girls which I except and think people should except. (19 years old)

Conditionally willing. The larger CNM literature reported that individuals engaged in CNM label themselves as “ethical sluts” (Ritchie & Barker, 2006). The term “ethical slut” puts a spin on the dominant discourse of monogamy, wherein the term slut is often used to describe CNM individuals. The word ethical is inserted to indicate that CNM individuals take precautions to protect themselves sexually and emotionally, and do so in part out of respect for their numerous partners. A large percentage (53.8%) of those who indicated willingness indicated that they would only be willing to engage under certain conditions.

One of the conditions for engaging in CNM among this group was safe sex. A young man illustrated this in the following response: “I would not be very willing at first. However, as long as I have important details and I know that my partner is being safe...and I can trust the person they’re with, then it’s okay” (20 years old). One woman echoed similar sentiments:

I would try it out with certain conditions, such as: no sex or at least must wear protection, etc.. but if after several months I decided I couldn’t handle the non-commitment, then I would have to give my partner an ultimatum. (21 years old)

In addition to protecting themselves physically, many also indicated the importance of protecting against negative emotional consequences. This manifested in an unwillingness to become emotionally attached, which is illustrated in this man's response: "I would be willing to. As long as I felt that I could keep from getting attached emotionally to the person" (25 years old).

CNM as a sacrifice. A small percentage of participants in this group (15.4%) had a storyline that described a clear willingness to engage in CNM; however, they also described CNM as a sacrifice. These participants did not desire to engage in CNM, rather they stated they would make the sacrifice to either (a) please their partner or (b) enhance their relationship. The following response is an example of a woman willing to engage in CNM to please her partner:

I am currently in that situation. I like them a lot and want to be with them, so I am faced with the question of accepting to be in a non-monogamous relationship or not.... And I don't want to, but I feel like that because I like them so much I will... Which kills me inside because there are so many people out there who would be fine with just me... (20 years old)

Whereas this participant discussed a lack of desire to engage in CNM, she also clearly stated "I will," which is an indication of her willingness. Previously, CNM desire and willingness have been conceptualized as synonymous constructs. This finding challenges this conceptualization, as we find that despite a lack of desire to engage in CNM, some individuals are willing to engage in CNM if it means fulfilling the needs of one's romantic partner.

Although participants who were conditionally willing indicated that they would only engage in CNM if the relationship was not serious, or if they could remain unattached, participants who gave this reason indicated an opposite pattern. Some participants stated that they would engage in CNM to enhance an existing relationship, as one man indicated: "I would

be willing to try it. I wouldn't be completely for it but if it brought our relationship closer together I would be willing to experiment with it" (18 years old). Again we note that a central component of this group is that the participant's behavioral commitment to pleasing their partner seems to outweigh their own ambivalence toward engaging in CNM.

Open-Minded towards CNM

The smallest group (8.3%) of participants were in the *Open-Minded* group. This group was comprised of 8.4% of women and 7.7% of men from the sample. Participants in this group responded with an open-minded orientation to the idea of engaging in CNM. Responses frequently included words such as "depends," "open," and "might." This group is distinguished from the previous groups in that they give no clear indication of willingness or unwillingness. A large proportion of participants in this group gave reasons for their open-minded approach to CNM (86.7%). Specifically, within this group a similar proportion of men (84.6%) and women (87.5%) gave a reason for their open-mindedness. We note that within this group 20.5% of participants reported overlapping reasons.

Depends on the person. The most common reason given for being open-minded was that their decision to engage in CNM would depend on the person. Of those that gave a reason for being open-minded, 45% reported this reason. For example, one woman stated, "It depends on the other person, if I actually like them enough to try different things" (19 years old). Others also gave weight to their partner's reasons for wanting to engage in CNM. This was most clearly illustrated in one woman's response, "It depends on how I am feeling about the person, and their reasons for wanting to be non-monogamous" (21 years old).

Depends on the context/conditions. The next most prominent reason was that their willingness depended on the context or the conditions in which CNM occurred. This group

distinctly differs from the *Conditionally Willing* subtheme in the *Willing* group, as *Open-Minded* participants do not use language that was indicative of behavioral commitment. Rather they stated that it “depends,” or that they would “consider” CNM. Of those that gave a reason, 40% discussed context/conditions. There was a great deal of variation concerning the conditions participant gave for being open-minded, and a few of these are discussed below.

Some indicated the importance of being in love with their partner, and being in a serious relationship, before opening up their relationship to CNM. One woman indicated the importance of living together first, discussing the significance of first having a serious relationship before opening it to CNM: “It would be situational. If I had been with the person for several years and had been living with them then maybe” (19 years old). One man elaborated on this reason:

Skeptical but open minded. If I just met someone I really liked I would want us to be in a regular relationship for an extended period of time before we started experimenting with other partners. It would be difficult to maintain a relationship with someone if they had other partners right off the bat. (20 years old)

In addition to wanting a loving and serious relationship first, others indicated the importance of establishing basic rules before beginning a CNM relationship. For example, one woman stated: “If we agreed on the basic principles on how things should work, I could see myself being open to the idea” (20 years old). Others discussed specific examples of rules. One woman suggested that she would be open to CNM, but only if everyone was involved:

Potentially. A lot depends on the situation there have been times in my life where I was okay with different partners. But we were not in relationships. Once I have made the commitment to a relationship, unless both of us are involved (threesome) then I don’t think I would be okay with it. (19 years old)

Dissonance. The third, and least often, reason was feelings of dissonance with respect to CNM engagement. Of those that gave a reason in this group, 32% discussed dissonance. This reason manifested in several ways.

One variation indicated a dissonance between desire and beliefs. For example, one woman stated: “It depends. Because of my beliefs, I would like to say I would not participate, but things change when you fall in love” (18 years old). One man described a dissonance between what his heart and body wanted and what he believed was morally right:

Physically and emotionally I obviously would be very interested in engaging in this style of relationship. But ethically, morally, and spiritually I would not agree with this and would not be comfortable with it. I try to be guided by these things rather than what body or emotions want. (20 years old)

Another variation appeared in the dissonance between one’s desire to please their partner (who wants to engage in CNM) and one’s own monogamous desires. One woman described this in her response: “I might. I would like to be the only one for them, but if I really liked them, I would do whatever they wanted just to have them” (20 years old). Again, we note the difference between this participant and those in the *CNM as a Sacrifice* subtheme in the *Willing* group. This participant uses the tentative language of “I might,” rather than committing to willingness.

Dissonance also manifested in a third way, which was unique to men. Specifically, these participants described wanting exclusive rights to their partner, while also desiring sexual freedom for themselves. For example, one man stated: “Not at all. I think I would get jealous of her sleeping around. I might be ok fucking other girls but you never know until you get into that situation” (20 years old).

Quantitative Group Comparisons

Gender. A chi-square analysis examined the relationship between group membership and gender and indicated a significant relationship, $\chi^2(2) = 25.487, p \leq .001$. Post-hoc analyses were then conducted to further examine the source of this effect. Examining the 2x2 contingency table for gender and *Unwilling* group status indicated a proportional difference based on gender, $\chi^2(1) = 15.12, p \leq .001$. Specifically, a greater proportion of women (83.8%) than men (68.4%) were in the *Unwilling* group. In examining the 2x2 contingency table for gender and the *Willing* group indicated a proportional difference based on gender, $\chi^2(1) = 25.43, p \leq .001$. Specifically, a greater proportion of men (23.8%) than women (8.1%) were in the *Willing* group. Finally, no proportion differences were found in the *Open-Minded* group based on gender, $\chi^2(1) = .01, p = .72$. That is, the proportion of women (8.7%) and men (7.7%) did not differ statistically for the *Open-Minded* group. These findings confirm our hypothesis that more men than women would be willing to engage in CNM.

Perceived adulthood status. Of the 549 participants included in the qualitative analyses, 547 responded to the measure of perceived adulthood status. Of these, 76.1% indicated that they were emerging adults (i.e., responded as “in some ways yes, and in some ways no”), 15.9% indicated that they had reached adulthood (i.e., responded “yes”), and 8% indicated that they had not reached adulthood (i.e., responded “no”). Chi-square analyses were conducted to examine the relationship between group membership and perceived adulthood status. An examination of this 3x3 contingency table revealed no significant main effect, $\chi^2(4) = 4.56, p = .33$. This finding does not support our hypothesis that those who had reached adulthood status would be less willing to engage in CNM.

Social desirability. Across groups, the mean for the social desirability scale was 6.62 ($SD = 1.67$, $range = 0-10$). The *Unwilling* group had the highest score ($M = 6.67$, $SD = 1.64$). To test for significant differences in group means across the three groups, a one-way between-subjects ANOVA was conducted. This test did not reveal mean differences across groups, $F(2,530) = 1.50$, $p = .22$. We therefore concluded that participants did not differ in their socially desirable responding based on group membership.

Discussion

The purpose of this study was to examine willingness to engage in consensual non-monogamy (CNM) using a large sample of college attending emerging adults ($N = 549$). Our study is among the first to examine this phenomenon using qualitative methods and to focus exclusively on those in the period of emerging adulthood. Generally, we found that most of the emerging adults in our sample were not willing to engage in CNM, although a sizeable minority were willing or open-minded towards this non-traditional relationship configuration. Perhaps one of the most important contributions of this study was beginning to understand *why*, or the reasons underlying individuals' willingness (or unwillingness) to engage in CNM.

Four prominent reasons emerged regarding why emerging adults in our sample were not willing to engage in CNM. The most prominent of these reasons is best described as “buying into” the halo effect of monogamy (Conley, Moors, et al., 2013) or the dominant discourse of monogamy. This has been labeled by previous scholars as mononormativity, which is a term used to identify the assumed naturalness and normality of monogamy (Finn, 2012). Group members who gave this reason also discussed the protective effects of monogamy, in particular for preventing sexually transmitted diseases. This finding is consistent with previous research that suggested many people believe CNM relationships to be at higher risk for sexually transmitted

infections (STI) by virtue of engaging in sexual acts with more than one partner (Conley, Ziegler, et al., 2013). However, this notion has not been found to be valid (for a review see Rubel & Bogaert, 2014). Compared to sexually unfaithful individuals in monogamous relationships, CNM individuals are more likely to use condoms during intercourse, gloves during sexual play, sterilize their sex toys, discuss STI and sexual history with extradyadic partners, and tell their partners about the extra dyadic encounter; they were also less likely to have sex under the influence (Conley et al., 2012). Another way mononormativity showed up in participant responses was by situating CNM as “less than” monogamy. Participants in this group indicated that CNM was less loving, less serious, less romantic, and less meaningful. Again, this finding is consistent with previous work that has documented the widespread assumption that monogamous relationships are more satisfying than CNM relationships (Conley, Moors, et al., 2013). However, contrary to these assumptions, much research has found no difference in relationship satisfaction between CNM and monogamous couples (Rubin, 1982).

The second most stated reason that members of the *Unwilling* group gave was related to negative emotionality. Not surprisingly, many participants stated that they would refrain from engaging in CNM because of the anticipated negative emotional consequences associated with sharing ones partner. Another reason that was given for not engaging in CNM was the belief that such a proposition was offensive, and further that such a proposition would be grounds for dissolving the relationship. Anderson (2010) found that some college men feared asking their partners to open up their relationship because they worried doing so would end the relationship. These results suggest that this fear is not unwarranted. Many women and men indicate that they would break up with their partner for suggesting CNM.

The least frequent subtheme in the *Unwilling* group stated that CNM was against their

religious, moral, or personal values. This finding is not surprising, given that this sample was recruited from a University in the Southeastern US. This finding is also consistent with previous research on CNM and religiosity. Hutzler, Giuliano, Herselman, and Johnson (2015) found that individuals who were more religious reported more negative attitudes toward CNM and were less interested in CNM.

We note that a sizable percentage of emerging adults were *willing* to engage in CNM, and that more men than women were in this group. This finding confirmed our hypothesis and is consistent with previous research (Moors et al., 2015). Three reasons for willingness emerged within this group. The most common was associated with the rejection of monogamous ideals. These individuals indicated that they were not interested in exclusivity, or rather that they were interested in a variety of relationship types. Other individuals described CNM as an adventure, or a less “serious” alternative to monogamy. These findings are consistent with previous research on non-monogamy during emerging adulthood, in particular that many emerging adults feel too young to be tied down in monogamous relationships (Lyons et al., 2014). Further, these results support Conley, Ziegler, and colleagues (2013) assertion that CNM may be an attractive option during this developmental period.

Another reason given for being willing to engage in CNM was described by participants as conditional willingness. These individuals indicated a clear willingness to engage in CNM; however, they also discussed a need for specific conditions. A variety of conditions materialized in this group, including the importance of protecting themselves from becoming emotionally attached to their CNM partner. Moors and colleagues (2015) found that individuals who scored higher on attachment avoidance also reported greater willingness to engage in CNM. Our findings here are consistent with this study, and suggest that some individuals who are willing to

engage in CNM may not clearly understand that CNM relationships differ from casual, less serious relationships. It seems that some individuals may report willingness, under the pretense that this relationship configuration is less serious, less committal, and involves less emotional investment (i.e., casual sex or “hookups”).

The final reason given by those in the *Willing* group was that their engagement in CNM would be a sacrifice for their partner or for their relationship. This group of participants indicated that despite their own lack of desire to engage in CNM, they would be willing to try CNM for their partner or their relationship. This last point raises an especially important issue, because willingness to engage in CNM has been conceptualized as CNM desire (Moors et al., 2015). This finding, although small, indicates that for some individuals, these may not be the same construct. To the contrary, an individual may express a high degree of willingness and no desire to engage in CNM. As scholars move forward in understanding CNM desire, they must further deconstruct this concept, which is likely to be developed through qualitative methods.

A third group emerged in our study, which we labeled *Open-Minded*. Although this was the smallest group, it may be one of the more interesting findings from this study. Previous work on willingness to engage in CNM has been quantitative, thus, open-minded individuals have never been clearly represented in the literature. Here we have identified such individuals and discuss their reasons for having an open-minded approach to CNM.

The most frequently stated reason among *Open-Minded* group members was that willingness was dependent upon the person (i.e., who the relationship partners were). These individuals discussed that their willingness to engage in CNM would depend on how much they liked the person and that persons reasons for wanting to try CNM. The second most stated reason was that it would depend on the context or conditions. This subtheme outlined various conditions

that would need to be in place for them to consider engaging in CNM. Many indicated that they would want to first be in a serious and loving relationship with that person. This pattern is distinctly different than those in *Willing* group, as they wanted to remain emotionally distant in CNM relationships. *Open-Minded* individuals also discussed dissonance. That is, these individuals indicated that as they were considering CNM, they had reasons for wanting to and not wanting to engage. One variation, unique to men, discussed dissonance between wanting exclusive rights to their partner, while desiring sexual freedom for themselves. This finding mirrors Anderson's (2010) finding that some college men desire extra dyadic sex themselves, but are reluctant to share their partner.

Theories of emerging adulthood may be particularly relevant for understanding *Willing* and *Open-Minded* individuals. These individuals seem to embody many of the central components that Arnett (2015) describes as key to this developmental period. These components include exploration, experimentation, and self-focus. Individuals in the *Willing* group appear to be particularly high in self-focus, as many discussed a desire to remain unattached and would like to avoid exclusivity/commitment. Members of both groups showed characteristics consistent with exploration and experimentation. Moving forward, researchers should examine these facets of emerging adulthood, particularly as it relates to willingness to engage in CNM.

Limitations

Although this study makes several contributions to the literature on willingness to engage in CNM, several limitations are noted here. This study collected data for content analysis from written responses to a single question. Although 549 responses were able to be coded, many responses lacked breadth. As such, several participants did not provide a reason for their willingness to engage in CNM. Additionally, despite the fact that CNM was defined for the

participants prior to being given the stem item, it is unclear as to whether all participants read the definition prior to responding to the question. It may be that some respondents proceeded to answer the question under the false assumption that CNM was equated with hooking up, casual sex, friends with benefits style relationships, or infidelity. Some participants in the *Willing* group indicated that they would like a relationship that was not serious, others stated that they thought CNM would be an adventure. It may be that these individuals were unclear as to what a CNM relationship actually entails.

In future studies, a validity check may be warranted to ensure participants understand what CNM is and what this type of relationship entails. To our knowledge, such methodology has not been used in CNM research, which raises some concern regarding the validity of previous work in this area. This may be problematic for prevalence estimates, as individuals who stated they are in a CNM relationship, may actually be hooking up or in a friends with benefits style relationship. The possibility of overestimation should be further investigated.

Finally, it is also important to note that this study used a convenience sample of college attending emerging adults. This sample was also derived from a university pool in the Southeastern region of the US. As such, these results cannot be generalized to the broader population of emerging adults. It is likely that the degree of willingness to engage in CNM differs substantially by geographic location, as certain areas may endorse greater acceptance of non-traditional relationship configurations.

Implications

Emerging adulthood has been established as an important time in the life course for exploring and establishing romantic relationships (Arnett, 2015). Conley and colleagues (2013) have called for more attention to the study of CNM among this age group, suggesting that CNM

may be more appropriate than serial monogamy during this time period. This study reveals that a sizable proportion of emerging adults are open-minded, or willing to engage in CNM. As such, these findings may have important implications for sexual and relationship health education (SRHE) among emerging adults.

SRHE programs that use abstinence education echo the dominant discourse in society that relationships should be monogamous. Not only do we know that such programs are ineffective in delaying sexual activity until marriage (Kohler, Manhart, & Lafferty, 2008), they also may mislead individuals about the protective effect of monogamy. Our findings indicated that a large percentage of emerging adults buy into the halo effect of monogamy, which replicates findings from previous research (Conley, Ziegler, et al., 2013). SRHE programs should address the risks that exist within monogamous relationships. These programs should pay particular attention to the high prevalence of infidelity in emerging adult dating relationships (Seal, Agostinelli, & Hannett, 1994) and the lack of condom use in extra-dyadic experiences (Conley et al., 2012).

This study also revealed that emerging adults hold many misconceptions about CNM. Individuals who are not provided the resources to critically examine monogamy (Conley, Ziegler, et al., 2013) and understand other relationship configurations may be less informed and may be unprotected given the potential for multiple, and concurrent, sexual relationships among emerging adult populations. These findings suggest that we should consider broadening SRHE to accommodate non-dyadic relationship configurations as many emerging adults appear willing to engage in CNM relationships.

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CHAPTER 4:

Willingness to Engage in Consensual Non-Monogamy among Emerging Adults:

A Structural Equation Analysis of Sexual Identity, Casual Sex Attitudes, and Gender

Abstract

Research on consensual non-monogamy (CNM) has increased over the last decade. Willingness to engage in CNM is an understudied phenomenon within this body of literature. Little research has examined the correlates of this aspect of CNM nor focused on individuals in the developmental period of emerging adulthood. This study used multi-group structural equation modeling to test a conceptual model of emerging adults' (ages 18-29; $N = 890$) willingness to engage in CNM. Results indicated that emerging adult experimentation/possibilities, sexual identity exploration, and permissive attitudes towards casual sex were all related to willingness to engage in CNM. Results also showed that the pathway from emerging adult experimentation/possibilities to willingness to engage in CNM was differentially mediated across gender. Specifically, for women there was an indirect (and positive) pathway from experimentation/possibilities to CNM through sexual identity exploration. For men there was an indirect (and positive) pathway from experimentation/possibilities to CNM through permissive attitudes towards casual sex. Implications for future studies on CNM among emerging adults are discussed.

Introduction

Consensual nonmonogamy (CNM) is an umbrella term that encompasses a variety of open relationships (Frank & DeLamater, 2010). Over the past decade greater attention has been given to these non-traditional relationship formations, which are characterized by commitment, consent, and agreement that romantic or sexual relations are permitted with partners outside the primary relationship. Within this literature, scholars have begun to identify and test correlates of CNM such as gender, attitudes, and attachment orientation (Conley, Ziegler, Moors, Matsick & Valentine, 2012; Moors, Conley, Edelstein & Chopik, 2015).

Little research on CNM has focused exclusively on individuals in the developmental period of emerging adulthood (ages 18-29; Arnett, 2015). Previous studies have suggested the need to focus on this population (Conley et al., 2012), and to consider various life stages separately when examining CNM (Rubin, Moors, Matsick, Ziegler & Conley, 2014). However, much of this research has studied CNM relationships using samples of middle-aged individuals (Frank & DeLamater, 2010). Scholars have noted the overrepresentation of middle-aged identities in CNM research as an important limitation in this field (Rubin et al., 2014).

The purpose of this study was to address these limitations by focusing exclusively on emerging adults. We also propose a conceptual model and aim to establish correlates of an understudied construct within CNM by examining willingness to engage in CNM. Further, we examine how the relationships among these tested correlates differ as a function of gender.

Constructing a Model of CNM for Emerging Adults

Non-monogamy is not a novel topic for researchers interested in emerging adults. However, a great deal of research has focused on infidelity within dating relationships (e.g., McAnulty & Brineman 2007), and more recently, casual sex and the “hookup culture” (Garcia, Reiber, Massey, & Merriwether, 2012). CNM is distinguished from these forms of non-monogamy in several ways. For example, in CNM relationships there is an explicit agreement from committed partners to engage in extradyadic sex, whereas in cases of infidelity there is a lack of such agreement, and lack of commitment is a central component of hookups (Garcia et al., 2012). Given this distinction, few studies have focused on CNM among emerging adults.

In constructing a model of CNM among emerging adults, it is important to consider that sexuality is a multidimensional construct. Moors and colleagues (2015) identified three components of CNM relationships: attitudes, desire, and behavior. They assessed these by

measuring attitudes toward, willingness to engage in CNM and actual engagement in CNM relationships. For this study, we focused on desire, or one's willingness to engage in CNM.

Willingness to Engage in CNM (Desires)

Of the three CNM components, a great deal has been learned over the past decade about CNM attitudes and behaviors. However, CNM desires has received far less attention. This component of CNM may be most relevant for emerging adults, as they are considered to be in a period of sexual exploration. Further, emerging adults are typified by the pursuit of sexual and relationship variety before settling into adult roles (Arnett, 2015), which are discussed below.

Although there are few studies on CNM desires using samples of individuals in the period of emerging adulthood, insights can be drawn from a similar body of literature. In previous decades studies examined individuals' willingness to engage in "alternative marital and family forms" (Jurich & Jurich, 1975; Rao & Rao, 1980; Strong, 1978). One caveat is that this research has only examined CNM desires within the context of future marital arrangements.

In one of the earliest studies on CNM desire, Jurich and Jurich (1975) asked participants to rank alternatives to monogamy. They found that men ranked polygyny and communal marriage higher than women, whereas women ranked monogamy, serial monogamy and affairs higher than men. University students were more likely to prefer non-legal monogamy, communal marriage, open marriage, group marriage, polygyny and polyandry than individuals who were not enrolled at a university (Jurich & Jurich, 1975).

Similar to Jurich and Jurich (1975), Strong (1978) asked participants to rate their "willingness to participate" in 12 alternatives to monogamy and found that compared to women, men reported a greater willingness to engage in spouse swapping, group marriage, rural communes with shared sex, and consensual extra-marital sex. Rao and Rao (1980) conducted a

similar study to examine this phenomenon among a sample of African American college students. They found that higher self-esteem was positively associated with a greater willingness to engage in CNM for both men and women. They also found that junior and senior status in college was related to more liberal views and a greater willingness to engage in CNM, specifically group marriage (Rao & Rao, 1980).

Few studies have focused on willingness to participate in CNM, or examined a willingness to participate in CNM outside context of marital relationships. Given demographic trends towards delaying the age of first marriage (Claxton and van Dulmen, 2013), it is concerning that the majority of methods have only examined willingness to participate in CNM within a marital context. This is an important limitation, as individuals in this developmental stage may view CNM as a means to explore their sexual identity rather than as an ideal martial arrangement. Emerging adults may be more willing to engage in CNM in dating and cohabiting relationships. Given these considerations, the current study examined CNM desires outside the marital context among a sample of college attending emerging adult men and women.

The only known measure of willingness to engage in CNM in the context of a non-marital relationship was developed by Moors and colleagues (2015). A few studies (discussed below) have used this measure to examine correlates of individuals' willingness to engage in CNM (Moors et al., 2015; Moors, Rubin, Matsick, Ziegler, & Conley, 2014). In particular, these studies reported that CNM desires was associated with gender and attachment avoidance. In the CNM literature, gender has largely been used as a predictor variable. Most studies have found that men score higher on CNM desires (Jurich & Jurich, 1975; Moors et al., 2015; Strong 1978), attitudes (Moors et al., 2015), and behavior (Moors et al., 2015; Rubin et al., 2014). In light of these findings, the current study examined gender as moderator of the relationship between CNM

desires and various correlates tested in this study.

Correlates of CNM Desire

The primary aim of this paper was to construct a model identifying correlates of CNM desires among individuals in the period of emerging adulthood. Because limited attention has been given to correlates of CNM desires among contemporary emerging adults, this model draws on theories of identity development (Erikson, 1994; Marcia, 1966), life course (Elder, 1998), and emerging adulthood (Arnett, 2015), as well as the extant literature on CNM (Moors et al., 2015; Moors et al., 2014) and other non-monogamies (Anderson, 2012; Seal, Agostinelli, & Hannett, 1994). Based on theory and research, correlates tested in this model included: (a) perceptions of emerging adulthood as a time for experimentation/possibilities, (b) sexual identity exploration, and (c) attitudes towards casual sex. The conceptual model for the directional relationships among these constructs is shown in Figure 1.

Emerging adulthood experimentation/possibilities. Emerging adulthood is a time in the life course that has been noted as particularly important for establishing romantic relationships (Arnett, 2015). This period has also been described within the context of demographic shifts, where young adults postpone marriage, job attainment and other adult roles in the pursuit of identity exploration (Claxton & van Dulmen, 2013). Arnett (2015) asserted that emerging adulthood is not just characterized by identity exploration; it is also a time of feeling in-between adolescence and adulthood, and a time of self-focus, experimentation and possibility, and instability. However, many studies do not account for these complex psychological processes which characterize emerging adulthood (Lisha, Grana, Sun, Rohrbach, Spruijt-Metz, Reifman, & Sussman, 2014). Only one measure comprehensively captures all five dimensions of emerging adulthood, the Inventory of the Dimensions of Emerging Adulthood (IDEA; Reifman,

Arnett, & Colwell, 2007). For this study, we focused on the dimension of experimentation/possibilities.

Experimentation/possibilities during the period of emerging adulthood is particularly relevant for willingness to engage in CNM. This is evident in Arnett's (2015) claim that emerging adults today believe it is necessary to explore the different possibilities available to them, so as to not limit their options. Conley and colleagues (2012) suggested that CNM may be a more appropriate arrangement than serial monogamy during emerging adulthood and further posited that CNM may be particularly effective for those who wish to eventually find a monogamous partner, as concurrent partnerships would allow an opportunity to simultaneously compare different relationships while transitioning into monogamy. For the current study, it was hypothesized that individuals who identified more with emerging adulthood being a time of experimentation/possibilities would report a greater willingness to engage in CNM (H1).

Sexual identity exploration. Although there is consensus that emerging adulthood is a time of identity exploration in the areas of relationships, occupations, and world views (Arnett, 2015), sexual identity exploration has received less attention (Archer & Grey, 2009). As this is a developmental period characterized by the pursuit of romantic and sexual variety before settling into adult roles (Arnett, 2015), the various dimensions of emerging adulthood may also be related to sexual identity exploration. Particularly, the dimension of experimentation/possibilities may be related as it is characterized by exploration, open choices, experimentation, possibilities, and trying new things (Reifman, Arnett, & Colwell, 2007). Archer and Grey (2009) found sexual identity to be an important part of self-definition for college attending emerging adults.

Identity exploration of sexual needs and desires may also be related to willingness to engage in CNM. Actively exploring one's sexual identity, rather than conforming to the dominant

discourse in society about sexuality and relationships (e.g., monogamy, heterosexuality) may render one more likely to experiment with or participate in a non-traditional relationship.

Anderson (2012) suggested that individuals who internalize societal values related to sexuality (e.g., monogamy) without exploration of their own sexual needs, are more likely to continue holding values consistent with the dominant discourse in society. Anderson's example is an illustration of Marcia's (1966) concept of identity foreclosure, which is an identity status wherein individuals commit to an identity, without exploration (Marcia, 1966). While describing Marcia's (1966) model is beyond the scope of this paper, we do note that two central concepts of this model are *commitment* and *exploration*.

Scholars have adapted Marcia's (1966) four statuses of identity to study sexual identity. Whereas much of this research has focused almost exclusively on sexual orientation (Muise, Preyde, Maitland & Milhausen, 2010), Worthington, Navarro, Savoy, and Hampton (2008) developed the Measure of Sexual Identity Exploration and Commitment (MoSIEC) to consider aspects of sexual identity, beyond sexual orientation. To conceptualize sexual identity more generally the MoSIEC focuses on the exploration of one's sexual needs, values, choice of partners, activities, and expressions (Worthington et al., 2008). Inspired by Marcia's (1966) model, the MoSIEC includes subscales of *exploration* and *commitment* to sexual identity.

For this study we were interested specifically in sexual identity exploration. Although no studies were found that have directly examined the relationship between CNM desires and sexual identity exploration, it is reasonable to believe that a positive relationship exists. For example, in a qualitative study examining sexual identity development among African American college attending emerging adult men, Randolph, Kim, Golin, Matthews, and Howard (2013) reported a general theme of having multiple, concurrent sexual partnerships. In another study, Johnson,

Giuliano, Herselman, and Hutzler (2015) found that men and women who identified themselves as having greater sexual needs also reported more favorable attitudes toward CNM.

We hypothesized that individuals who identified more with emerging adulthood being a period of experimentation/possibilities would report greater sexual identity exploration (H2a). We also hypothesized that greater sexual identity exploration would be positively associated with a greater willingness to engage in CNM (H2b). Last, we hypothesized that sexual identity exploration would mediate the relationship between emerging adulthood experimentation/possibilities and CNM desire (H2c).

Attitudes towards casual sex. Permissive attitudes towards casual sex, otherwise defined as unrestricted sociosexuality (Simpson & Gangestad, 1991) pertains to the general belief that sexual activity outside of a committed relationship, or casual sex with multiple partners is positive. A large body of research has examined the experience and prevalence of casual sex among those in the period of emerging adulthood (e.g., Claxton & Dulmen, 2013; Lyons, Manning, Longmore, & Giordano, 2014; Shulman & Connolly, 2013). These studies generally indicated that emerging adults are accepting of casual sex, partially because they report feeling too young to be tied down to one partner (Lyons et al., 2014). Claxton and van Dulmen (2013) indicated that due to recent demographic shifts in delaying the age of marriage, emerging adults today are more sexually permissive. Sexual permissiveness may be greater among contemporary emerging adults because they have more sexual freedom than previous generations (Arnett, 2015). Thus, we hypothesized that individuals who identified more with emerging adulthood being a period of experimentation/possibilities would report more permissive attitudes towards casual sex (H3a).

Permissive attitudes towards casual sex may also be related to willingness to engage in

CNM. Research shows that individuals with restricted sociosexuality pursue sex exclusively within the context of monogamy, or serial monogamy (Webster, 2015). Morrison and colleagues (2013) also found in their comparison of self-identified monogamous participant to CNM participants that CNM men and women both reported greater levels of unrestricted sociosexuality (even when controlling for age, education, income, and sexual orientation). Also, van Anders, Hamilton, and Watson (2007) found that CNM women scored higher on measures of unrestricted sociosexuality compared to monogamous women. Among emerging adults, permissive attitudes towards casual sex has also been shown to be positively associated with a willingness to engage in non-consensual extradyadic relationships (i.e., infidelity; Seal, Agostinelli, & Hannett, 1994; Mattingly, Clark, Weidler, Bullock, Hackathorn & Blankmeyer, 2011), as well as casual sex (Vrangalova & Ong, 2014). Given these findings, we hypothesized that more permissive attitudes towards casual sex would be positively associated with a greater willingness to engage in CNM (H3b). Further, we hypothesized that permissive attitudes toward casual sex would mediate the relationship between perceiving emerging adulthood as a period of experimentation/possibilities and willingness to engage in CNM (H3c).

Gender. Gender has been tested for its association with all of the variables discussed above. For example, previous studies reported that men were more willing to engage in CNM (Moors et al., 2015) and other forms of non-monogamy (Seal, Agostinelli, & Hannett, 1994). Men also scored higher on measures of unrestricted sociosexuality or permissive attitudes towards casual sex (Simpson & Gangestad, 1991; Sprecher, Treger, & Sakaluk, 2013). Regarding sexual identity exploration, using the MoSIEC, some studies found that compared to men, women were more likely to report active sexual identity exploration (Morgan, 2012; Reid, 2013). Given the complexity of these relationships, gender was examined as a moderator for all

model paths. More specifically, multi-group structural equation modeling (SEM) was used to examine whether there were differences between men and women for each model path.

Current Study

The current study contributes to the extant CNM literature by addressing several limitations identified in past studies. First, little research on CNM has focused exclusively on individuals in the developmental period of emerging adulthood. The current study addresses this issue by focusing exclusively on emerging adults and also considers how a specific dimension of emerging adulthood (experimentation/possibilities) is related to willingness to engage in CNM.

Another limitation addressed by this study is the focus on CNM desires. CNM scholars have generally examined one or more of the following three components of CNM: desires, attitudes and/or behaviors (Moors et al., 2015). The majority has focused on attitudes and behavior. As a result, little understanding exists regarding CNM desires. Further, because little is known about the correlates of CNM desire, the current study adds to the existing literature by suggesting and testing potential correlates of CNM desires. We also examined how the strength of these relationships differ as a function of gender (i.e., moderator), rather than testing gender as a correlate of CNM desires as previous studies have done.

Method

Procedure

The population of interest for this study was emerging adults (ages 18-29; Arnett, 2015). Specifically, we examined data from a large sample of college attending emerging adults, enrolled at a large public university in the Southeastern US. The study uses data from an online survey, which utilized a convenience sampling strategy. Surveys were comprised of demographic information, survey questions and scales, as well as open-ended questions.

Recruitment and Sample

Upon approval from the university institutional review board, participants were recruited through a communications studies research pool to participate in an online survey about emerging adulthood, relationships, and sexuality. Participants self-selected into the study and received partial course credit for completing the anonymous survey.

Data was collected during the spring 2015 semester. A total of 980 emerging adults participated in the study. After screening for missing and incomplete data, 53 participants (5.4%) were dropped from the study. Also, 37 participants (3.8%) who identified as sexual minorities were removed, as CNM has been suggested to be a different phenomenon for sexual minorities compared to those who identify as heterosexual (Moors et al., 2014). Thus, 890 heterosexual emerging adults were included in our analyses. A slight majority (51.9%) were women and reported as White, non-Hispanic (84%), followed by African American (7.9%), Asian/Pacific Islander (3.9%), Hispanic (2.1%), American Indian (0.3%), and 2.6% identified as “Other.” Participants were on average 19.2 years of age ($SD = 1.59$, $range = 18-29$). Just under half (46.3%) reported being in a romantic relationship at the time of study. The majority were freshmen (71.7%), followed by sophomores (17.9%), juniors (6.9%), seniors (3.3%) and 0.3% identified their year in school as “Other.”

A series of post-hoc analyses were conducted to examine whether the 53 individuals dropped from the study differed from those that remained on various demographic characteristics. Chi-square analyses indicated that participants who were dropped did not differ from those retained by gender, $\chi^2(1) = .06$, $p = .81$; year in school, $\chi^2(1) = 1.20$, $p = .27$; or relationship status, $\chi^2(1) = .50$, $p = .48$. A greater proportion of racial/ethnic minorities (9.7%) were dropped compared to White, non-Hispanic (4.5%) participants, $\chi^2(1) = 7.06$, $p = .008$.

Measures

Exogenous variable: Experimentation/Possibilities. The latent variable, *experimentation/possibilities* was measured using the Experimentation/Possibilities subscale (5 items) of the Inventory of the Dimensions of Emerging Adulthood (IDEA, Reifman, Arnett, & Colwell, 2007). Participants were first asked to think about “this time in your life,” which was defined as the present, the last few years and the next few years to come. The stem for all items on this measure then asked participants “is this period of your life a...” Sample items for the experimentation/possibilities subscale included: “time of many possibilities,” and “a time of open choices.” Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores indicated greater agreement with the perception that emerging adulthood was a period of experimentation/possibilities. For this study Cronbach’s alpha was .87 for the experimentation/possibilities subscale.

Mediating variable: Sexual identity exploration. The latent variable, *sexual identity exploration*, was measured using the Measure of Sexual Identity Exploration and Commitment scale (MoSIEC, Worthington et al., 2008). The MoSIEC is a 22-item questionnaire, which includes four subscales of sexual identity. For the purposes of this study only the *exploration* subscale (8 items) was used. Sample items included: “I am actively trying to learn more about my own sexual needs” and “my sexual values will always be open to exploration.” Response options ranged from 1 (*very uncharacteristic of me*) to 5 (*very characteristic of me*). Higher scores indicated greater sexual identity exploration. For this study, Cronbach’s alpha was .92 for the sexual identity exploration subscale.

Mediating variable: Attitudes towards casual sex. The latent variable, *attitudes toward casual sex*, was measured using the Sociosexual Orientation Inventory-Revised (SOI-R; Penke &

Asendorpf, 2008). The SOI-R, which was adapted from Simpson and Gangestad's (1991) original measure, which specifies three dimensions of sociosexuality: desires, attitudes and behavior towards casual sex. For this study we focused on attitudes. Attitudes towards casual sex was measured using three items: "Sex without love is okay," "I can imagine myself being comfortable and enjoying 'casual' sex with different partners," and "I would have to be closely attached to someone (both emotionally and psychologically) before I can feel comfortable and fully enjoy having sex with him or her" (reverse coded). Response options ranged from 1 (*strongly disagree*) to 9 (*strongly agree*). Higher scores indicated more permissive attitudes towards casual sex. For this study, Cronbach's alpha was .82.

Endogenous variable: Willingness to engage in CNM. The latent variable, *willingness to engage in CNM*, was measured using a 6-item scale developed by Moors and colleagues (2015). This measure prompts participants to "indicate their level of willingness for each of the items." A sample item from this measure was: "have sex and romantic relationships with whomever you want, but there must be no secrets between you." Response options ranged from 1 (*very unwilling*) to 7 (*very willing*). For this study, Cronbach's alpha was .92.

Moderator variable: Gender. Gender was measured using a single item that asked participants, "What is your biological sex?" Responses options were 1 (*male*), 2 (*female*), and 3 (*Other, please specify*). For this study, all participants identified as either *male* or *female*.

Control variable: Religiosity. We included religiosity as a control variable in our model. Although research has yet to examine CNM desire and religiosity, it has been shown that individuals who identified themselves as more religious also reported having more negative views of CNM relationships (Johnson et al., 2015). In our model, religiosity was included as a manifest variable with a direct path to all other variables in the model. Religiosity was measured

using a single item: “Please indicate the level of intensity of your religious beliefs?” Response options ranged from 0 (*not at all intense*) to 20 (*very intense*). Higher scores indicated a great level of religiosity.

Statistical Analyses

Descriptive statistics (means, standard deviations and frequencies) of observed variables, and the relationships among observed variables were estimated in SPSS.22. Although some of our variables violated standard normality assumptions, we used the MLR command in Mplus to correct for the non-normality in the data. Prior to testing our structural model, we conducted a multi-group confirmatory factor analysis (CFA), testing the full measurement model using Mplus 7.2. In this model all parameters were freely estimated for men and women. Modification indices, factor loadings, and model fit statistics were evaluated and used to create the best fitting model.

After the measurement properties of the proposed model were examined, we then tested the structural model. In this step, directional relationships were specified and latent regressions were added to the measurement model. To test how the relationship between the variables in the model differed as a function of gender, a multi-group SEM approach was used. All models for these analyses were identified using the fixed factor method of identification (Little, Slegers, & Card, 2006) to obtain standardized estimates. Model fit was evaluated based on the following criteria, CFI > .90, TLI > .90, SRMR < .80, and RMSEA < .80 (Bentler, 1990; Brown, 2015), in addition to examining chi-square model fit statistics. To test whether structural paths varied by gender, we first estimated the models by gender, allowing all paths to be freely estimated. We then estimated a model in which all paths were constrained to be equal across men and women. A chi-square difference test was used to determine whether the fully constrained model differed

significantly from the freely estimated model. Following this, a series of iterations were conducted to further examine the nature of significant difference in structural paths. Specifically, we allowed each path in the model to vary one at a time (for both groups) while all other paths were constrained to be equal. This was then compared to the fully constrained model. This process indicated the nature of significant effects and whether relationships among constructs differed as a function of gender.

Results

Descriptive statistics were first examined for each of the constructs and the control variable, by gender. This information is presented in Table 2. Additionally, the association between each of the constructs was examined. Bivariate correlations are presented in Table 3. Following this we conducted SEM analyses.

The first step of an SEM analysis is to test the measurement model. In our measurement model we specified four latent constructs (i.e., emerging adulthood experimentation/possibilities, sexual identity exploration, attitudes towards casual sex, and willingness to engage in CNM). After examining the factor loadings of the full measurement model, three items were removed due to unacceptable factor loadings (i.e., $< .30$). Specifically, we dropped item one from the willingness to engage in CNM scale “have sex with whomever you want, using condoms, no strings attached, no questions asked” (loading = .29), item one from the sexual identity exploration scale: “I am actively trying new ways to express myself sexually” (loading = .03), and item five from the emerging adult exploration/possibilities subscale “time of trying new things” (loading = .25). Including these items in the model resulted in initial poor model-data fit (CFI = .81; TLI = .79; RMSEA = .09; SRMR = .11). Dropping these three items resulted in an improvement in model-data fit (CFI = .89; TLI = .87; RMSEA = .08; SRMR = .08). After

examining the modification indices of the measurement model, we also found that allowing the residuals of 10 individual items to covary improved overall model-data fit. The residuals for these individual items were only allowed to covary within the construct. Item residuals did not covary across different constructs. The final measurement model had acceptable model-data fit (CFI = .93; TLI = .92; RMSEA = .06; SRMR = .08). Factor loadings and fit statistics for the final measurement model are shown in Table 4.

Following re-specification of the measurement model, directional relationships were specified. The full structural model also had acceptable model-data fit (CFI = .94, TLI = .93, RMSEA = .06; SRMR = .07). This model explained 28.8% of the variance in the dependent variable ($R^2 = .288, p < .001$). Path coefficients for the structural model are shown in Figure 2.

Testing Gender as a Moderator

The first step of our multi-group analyses was to replicate the measurement model tested above using a multi-group CFA. All factor loadings in the multi-group CFA were above .55 across men and women. Further, the multi-group measurement model had adequate model-data fit (CFI = .95; TLI = .94; RMSEA = .06; SRMR = .07). The factor loadings for men and women for this model are shown in Table 4. Model comparison statistics between the initial measurement model and the multi-group measurement model are shown in Table 5.

Following specification of the multi-group measurement model, directional relationships were specified. First, we tested a multi-group structural model where all paths were constrained to be equal across gender (CFI = .92; TLI = .92; RMSEA = .06; SRMR = .10). The variance in the dependent variable explained by this model was approximately 29% across gender (men $R^2 = .288, p < .001$; women $R^2 = .286, p < .001$). Next, we tested a model in which all paths were allowed to be freely estimated across gender (CFI = .96; TLI = .95; RMSEA = .05; SRMR =

.06). Approximately 24% of the variance in the dependent variable was explained by the freely estimated model across gender (men $R^2 = .235, p < .001$; women $R^2 = .244, p < .001$). Model comparison statistics indicated that the freely estimated model was better model-data fit than the fully constrained model, indicating significant gender differences in the structural paths. Model comparison statistics are shown in Table 5.

To test the nature of these gender differences we conducted a series of analyses in which we allowed each path in the model to vary one at a time (for both groups) while all other paths were constrained to be equal. We then compared model-data fit to the fully constrained model. In the first step of these iterations we allowed the path from emerging adulthood experimentation/possibilities to willingness to engage in CNM to vary across gender, and found that these paths were not different across gender (women $\beta = -.17, p < .001$; men $\beta = -.17, p < .01$), compared to the constrained model ($\beta = -.17, p < .001$).

In the next step, the path from emerging adulthood experimentation/possibilities to attitudes towards casual sex was allowed to vary across gender. Findings indicated that the paths were significantly different when allowed to vary by gender (women $\beta = -.001, p > .05$; men $\beta = .14, p < .05$), compared to the constrained model ($\beta = .07, p > .05$). We then allowed the path from emerging adulthood experimentation/possibilities to sexual identity exploration to vary across gender. Finding indicated that the paths were significantly different when allowed to vary by gender (women $\beta = .15, p < .05$; men $\beta = .08, p > .05$), compared to the constrained model ($\beta = .11, p < .05$).

We then examined the path from sexual identity exploration to willingness to engage in CNM. Findings did not indicate a significant difference when the path was allowed to vary by gender (women $\beta = .29, p < .001$; men $\beta = .23, p < .001$), compared to the constrained model (β

= .26, $p < .001$). Finally, we examined the path from attitudes towards casual sex to willingness to engage in CNM. Findings did not indicate a significant difference when allowed to vary by gender; however, we note that the path coefficient for women was slightly larger (women $\beta = .47$, $p < .001$; men $\beta = .33$, $p < .001$), compared to the constrained model ($\beta = .38$, $p < .001$). The path coefficients for this series of iterations are shown separately for men and women in Figure 3.

To further examine the mediating effects of sexual identity exploration and attitudes about sex, we conducted a model with only emerging adult experimentation/possibilities predicting willingness to engage in CNM. In the absence of mediating variables, this association was no longer significant for men ($\beta = -.08$, $p > .05$) and women ($\beta = -.09$, $p > .05$).

Discussion

The purpose of this study was to test a conceptual model of CNM desire for emerging adults, addressing two important limitations of previous research. First, our study is among the first to test the correlates of CNM desires and to focus exclusively on those in the developmental period of emerging adulthood. Second, our study is among the first to examine correlates and gender differences using multi-group structural equation analyses in a study of willingness to engage in CNM. Thus, this study contributes to the extant CNM and emerging adult literature, and is among the first to bridge the gap between these two areas.

Results indicated that for both men and women, emerging adult experimentation/possibilities, sexual identity exploration, and attitudes towards casual sex were associated with willingness to engage in CNM among emerging adults. At the outset, it appears that for both men and women, emerging adult experimentation/possibilities is negatively associated with willingness to engage in CNM. Also, the constructs of sexual exploration and permissive attitudes towards casual sex are positively associated with willingness to engage in

CNM for men and women. Although there appears to be a lack of gender differences across these relationships, the association between emerging adult experimentation/possibilities and willingness to engage in CNM is more complex when considering the nature of indirect effects.

Specifically, results indicated that the path from emerging adulthood experimentation/possibilities to willingness to engage in CNM may be mediated by different mechanisms across genders. For women, we found evidence for an indirect effect of sexual identity exploration on this relationship. However, this mediating pathway was not significant for men. For men we found evidence that the pathway from emerging adult experimentation/possibilities to willingness to engage in CNM was mediated by attitudes towards casual sex. We also note that this indirect effect was not present for women.

Traditionally, mediation is tested and validated by a decrease in the direct effect, when mediating variables are introduced into the model. However, our results are characteristic of a *suppression* effect, also called inconsistent mediation (MacKinnon, Krull, & Lockwood, 2000). In cases where the direct effect and indirect effects have opposite signs (-/+), suppression effects occur. Suppression effects actually increase the magnitude of the direct effect, rather than decrease it, once the mediating variables are introduced into the model. Further, the inclusion of suppressors in a model partials out criterion irrelevant variance in the independent variable (Cheung & Lau, 2007).

These results seem to suggest that for women, sexual identity exploration increases the magnitude of the direct effect because it explains some of the variance in women's emerging adult experimentation/possibilities. That is, for women, the direct effect of emerging adult experimentation/possibilities on willingness to engage in CNM is negative; however, there is a positive indirect effect through sexual identity exploration. In other words, those women who

score higher on this domain of emerging adulthood, meaning they are open to try new things and are willing to experiment/explore, are not willing to engage in CNM, unless they also are actively exploring their sexual identity. Similarly for men, attitudes towards casual sex explained the variability in emerging adulthood experimentation/possibilities. Meaning that, for men, scoring high on this domain of emerging adulthood was only positively associated with willingness to engage in CNM if they also held more permissive attitudes towards casual sex. Finally, we found evidence for full suppression, as the path from emerging adult experimentation/possibilities only becomes significant after the mediating mechanisms are introduced into the model.

Arnett (2015) asserted that the period of emerging adulthood is an important time for exploring and experimenting with different romantic relationships. Conley and colleagues (2012) were among the first to suggest that CNM may be a more appropriate arrangement than serial monogamy during this time in the life course. Our findings indicate that identifying with being an emerging adult in the realm of experimentation/possibilities is not, on its own, positively directly associated with CNM desire. Rather, the pathways to CNM desire operate indirectly through different mechanisms for men and women.

Although no other study has proposed or tested a conceptual model of CNM desire in emerging adulthood, our results are in many ways consistent with previous research. The finding that sexual identity exploration mediated the pathway from emerging adulthood experimentation/possibilities to willingness to engage in CNM, but only for women, is consistent with previous studies. For example, previous studies found that compared to men, emerging adult women reported more active sexual identity exploration (Morgan, 2012; Reid, 2013). We found that, for men only, permissive attitudes about casual sex mediated this relationship. This is

also consistent with prior research which has indicated that men hold more permissive attitudes about sex (Simpson & Gangestad, 1991; Sprecher, Treger, & Sakaluk, 2013). It may be that experimentation/possibilities during this developmental period means different things for men and women.

For example, Dworkin (2005) qualitatively examined emerging adult's personal meanings of experimentation. In this study, participants defined experimentation as a process of finding out who they are and what they like. Many stated that experimentation could pertain to any area of their life, or any behavior, including trying new sports, meeting new people, and taking new classes. However, Dworkin (2005) also found that the majority discussed experimentation with regard to sexual behavior and substance abuse. This study is consistent with our findings, suggesting that there are several developmental trajectories of experimentation for individuals in the period of emerging adulthood. That is, individuals may meet their developmental needs for experimentation in a variety of ways. Further, these choices may set them up for different relationships trajectories, some of which may include a desire for CNM.

Limitations

Findings should be considered in light of several limitations. First, our study utilized cross-sectional data. This is important to consider, as this study also tested indirect effects. We note that true mediation can only be tested with longitudinal data and methodology. Additionally, because this study only examined emerging adults, we are unable to conclude whether this phenomenon is the same across different cohorts. We also note that while the focus of this study was CNM desire during emerging adulthood, we only examined one domain of this complex developmental period. In addition to experimentation/possibilities, Arnett (2015) has

identified several additional components of emerging adulthood that were not examined in this study. As such, we advise readers to interpret our findings with this caveat in mind.

With respect to methodology, we also draw attention to the measures used in the current study. Although the MoSIEC (Worthington et al., 2008), IDEA (Reifman, Arnett, & Colwell, 2007), and the SOI-R (Penke & Asendorpf, 2008) are all widely used and validated measures, the measure of CNM desire was only recently developed (Moors et al., 2015). At present, we are unaware of any published data on the reliability or validity of this scale. Given these methodological limitations, we advise caution in the interpretation of our findings.

Additionally, our study utilized a convenience sample of college attending emerging adults and was recruited through a Southeastern university in the U.S. We note that these results cannot be generalized to the broader population of emerging adults. Although we controlled for religiosity, other unknown factors tied to geographic location likely influence willingness to engage in CNM. As such, it is likely that certain areas may endorse greater acceptance of non-traditional relationship configurations.

Finally, we also consider our exclusion of sexual minorities as a limitation to our study. The lack of diversity with regard to sexual orientation in our sample did not allow us to examine sexual orientation as a point of variation in our analyses. As CNM desire is considered to be a different phenomenon for heterosexual and sexual minorities (Moors et al., 2014), collapsing across these two populations into one group for analyses we believe would have been inappropriate. Unfortunately, due to our small number of participants who identified as sexual minorities, we did not have the power to support using multi-group SEM to examine sexual orientation as a moderator.

Implications for Research

This study is among the first to examine willingness to engage in CNM among emerging adults, and to our knowledge it is the first to examine how the experimentation/possibilities dimension of emerging adulthood is related to willingness to engage in CNM. We found a negative direct effect of experimentation/possibilities predicting willingness to engage in CNM. Future research should explore the nature of this relationship and consider replicating these findings with other samples of emerging adults. Also, given the possibility for multiple developmental trajectories from emerging adult experimentation/possibilities to willingness to engage in CNM, future research should use longitudinal data and other statistical approaches to map these divergent pathways. For example, growth mixture modeling would be a valuable tool to examine these relationships over time during the period of emerging adulthood.

This study was also among the first to test correlates of willingness to engage in CNM among emerging adults. As stated earlier, emerging adults' approach to sex and sexuality is complex and multifaceted. In this study we focused on experimentation/possibilities as one relevant dimension of emerging adulthood. Future research may also consider exploring how the dimensions of identity exploration and self-focus may be related to willingness to engage in CNM. Also, while previous studies have considered gender as a predictor, no study was found that has adequately accounted for the moderating effect of gender on CNM desire and its correlates. This study revealed that the men and women may have different pathways to CNM desire. We recommend that future research on CNM include gender as a moderator, rather than a predictor or control variable. Further, because our study only tested three correlates, future research should test additional correlates not considered in this study (e.g., personality, attitudes towards sex and commitment).

Finally, as noted earlier, a significant limitation of this research was the focus on only heterosexual emerging adults. Future work should evaluate the extent to which this phenomenon differs across sexual orientation, as well as gender. Researchers should examine more diverse samples and replicate this study, testing sexual orientation as a moderator with multi-group SEM. Additionally, because sexual identity exploration has typically been studied among sexual minorities, this may represent another future avenue of inquiry for those who are specifically interested in studying willingness to engage in CNM among sexual minorities.

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CHAPTER 5:

Conclusion

Over the past decade, research on non-traditional relationships has increased (Barker & Langdridge, 2010). One type of relationship that has received growing attention is consensual non-monogamy (CNM), a broad category that encompasses a variety of open relationships (Frank & DeLamater, 2010). However, research on CNM has encountered important methodological challenges (Rubel & Bogaret, 2014). One noted limitation is that much of the research on CNM has focused on middle-aged individuals, with little attention to those in the developmental period of emerging adulthood (e.g., ages 18-29; Arnett, 2015).

Using multiple methodologies, the three manuscripts presented here examined various components of CNM among emerging adult samples. Several suggestions and directions for future research have been discussed. Taken together, this collection of work draws three conclusions from the presented studies: (a) there is a need to strengthen existing methodology in research on CNM attitudes and desire, (b) qualitative approaches are needed for understanding these phenomena among emerging adults, and (c) there are important gender differences which should be further examined in studies focused on CNM desire.

In manuscript one, a systematic review and critique of the methodology used in CNM research revealed several opportunities for future research. This paper focused on, and was the first to review, previous research on CNM attitudes and desire. This review also critically considered those studies that included emerging adult participants in their samples. Several conclusions were made from a review of 18 empirical articles (25 studies). A broad conclusion is that research on CNM attitudes and desire has shown little improvement with regard to addressing consistent limitations in the methodologies used between 1974 and 2016. Suggestions were made regarding study replication, sampling, and measurement. Specifically, this review found that researchers in the field often revised others' measures for their own study purposes.

As such, no studies were found that fully replicated previous study findings. Full replication is necessary, and indeed a next step, to validate the findings of other scholars in this field.

With regard to sampling, this review drew several conclusions. The samples from studies on CNM attitudes and desire are less homogeneous than samples from studies on CNM behavior, particularly with regard to age. However, this review noted several limitations with the large age range used in studies on CNM attitudes and desire. From a life course perspective, a large range in age is problematic when researchers do not control for this. Specifically, including participants across the life course together in a sample does not control for generational shifts (or cohort effects) regarding these phenomena, or the unique developmental tasks associated with different stages in the life course. Future researcher should control for age or examine emerging adults as a distinct population.

With regard to measurement, there was little overlap across studies. It appears that there is not yet a consensus as to how these phenomena are best measured. Further, of the measurements that are available, few have published data on the validity, reliability, and psychometric properties of these measure. It is recommended that future researcher validate existing measurements in the field.

Following information gleaned from this review, the second manuscript contributed to the extant CNM literature by addressing several noted limitations within the field. As CNM desire, or willingness to engage in CNM, is an understudied phenomenon, prior research has yet to examine CNM desire using qualitative methods. This study was among the first to use a mixed-methods approach to examine a large sample of emerging adults' (ages 18-29; $N = 549$) responses to a question about their willingness to engage in CNM. Qualitative content analysis was used to analyze these responses and revealed three distinct groups (*Unwilling*, *Willing*, and

Open-Minded). Further, several subthemes emerged within each group that helped illuminate *why* this sample of emerging adults were (or were not) willing to engage in CNM. Results from these qualitative analyses revealed that a sizeable proportion of emerging adults were *Willing* or *Open-Minded* to engaging in CNM. Whereas most quantitative measures of CNM desire have documented individuals' willingness and unwillingness, such measures have not captured those individuals who are open-minded. Further, quantitative measures of CNM desire overlook a very important aspect of this phenomena, which is the reasons why they were willing (or not) to engage in CNM. Moving forward, it is recommended that future researcher consider using qualitative methodology in their assessment of CNM desire to consider the important meanings and nuances that quantitative measures have difficulty assessing.

Quantitative analyses from this study considered the relationship between group membership, gender, and perceived adulthood status. Results indicated that greater proportion of women were in the *Unwilling* group. Further, a greater proportion of men were in the *Willing* group. These findings were consistent with previous research on CNM desire, and provided additional evidence for important gender differences in these phenomena. It is noted that no group differences were found for comparisons based on perceived adulthood status.

Practical implications were noted with regard to the sexual health risks associated with multiple concurrent partnerships during this developmental period. Specifically, a large minority of emerging adult men and women indicated that they were *Open Minded* or *Willing* to engage in CNM. However, when examining the reasons emerging adults gave for their approach toward CNM, it became clear that many emerging adults do not understand CNM. It appeared that some individuals equated CNM with infidelity, while others viewed it to be the same as hooking up. Despite CNM being defined for participants prior to responding to the qualitative item, it seems

that some misunderstood this relationship type, which is not discussed within the dominant discourse of society. It may also be that some emerging adults simply lack exposure to and education on alternatives to monogamy. This lack of awareness may increase exposure to sexual health risks among emerging adults who are willing to engage in CNM. We suggest that college sexual and relationship health education programs incorporate the discussion of CNM relationships into their curricula.

Building upon this work, manuscript three proposed and tested a conceptual model of CNM desire during emerging adulthood, examining the moderating effect of gender. Specifically, this study utilized multi-group structural equation modeling and tested this conceptual model using a large sample of college attending emerging adults (ages 18-29; $N = 890$). Based on the theory of emerging adulthood and the extant literature, proposed correlates of CNM desire included experimentation/possibilities during emerging adulthood, sexual identity exploration, and casual sex attitudes. Gender was tested as a moderator of all model paths.

Results indicated that emerging adult experimentation/possibilities, sexual identity exploration, and casual sex attitudes were all positively related to CNM desire. Also, the pathway from emerging adult experimentation/possibilities to willingness to engage in CNM was differentially mediated across gender. Specifically, for women there was a positive indirect pathway from experimentation/possibilities during emerging adulthood to CNM desire through sexual identity exploration. For men there was a positive indirect pathway from experimentation/possibilities during emerging adulthood to CNM desire through casual sex attitudes. These findings further illustrated the nature of gender difference in CNM desire. It is recommended that future research further examine these important differences, and test these accordingly. It is suggested that gender be tested as a moderator in statistical analyses and

conceptual models, rather than a predictor. Finally, given the consistency of gender differences found in research on CNM desire, it is also recommended that future research examine the measurement invariance of CNM desire measures across gender.

Taken together, these three manuscripts sought to identify important limitations in methodology used in CNM research. These papers specifically focused on CNM attitudes and desire. Manuscripts two and three also sought to address several of these limitations. It was a central aim that through the critique and identification of methodological limitations in the field, these papers would provide CNM scholars with clear directions and guidelines for improving future research on CNM relationships.

In conclusion, CNM is a relatively young and new field of research. As such, this collection of papers is concluded with a reminder that despite limitations in the field, the study of these phenomena represents an important step toward growing this content area. While many of the earliest studies may now be considered antiquated, they are important reminders of how these phenomena were first conceptualized in research. Further, it is notable that there has been some variation in how CNM is defined and conceptualized from 1974 to 2016. For example, only recently has CNM been conceptualized as consisting of three different components. As we move forward with the study of CNM, it is important to remember that these phenomena will be constantly evolving as society comes to better understand alternatives to monogamy.

APPENDIX

Table 1. *Study Characteristics and Methodological Summary.*

Author (year)	Sample Characteristics	Sampling Methods	CNM Measures	Method/ Focus
Billingham (2008)	Study 1: $N = 359$; participants were single, never married undergraduate females enrolled at a large university in the mid-west. Age not reported Study 2: $N = 111$; participants were single, never married undergraduate female students enrolled at a large university in the mid-west. Age not reported	Data was collected from students enrolled in large lecture classes at a large university in the mid-west. Participation was voluntary and anonymous	Study 1: In 1986 participants rated their willingness to participate in 13 alternative marital and family forms. Specifically, participants reported their “willingness to participate” on a 7-point Likert-type scale Study 2: In 2003 participants completed a similar measure, rating their willingness to engage in 24 alternative marital and family forms	Quantitative/ Desire
Billingham & Sack (1986)	$N = 359$; participants were single, never married undergraduate female students enrolled at a large university in the mid-west. Age not reported	Data was collected from students enrolled in large lecture classes at a large university in the mid-west. Participation was voluntary and anonymous	In 1986 participants rated their willingness to participate in 13 alternative marital and family forms. Specifically, participants reported their “willingness to participate” on a 7-point Likert-type scale	Quantitative/ Desire
Billingham, Perera, & Ehlers (2005)	$N = 111$; participants were single, never married heterosexual undergraduate female students enrolled at a large university in the mid-west. Age not reported	Data was collected from students enrolled in large lecture classes at a large university in the mid-west. Participation was voluntary and anonymous	In 2003 participants rated their willingness to participate in 24 alternative marital and family forms. Specifically, participants reported their “willingness to participate” on a 7-point Likert-type scale	Quantitative/ Desire

Table 1. *Continued.*

Author (year)	Sample Characteristics	Sampling Methods	CNM Measures	Method/ Focus
Burris (2014)	<i>N</i> = 262; participants were undergraduate students; 74% women; 51% in a committed relationship with one partner; 62% North American/Caucasian. Age not reported	Participants were enrolled in second-year psychology courses and were recruited to complete the survey on a volunteer basis	Perspective-taking manipulation and scenario: Prior to reading one of six scenarios, participants were either instructed to “put yourself in the [characters] place and experience the situation from his/her perspective,” or received no perspective-taking instructions. Scenarios included: polyamory and a love affair. Participants rated the character on 12 positive and negative traits using a 7-point Likert scale	Quantitative/ Attitudes
Conley, Moors, Matsick, & Ziegler (2013)	Study 1: <i>N</i> = 189; 66% female; 63% European/White; 69% undergraduate students. Mean age was 25 (<i>SD</i> = 10.5) Study 2: <i>N</i> = 1,101; 65% female; 72% European/White; 31% college students. Mean age was 24 (<i>SD</i> = 12.5) Study 3: <i>N</i> = 132; 68% female; 60% European/White. Mean age was 35 (<i>SD</i> = 13.8) Study 4: <i>N</i> = 269; 75% female; 70% European/White. Mean age was 34 (<i>SD</i> = 13.8)	Study 1: Participants recruited by student researchers via social networking sites and emailing friends links. Study 2, 3 & 4: Participants were recruited via links on classified advertisement sites (e.g., Craigslist) and social networking sites (e.g., Facebook)	Study 1: Open-ended questions about the benefits of monogamy Study 2, 3 & 4: Experimental manipulation of relationship vignettes; participants rated relationship type (CNM or monogamy) on various relationship relevant and arbitrary traits. All ratings were made on Likert-type scales on which higher numbers indicated greater levels of a given quality	Mixed- Methods/ Attitudes

Table 1. *Continued.*

Author (year)	Sample Characteristics	Sampling Methods	CNM Measures	Method/ Focus
Edwards & Stinnett (1974)	<i>N</i> = 768; participants were college students representing five regions of the nation. Age not reported	Recruitment not reported	Alternate Life Styles Perceptions Scale (ALPS). 35-item scale. Responses recorded on a 5-point Likert scale. Assesses perceptions of 7 “alternative” lifestyles (extramarital sex with mutual consent, extramarital sex without consent, homosexual marriage, cohabitation, trial marriage, group marriage, communal living)	Quantitative/ Attitudes
Grunt- Mejer & Campbell (2016)	<i>N</i> = 375; participants were college students; 84% women; 89% heterosexual. Mean age was 21.6 (<i>SD</i> = 3.09)	Recruitment not reported	<p>Participants were asked to define three different types of CNM: polyamory, swinging, and open relationships. Definitions were scored on accuracy on a scale of 0-3; 3 represented an accurate definition. Scores were totaled to measure participants’ knowledge about CNM</p> <p>Experimental manipulation of relationship vignettes; participants rated relationship type (CNM or monogamy) on various characteristics including 15 relationship satisfaction items, six cognitive abilities items, and six morality items. All ratings were made on Likert-type scales on which higher scores indicated greater levels of a given quality</p>	Mixed- Methods/ Attitudes

Table 1. *Continued.*

Author (year)	Sample Characteristics	Sampling Methods	CNM Measures	Method/ Focus
Hutzler, Giuliano, Herselman, & Johnson (2015)	Study 1: $N = 100$; 38% women; 77% identified as White/European-American; 77% in a relationship. Mean age was 32.4 ($SD = 11.18$; $range = 18-63$) Study 2: $N = 196$; 46.9% women, 80% identified as White/European-American; 64% in a relationship. Mean age was 33.3 ($SD = 11.18$; $range = 18-67$)	Participants were recruited using Amazon Mechanical Turk and were compensated \$0.35 for completing the survey	Participants were presented with a definition of polyamory and were instructed to use this definition when answering the remaining questions. Participants responded to a variety of questions using Likert-type scales that assessed perceptions of people in polyamorous relationships (modified from Conley et al., 2013), attitudes towards and personal interest in polyamory. The authors used an 8-item version of the attitudes towards polyamory (ATP) scale (Johnson et al, 2015). The authors created a 5-item index to assess personal interest in polyamory	Mixed-Methods/ Attitudes & Desire
Johnson, Giuliano, Herselman, & Hutzler (2015)	Study 1: $N = 100$; 38% women; 77% White/European-American. Mean age was 32.3 ($SD = 11.18$; $range = 18-63$) Study 2: $N = 134$; participants were college students; 61.9% women; 82.8% White/European-American. Mean age was 20.2 ($SD = 1.77$; $range = 18-31$) Study 3: $N = 196$; 46.9% women; 80.1% White/European-American. Mean age was 33.3 ($SD = 12.09$; $range = 18-79$)	Study 1 & 3: Participants were recruited using Amazon Mechanical Turk, and were compensated between \$0.20 to \$0.50 Study 2: Students were recruited through social networking sites, online campus message boards and word-of-mouth	Participant completed an online survey comprised of questions from the Attitudes Towards Polyamory Scale (ATP), among other personality and attitude measures used to test the validity of the ATP scale. Validation and revision of the ATP scale resulted in a total of 7 items. Before completing the ATP scale, participants were given a definition to ensure that they had a basic understanding of polyamory	Quantitative/ Attitudes

Table 1. Continued.

Author (year)	Sample Characteristics	Sampling Methods	CNM Measures	Method/ Focus
Jurich & Jurich (1975)	<i>N</i> = 128; 50% women, 50% married; 50% university affiliated (student or faculty). Age not reported	Participants were randomly selected from telephone directories and recruited via telephone calls. Individuals who wished to participate in the study were interviewed at their residence	Participants completed a Q-sort task, ranking 10 alternatives to monogamy. Participants were first asked to rank the cards while considering which alternative would provide “maximum growth” and then while considering which was most “feasible.” Following each Q-sort, participants were asked why they ranked the cards as they did; responses were recorded qualitatively	Mixed-Methods/ Desire
Matsick, Conley, Ziegler, Moors, & Rubin (2014)	<i>N</i> = 126; 55.6% women; 87.9% White/European-American; 72.5% undergraduate students; 78.6% heterosexual. Mean age was 25 (<i>SD</i> = 11.15)	Participants were recruited via survey links on classified advertisement sites (e.g., Craigslist) and social networking sites (e.g., Facebook)	Randomly assigned participants to read only one of the three definitions of a type of CNM relationship (polyamorous relationship, open relationship or swinging). Participants then reported their attitudes towards this relationship and the people in this type of relationship. Participants rated individuals involved in a certain type of relationship on negative and positive character traits using a 5-point scale	Quantitative/ Attitudes
Moors, Conley, Edelstein, & Chopik (2015)	<i>N</i> = 1,281; participants were heterosexual and monogamous; 71% women; 57% in a relationship; 70% White/European-American. Mean age was 23.1 (<i>SD</i> = 7.24; <i>range</i> = 18-67).	Participants were recruited via survey links on classified advertisement sites (e.g., Craigslist) and social networking sites (e.g., Facebook)	Attitudes toward CNM was measured using a scale composed of 6 items. Participants rated the extent to which they agreed with each statement, using a 7-point Likert scale. Participants rated their willingness to engage in 6 different scenarios characterized by CNM using a 7-point Likert scale	Quantitative/ Attitudes & Desire

Table 1. Continued.

Author (year)	Sample Characteristics	Sampling Methods	CNM Measures	Method/ Focus
Rao & Rao (1980)	<i>N</i> = 230; participants were African American, college students; 61.7% women. Age not reported	A random sample of students enrolled in a Southern University were invited to participate in the study	"Willingness to participate" in alternative marital and family forms was measured using a series of 6-point Likert scale items. The respondents were asked to use the scale to indicate their levels of willingness to participate in 16 alternative marital and family forms.	Quantitative/ Desire
Rubin, Moors, Matsick, Ziegler, & Conley (2014)	<i>N</i> = 2,395; 5.3% identified as part of a CNM relationship; 69% women; 90% heterosexual, 76% identified as White/European-American. Mean age was 27.7 (<i>SD</i> = 10.79; <i>range</i> = 18-84)	Participants were recruited via survey links on classified advertisement sites (e.g., Craigslist) and social networking sites (e.g., Facebook)	Willingness to engage in CNM was measured using 6 items (Moors et al., 2015). Participants rated their willingness to engage 6 different scenarios characterized by CNM using a 7-point Likert scale. An eighth option was added that specified "I'm currently in this type of relationship"	Quantitative/ Desire
Spanier & Cole (1975)	<i>N</i> = 579; 50.4% women; 25% of the sample had graduated from college. Mean age was 29 (<i>SD</i> = 15; <i>range</i> = 17-93)	A stratified area probability sample from a Midwestern community of 40,000 people	Survey included questions to examine the respondents' desire to participate in, knowledge of, and attitudes toward mate swapping and extramarital sexual relations	Quantitative/ Attitudes & Desire
Stinnett & Taylor (1976)	<i>N</i> = 768; 71% women; participants were undergraduate students. <i>Range</i> = 17-30+. 45.6% were in the 19-20 category; 1.19% were 30+	Recruitment not reported	Alternate Life Styles Perceptions Scale (ALPS; Edwards & Stinnett, 1974). 35-item scale recorded on a 5-point Likert scale. Assessed perceptions of seven alternative lifestyles (extramarital sex with mutual consent, extramarital sex without consent, homosexual marriage, cohabitation, trial marriage, group marriage, communal living)	Quantitative/ Attitudes

Table 1. *Continued.*

Author (year)	Sample Characteristics	Sampling Methods	CNM Measures	Method/ Focus
Strong (1978)	<i>N</i> = 353; participants were college students; 47.6% women. Age not reported	A proportionate stratified random sampling procedure was used. Questionnaires were either delivered or mailed to participants	"Willingness to participate" in alternative marital and family forms was measured using a series of 6-point Likert scale items. The respondents were asked to use the scale to indicate their levels of willingness to participate in 12 alternative marital and family forms	Quantitative/ Desire
Wise & Strong (1980)	<i>N</i> = 203; participants were undergraduate students; 48.8% women. Age not reported	Recruitment not reported	"Willingness to participate" in alternative marital and family forms was measured using a series of 12, 6-point Likert scale items. Participants were asked to use the 6-point scale to indicate their levels of willingness to participate in 12 alternative marital and family forms	Quantitative/ Desire

Table 2. *Mean Differences for Constructs by Gender.*

Variables	<u>Male</u>		<u>Female</u>		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Experimentation/ Possibilities	3.95	.86	4.20	.76	-4.64	880	.000
CNM Desire	2.64	1.47	1.81	1.22	9.19	878	.000
Casual Sex Attitudes	4.80	1.51	4.42	1.23	4.14	879	.000
Sexual Identity Exploration	2.76	.94	2.64	1.04	1.69	860	.091
Religiosity	10.48	6.33	11.53	6.12	-2.51	876	.012

Table 3. *Bivariate Relationships among Constructs.*

	Experimentation/ Possibilities	CNM Desire	Casual Sex Attitudes	Sexual Identity Exploration
Experimentation/ Possibilities	-	-.073*	.168***	.124***
CNM Desire	-	-	.290***	.366***
Casual Sex Attitudes	-	-	-	.366***
Sexual Identity Exploration	-	-	-	-

Table 4. *Loadings and Residuals for Indicators in Measurement Model.*

Latent Construct	Measurement Model	Multi-Group Measurement Model	
<i>Indicator</i>	Loading	Loading for Men	Loading for Women
Willing to Engage in CNM			
<i>Item1</i>	.75 (.02)	.71 (.04)	.77 (.04)
<i>Item2</i>	.89 (.02)	.89 (.02)	.90 (.03)
<i>Item3</i>	.90 (.02)	.89 (.02)	.91 (.03)
<i>Item4</i>	.86 (.02)	.86 (.02)	.84 (.04)
<i>Item5</i>	.74 (.03)	.81 (.03)	.64 (.05)
Attitudes Toward Casual Sex			
<i>Item1</i>	.81 (.02)	.87 (.03)	.75 (.04)
<i>Item2</i>	.91 (.02)	.95 (.02)	.83 (.05)
<i>Item3</i>	.61 (.03)	.56 (.05)	.58 (.05)
Sexual Identity Exploration			
<i>Item1</i>	.78 (.02)	.75 (.03)	.81 (.03)
<i>Item2</i>	.71 (.03)	.73 (.04)	.73 (.03)
<i>Item3</i>	.69 (.02)	.70 (.04)	.69 (.03)
<i>Item4</i>	.87 (.02)	.88 (.02)	.86 (.02)
<i>Item5</i>	.81 (.02)	.82 (.03)	.81 (.03)
<i>Item6</i>	.81 (.02)	.82 (.03)	.82 (.03)
<i>Item7</i>	.60 (.03)	.56 (.05)	.63 (.04)
Experimentation/Possibilities			
<i>Item1</i>	.81 (.02)	.83 (.03)	.77 (.04)
<i>Item2</i>	.93 (.02)	.93 (.02)	.92 (.02)
<i>Item3</i>	.62 (.03)	.58 (.04)	.66 (.04)
<i>Item4</i>	.67 (.03)	.72 (.04)	.60 (.05)

Note. All loading are standardized and significant at $p < .001$; standard errors in parentheses.

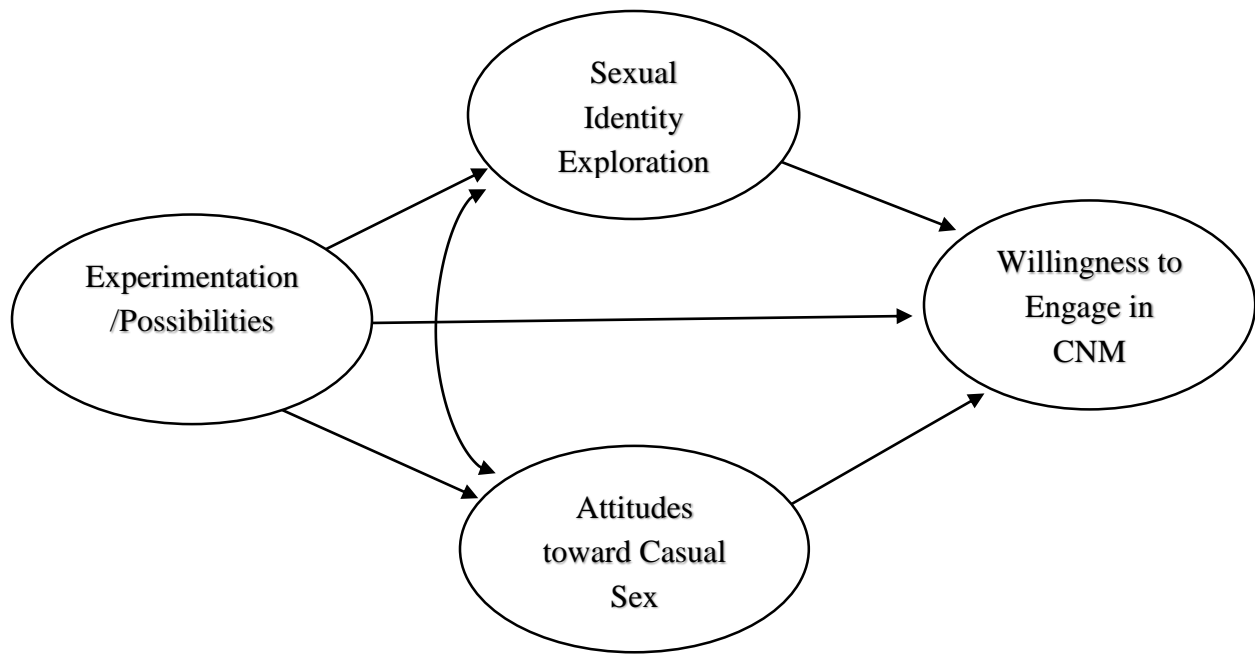
Note. Measurement model fit statistics: $\chi^2=677.501$, $df=154$; SCF=1.10; RMSEA= .062; CFI=.935; TLI=.920; SRMR= .079. Multi-group measurement model fit statistics: $\chi^2=643.608$, $df=270$; SCF=1.08; RMSEA= .056; CFI= .951; TLI=.938; SRMR= .066.

Table 5. *Goodness of Fit Statistics for the Estimated Models.*

<i>Model Specified</i>	X^2	<i>df</i>	ΔX^2	Δdf	<i>CFI</i>	ΔCFI	<i>TLI</i>	<i>SRMR</i>	<i>RMSEA</i>
1. Measurement model	677.501***	154			.94		.92	.08	.06
2. Multi-group measurement model	643.608***	270	33.893	116	.95	.01	.94	.07	.06
3. Structural model	627.301***	164			.95		.93	.07	.06
4. Multi-group structural model; freely estimated	601.014***	288	26.287	124	.96	.01	.94	.06	.05
5. Multi-group structural model; fully constrained	969.531***	372	368.517***	84	.93	.03	.92	.10	.06

Note. * $p < .05$; ** $p < .01$; *** $p < .001$

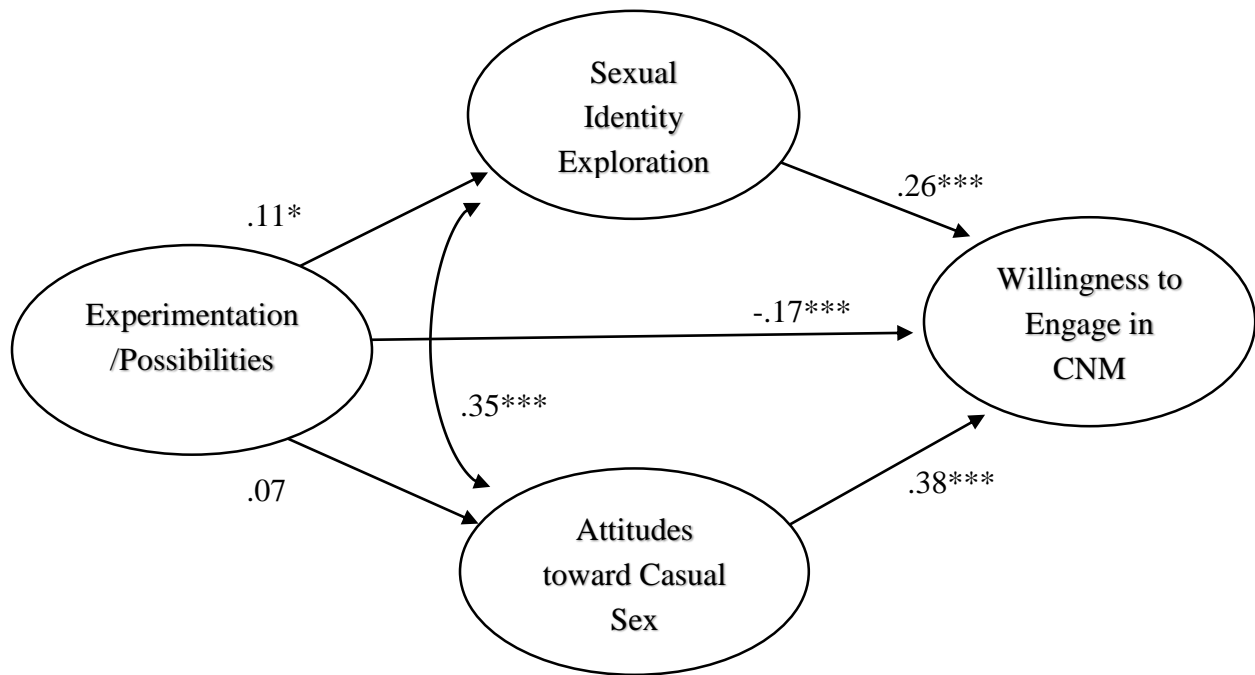
Note. ΔX^2 is tested on the previous model.



Note. Control variable: religiosity.

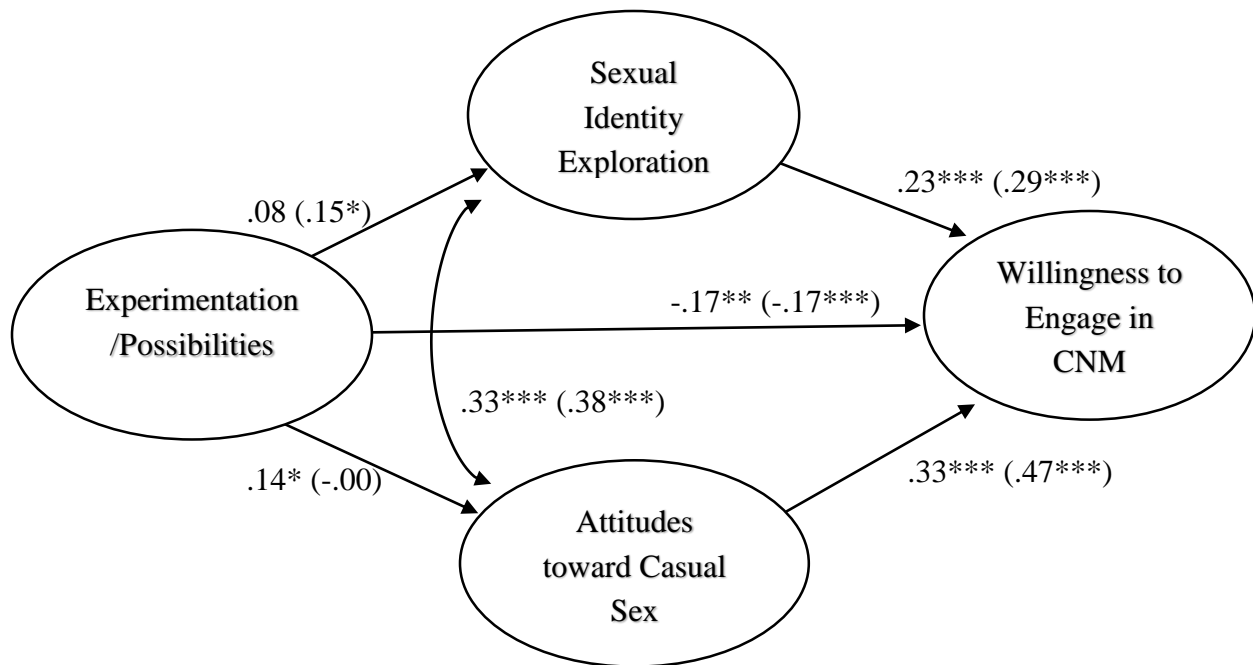
Note. Gender tested as a moderator for all structural paths.

Figure 1. *Conceptual Model of Tested Variables and Relationships.*



Note. $*p < .05$; $**p < .01$; $***p < .001$

Figure 2. Path Coefficients from the Structural Model.



Note. * $p < .05$; ** $p < .01$; *** $p < .001$

Note. Path coefficients for women are in parentheses.

Note. Each coefficient represents the moderating effect of gender on each path, while all other paths in the model were constrained to be equal.

Figure 3. Path Coefficients from the Multi-Group Model.

VITA

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