

LIVING APART TOGETHER (LAT) IN OLDER ADULTHOOD

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## ABSTRACT

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Unmarried older adults have been increasing as a share of the population in recent decades due to changes in patterns of union formation and dissolution. Unmarried older adults may be in a non-residential relationship, which can be either a dating or living apart together (LAT) relationship. Yet, most social science surveys do not measure these relationships. Recent studies have called attention to LAT relationships among older adults. However, scant research examines LAT relationships in the United States using quantitative data. Researchers face challenges in studying LAT relationships, including how to define and measure LAT relationships. It is unclear whether LAT relationships are a new family form for older adults. Using data from the 2011 Wisconsin Longitudinal Study (WLS), this dissertation sheds light on conceptualizing LAT relationships in older adulthood. The WLS has a series of questions about dating behaviors that can be used to differentiate dating and LAT relationships. First, I examined what factors are associated with being in LAT relationships and whether LATs expect to cohabit or marry in the future. Second, I compared social and economic demographic characteristics of LAT relationships to other relationship types. Finally, I estimated how relationship type is linked the psychological well-being of older adults by comparing LATs and other relationship types, including single, dating, cohabitation, remarriage, and first marriage. The findings showed that LATs had different social and economic demographic characteristics than daters and cohabitators in later life. Older adults who were in LAT relationships were reluctant to expect to cohabit or marry in the future. LAT relationships were a long-term and committed relationship for older adults. About 86% of LATs had no expectations to either cohabit or marry. Previous marital experiences were associated with being in LAT relationships. Older adults who were divorced or

widowed were more likely to be LATs and less likely to be daters or cohabitators. The psychological well-being of LATs was no worse than that of either cohabitators or married older adults. LAT relationships have unique meaning and benefits for psychological well-being in later life. The results confirmed that LAT relationships are distinct from cohabitation and marriage. This project provides new insights on LAT relationships in older adulthood.

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## CHAPTER I: INTRODUCTION

Rapid changes in patterns of partnership formation and dissolution in recent decades mean that intimate relationships have become more diverse among older adults. The proportion of middle-aged adults who was single has risen 50% since 1980 (Lin & Brown, 2012). One in three baby boomers were currently unmarried. Among these unmarried boomers, the majority of them were either divorced or never married (Lin & Brown, 2012). The gray divorce rate, which refers to divorces that occur at ages 50 and older, has doubled since 1990. One in four divorces in 2010 occurred to persons aged 50 and older in the United States (Brown & Lin, 2012). The increases the single or unmarried population among middle-aged and older adults indicate a large proportion of them have the potential to form new partnerships in later life.

Most older singles do not repartner through either cohabitation or remarriage after marital dissolution. Among women who experienced a marital dissolution at aged 50 and older, only 24% of divorced women and 6% of widowed women were remarried or cohabiting. Among men who had a later life marital dissolution, 43% of divorced men and 24 % of widowed men were remarried or cohabiting (Brown, Lin, Hammersmith, & Wright, 2018). However, older singles may form intimate partnerships that do not involve coresidence. In fact, the rise in unmarried individuals suggests the availability of a large pool of potential partners for the non-residential relationship. For example, nearly 14% of singles who aged 57-85 were in a dating relationship (Brown & Shinohara, 2013).

A non-residential relationship can be either a dating or living apart together (LAT) relationship. Living apart together (LAT) is one of the partnerships that is raising research interest. Connidis, Borell, & Karlsson (2017) formulated a definition in LAT relationships from previous studies: “LAT is a chosen, intimate relationship between partners who are committed

to LAT and to each other for the long term and who live in separate homes” (Connidis et al., 2017).

The definition of LAT is widely debated. Many studies are from European countries, and estimates have shown roughly 10% of adults are possibly LATs (Castro-Martín, Domínguez-Folgueras & Martín-García, 2008; Duncan & Phillips, 2011; Régnier-Loilier, Beaujouan & Villeneuve-Gokalp, 2009). However, scholars have acknowledged that LAT relationships might be referred to by different terms in different countries (Duncan & Phillips, 2011; Levin, 2004). Prior studies have defined LAT relationships in various ways. For example, Castro-Martín et al. (2008) identified LAT relationships as those in which individuals had romantic partnerships and their relationship duration was more than two years. They also referred to LAT relationships as “non-residential partnerships.” Régnier-Loilier et al. (2009) indicated LATs were those who reported living alone but had a stable intimate relationship. The different definitions of LAT relationships reveal the challenges of measuring LAT relationships.

One of the challenges is how to measure dating and LAT relationships. Because LAT relationships do not involve co-residence, it is arguably challenging to pinpoint what constitutes a LAT relationship as opposed to a dating relationship. Intentions are key but can be challenging to measure. Current studies may be confounding dating and LAT relationships. Additionally, some studies do not separate LAT relationships by age which ignores the different meanings and motivations of dating and LAT relationships between young adults and older adults (Connidis et al, 2017). In the United States, 6% of men and 7% women ages 23-70 were in LAT relationships (Strohm, Seltzer, Cochran, & Mays, 2009). Strohm et al. (2009) indicated LAT relationships were those in which individuals had a main romantic partner but did not live together. Their figures are probably overestimates because they may include adults who are in dating

relationships. Additionally, their study did not focus on older adults in LAT relationships. In Western European countries, living apart together relationships are increasingly acceptable (Karlsson & Borell, 2005). However, scant research examines LAT relationships in the United States. Although recent studies have emerged to discuss LAT relationships among older adults in the United States, most of these studies are qualitative and thus cannot offer estimates of LAT relationships by using quantitative data (Bencon & Coleman, 2016a, 2016b; Connidis et al, 2017).

Dating or LAT relationships in later life may offer many benefits of a close intimate relationship without the constraints entailed by co-residence. The meanings and benefits of a non-residential partnership also differ from a coresidential partnership. Different types of partnerships have various effects on older adults' well-being and social support (Wright & Brown, 2017). Hence, it is important to address why and how older adults choose to have a nonresidential partnership rather than cohabitation or marriage. Furthermore, it is important to distinguish dating and LAT relationships because they have different motivations and meanings among older adults (Connidis et al, 2017).

The central aim of this project is to conceptualize the definition of LAT relationships for older adults in the United States. This project contains three analytic chapters. The first and second analytic chapters will focus on examining how LAT relationships are different from other types of intimate relationships and what factors are associated with being LAT relationships. The final analytic chapter will estimate how relationship type is linked to older adults' psychological well-being by comparing LATs and other intimate relationships, such as single, dating, cohabitation, remarriage, and first marriage. In this project, I use data from the Wisconsin Longitudinal Study (WLS). The Wisconsin Longitudinal Study (WLS) is a longitudinal study of

a random sample of 10,317 men and women who graduated from Wisconsin high schools in 1957. The advantage of WLS is that the 2011 survey has a series of questions about dating behaviors. These questions allow me to differentiate between daters and LATs. The WLS is the best data to measure and define LAT relationships because other surveys do not have questions about dating behaviors, particularly for older adults. Moreover, the WLS contains indicators of attitude, relationships, and physical and mental health that provide the opportunity to study various features of LATs, such as expectations of cohabitation and marriage, autonomy or gender ideology. For analysis, I will use data in the wave of 2011 CAPI, including graduate and sibling samples. The sample of graduates were born between 1938 and 1940, and the majority sample of siblings were born between 1930 and 1948.

First, I will examine several indicators for defining LAT relationships by showing the descriptive statistics. I will also do multivariate analysis to measure expectations of cohabitation and marriage among those in LAT relationships. Because WLS did not ask daters' expectations of cohabitation or marriage, I will concentrate on expectations of cohabitation and marriage among LATs. Although WLS did not ask questions about expectations of cohabitation and marriage for daters, WLS did ask cohabitators about their expectations of marriage. Thus, I can compare how differences in expectations of marriage between LAT relationships and cohabitation. This analysis will inform an important debate in LAT relationships research about whether LAT is a new family form or simply a stepping stone to cohabitation and marriage more akin to dating. Therefore, the goal of this chapter is to conceptualize LAT relationships by exploring the different expectations of cohabitation and marriage among older adults who are in LAT relationships. Previous research has shown that older adults who are in LAT relationships are less likely to expect to cohabit than are young adults (Coulter & Hu, 2017). Older adults who

are in LAT relationships may see their relationships as an alternative to cohabitation or marriage. This concept indicates LAT relationships as a new family form in later life (Connidis et al, 2017). Likewise, older adults who are in cohabiting unions tend to be reluctant to get married, signaling cohabitation is a long-term alternative to marriage (Brown, Bulanda & Lee, 2012). However, it is unclear what and how features differ between LAT relationships and cohabitation when both of them are seen as an alternative to marriage. Understanding the differences between LAT relationships and cohabitation may help to assess whether LATs is a new family form. Moreover, many researchers are concerned that older adults opt for LAT relationships because they want to retain their autonomy or avoid the obligation from gender norms, particularly for older women (Duncan, 2015; Karlsson & Borell, 2002; Upton-Davis, 2012). Thus, I also examine the autonomy and the attitude of gender role in this section.

Second, I will conceptualize LAT relationships by comparing their social and economic demographic characteristics with single, dating, cohabitation, remarriage and first marriage. Then, I will use the logistic regression to predict what factors are related to being daters, LATs, or cohabitators. Existing concepts of LAT relationships for the definition are ambiguous. The distinction between dating and LAT relationships is one of the main challenges. Unlike a formal marriage or cohabitation which has either a legal status or physically living together respectively, there is no clearly defined cut-off point to measure LAT relationships as distinct from dating (Strohm et al, 2009; Duncan & Phillips, 2010). Prior research may be confounding dating and LAT relationships when studying intimate relationships. Additionally, dating and LAT relationships seem to have different meanings for older adults. A qualitative study showed that older adults struggle to call their partners as boyfriend/girlfriend (Benson & Coleman, 2016b). Research for distinguishing dating and LAT relationships has remained scant, although a study

has found that LATs and daters are distinct across demographic characteristics (Brown, Manning, Payne, & Wu, 2016). There are also few studies that compare LATs and other types of relationships. Thus, in this project, I not only examine the differences between dating and LAT relationships but also discuss how LAT relationships differ from cohabitation, remarriage and first marriage among older adults.

Finally, I will examine psychological well-being of older adults by relationship type, including single, dating, LAT, cohabiting, remarried, and first married relationships. Different types of partnerships may indicate different meanings for individuals' life course. No researchers have focused on psychological well-being in LAT relationships although some researchers have examined relationship quality in later life by comparing LATs with other unions. One study found that older adults in LATs are less likely to be very happy and to have high support than those in marriage and remarriage, but they also have lower strain (Lewin, 2017a). The other study showed that the LATs, daters, and cohabitators have similar levels in relationship quality. These three unmarried relationships tend to be poorer quality than married relationships (Brown, Manning, & Wu, 2017). In this project, I will focus on examining the differences in depression across single, dating, LAT relationships, cohabitation, remarriage, and first marriage among older adults. This chapter will assess whether psychological well-being of older adults is lower in LAT relationships than other relationship types, such as cohabitation or marriage. If cohabitation is an alternative to marriage among older adults, the psychological well-being should be equal between cohabitation and marriage. Furthermore, if LAT relationships also are seen an alternative to cohabitation or marriage, the psychological well-being among LATs should be similar to cohabitation and married relationships.

Most prior research on LAT relationships is from Europe. In the United States, research is limited (Connidis et al., 2017). This research project contributes to the field by exploring LAT relationships among older adults and providing new insights into the conceptualization of LAT relationships in the United States. LAT relationships may play an important role in older adulthood because it provides the flexibility of partnership for older adults. Older adults who are in LAT relationships not only receive social support from their partner but also avoid the conflicts that can arise when living with a partner. Thus, a clearer understanding of the difference between dating and LAT relationships as well as how these relationships differ from marriage and cohabitation can provide new insights on the implications of intimate relationships, social support, resources, and older adults' well-being in later life.



## CHAPTER II: WHAT ARE LAT RELATIONSHIPS? CONCEPTUALIZING LAT RELATIONSHIPS AMONG UNMARRIED OLDER ADULTS IN LATER LIFE

Over the past few decades, significant changes in union formation and dissolution have occurred among older adults. The gray divorce rate has doubled between 1990 and 2010 (Brown & Lin, 2012). About one-third of Baby Boomers are unmarried (Lin & Brown, 2012). The increases in singlehood among older adults signal that they have the potential to form a new partnership. However, most researchers focus on marriage or cohabitation among older adults, ignoring non-coresidential relationships, such as dating or living apart together (LAT). Prior research has shown that only modest proportions of older singles repartner through either cohabitation or remarriage after later life marital dissolution (Brown et al., 2018). Most older singles are categorized as unpartnered in national surveys, which cannot capture the patterns of partnerships accurately among older adults because indicators of non-coresidential relationships are lacking. In fact, older singles may go out dates or be in a LAT relationship.

LAT relationships have been discussed increasingly in recent years and have become more accepted in European countries (Connidis et al., 2017; Haskey, 2005; Haskey & Lewis, 2006; Karlsson & Borell, 2005; Levin, 2004; Liefbroer, Poortman, & Seltzer, 2015; Pasteels, Lyssens-Danneboom, & Mortelmans, 2017; Stoilova, Roseneil, Crowhurst, Hellesund, & Santos, 2014; Tai, Baxter, & Hewitt, 2014). However, scant research examines LAT relationships in the United States. Most of these studies in the United States are qualitative and thus national estimates of LAT relationships are hard to come by (Connidis et al., 2017).

The work of Connidis et al. (2017) summarized that LAT is characteristically defined as a chosen, intimate relationship between partners who are committed to LAT and each other for the long term and who live in separate homes. Some researchers view LAT relationships as a

new family form, and others see LAT relationships as a stepping stone to cohabitation or marriage (Levin, 2004; Connidis et al., 2017). Researchers have explored reasons why people are in LAT relationships to clarify whether LAT relationships are a new family form (Duncan & Phillips, 2011; Duncan, Carter, Phillips, Roseneil, & Stoilova, 2013; Liefbroer et al., 2015; Benson & Coleman, 2016a). However, the debates are unresolved. To better understand whether LAT relationships are a new family form, it is essential to figure out what older adults who are in LAT relationship expect in terms of their future partnerships.

Furthermore, early prior research on LAT relationships does not examine age differences specifically. In recent studies, scholars have demonstrated that the reasons why individuals are in LAT relationships differ by age (Duncan et al., 2013; Duncan, Phillips, Carter, Roseneil, & Stoilova, 2014; Lewin, 2017b). Research findings showed that young adults opt for LAT relationships because of economic constraints, such as they cannot afford the cost of housing and continue to live with their parents (Castro-Martín et al., 2008). Older adults who experienced union dissolutions or had coresident children had increased probabilities of being in LAT relationships (Benson & Coleman, 2016a; De Jong Gierveld, 2004; De Jong Gierveld & Merz, 2013). LAT relationships take on different meanings for young versus older adults. Researchers have even argued that LAT relationships may be an alternative to cohabitation or marriage for older adults (Benson & Coleman, 2016a). Some older adults in LAT relationships reported that bad experiences in previous coresidential relationships made them refuse to live with their current partners. They are reluctant to transition into cohabitation or marriage. (Benson & Coleman, 2016a; Funk & Kobayashi, 2016). Moreover, some researchers emphasized the importance of autonomy or non-traditional gender norms in LAT relationships, particularly among older women (Kobayashi, Funk, & Khan, 2017; Upton-Davis, 2012, 2015). For example,

older women may not want to be a caregiver for a new partner because they may have experienced caregiving in a previous marriage (Karlsson & Borell, 2002; 2005). Prior research provides evidence that LAT relationships have specific meanings in later life and offer benefits in terms of social support or well-being. Therefore, researchers should not ignore the importance of LAT relationships for older adults.

Previous studies have shown that a lack of appropriate quantitative data may lead to poor measurement of LAT relationships (Haskey, 2005; Strohm et al., 2009). The measurement of LAT relationships is even confounded with dating behavior. In this study, I use an innovative measure of LAT relationships to provide a better way of conceptualizing LAT relationships among older adults. This study uses data from the Wisconsin Longitudinal Study (WLS) in the wave of 2011 CAPI (graduates and their siblings). The sample of graduates were born between 1938 and 1940, and the sample of siblings were born between 1930 and 1948. The Wisconsin Longitudinal Study (WLS) included a set of questions about dating behavior that allows me to gauge LAT relationships among older adults.

This study is comprised of three sections. The first section identifies several correlates that may distinguish for defining LAT relationships. The correlates include social and economic demographic characteristics, relationship duration, the frequency of getting together with partners, attitudes of autonomy, and traditional gender ideology. In the second section, the analysis focuses on identifying the key variables associated with expectations of cohabitation and marriage among LATs by using multivariate analysis. This section is to examine whether LAT relationships are a new family form which would be signaled if they do not expect to either cohabit or marry. Finally, a comparison of LAT relationships and cohabitation helps to clarify the definition of LAT relationships and provide possible explanations of whether LAT

relationships are an alternative to cohabitation or marriage. Thus, I compare the expectation of marriage for older adults who are in LAT relationships with older adults who are cohabiting.

### **Background**

Research findings have shown that the reasons why individuals are in LAT relationships are diverse. For example, some people choose LAT relationships because they feel it is too early to live together with their current partners, and some people simply reject cohabitation or marriage due to their previous negative experiences in coresidential relationships (Roseneil, 2006). However, important questions regarding the definition of LAT relationships remain unanswered. The definitions of LAT relationships are varied and widely debated (Amato & Hayes, 2013; Connidis et al., 2017; Duncan & Phillips, 2010; Levin, 2004).

Two main perspectives about the definition of LAT relationships have been discussed. One perspective sees LAT relationships as an innovative type of relationship that is associated with individualism and emerges from the context of the Second Demographic Transition (SDT) (Levin, 2004; Strohm et al., 2009; Upton-Davis, 2012; 2015). In this perspective, individuals seek intimate relationships, but not necessarily marriage or a relationship that involves living in the same household. LAT relationships are long-term committed relationships. Individuals in LAT relationships are unlikely to have intentions to live together or get married, especially among older adults (Benson & Coleman, 2016a; Duncan et al., 2014; Strohm et al., 2009). LAT relationships seem an alternative to cohabitation or marriage. In this context, some scholars think LAT relationships are a new family form.

The second demographic transition (SDT) argues that changes in attitudes and norms are related to a decline in marriage. Marriage is not the only intimate partnership option. The growth of cohabitation in recent decades shows that people can have an intimate relationship without

having to get married. Scholars have argued that if individuals who are divorced or widowed decide to repartner, the partnership may be either a cohabitation or LAT relationship rather than marriage (Coulter & Hu, 2017; Lesthaeghe, 2014; Levin, 2004; Strohm et al., 2009). LAT relationships may be a feature of the SDT, indicating changing meanings of intimate relationships, particularly for older adults. Researchers found that most young adults reported that they expect to marry in the future which support the notion that there is a “stalled” SDT in the U.S (Manning, Smock, & Fetto, 2019). However, it is unclear whether older adults have similar relationship expectations to young adults in the U.S.

The other perspective indicates that LAT relationships operate less as a new family form and more as a practical response to life course constraints, such as financial issues (Haskey & Lewis, 2006; Turcotte, 2013). From this perspective, individuals who are LATs will tend to transition into cohabitation or marriage, particularly among young adults (Coulter & Hu, 2017). Thus, LAT relationships may resemble dating relationships and not a new family form (Duncan & Phillips, 2011). When individuals think they are unready or unable to cohabit, they choose to live apart. LAT relationships are an intimate relationship in response to the demands of life circumstances or personal needs. If life circumstances or personal needs change, individuals or couples may change their intimate relationships. It also implies LAT relationships are short-term and often unstable. People who are in LAT relationships may move into living together or even break up (Régner-Loilier, 2015). Additionally, if individuals who are in LAT relationships tended to get married with their partner in the future, it may suggest that the pace of SDT is “stalled” (Manning et al., 2019). Marriage still plays a main role in family formation.

### *The Measurement of LAT Relationships*

The challenges of defining LAT relationships are related to the measurement of LAT relationships. Although LAT relationships have attracted the attention of many scholars in recent years, the lack of appropriate data is still an issue (Haskey, 2005; Strohm et al., 2009; Lewin, 2017b). One challenge about data collection is that surveys do not ask questions to capture people who have an intimate partner but do not live together. Even though some surveys interview people who are involved in dating relationships, they may not include questions such as relationship duration or the level of commitment. Thus, researchers may be hard-pressed to gauge LAT relationships as long-term and committed relationships. Not only is it a problem in terms of differentiating between LAT relationships and dating, but also it is difficult to distinguish LAT relationships from marriage and cohabitation (Duncan & Phillips, 2010; Lewin, 2017b).

The other challenge about the measurement of LAT relationships is whether the data can represent the older population. Previous studies may include a wide range of ages to measure LAT relationships ignoring various motivations and attitudes toward partnering between young versus older adults (Bildtgård & Öberg, 2017; Connidis et al., 2017; Coulter & Hu, 2017; Lewin, 2017b). Thus, researchers may have inaccurate results for measuring LAT relationships if they do not examine LAT relationships separating for the young and older populations.

### *Factors Related to Being in LAT Relationships*

Past studies have yielded some crucial correlates of being in a LAT relationship that may help to conceptualize LAT relationships. Age is one of the main factors to consider. Older adults in LAT relationships have different demographic characteristics and motivations from young adults. Connidis et al. (2017) argued that LAT relationships among older adults have different

meanings and should be categorized as another type of relationship. Connidis and her colleagues emphasized that LAT relationships have the unique features in older adulthood. A LAT relationship in older age is significantly different from a LAT relationship at earlier life stages, making LAT relationships a new family form rather than a transitory mechanism in later life. Older adults in LAT relationships typically are in committed, long-term, and stable relationships, unlike young adults in LAT relationships which tend to be short-term or temporary situations (Lewin, 2017; Régnier-Loilier, 2015).

Among young adults, those in LAT relationships often do not live with their partners because they lack financial independence and still live with their parents (Régnier-Loilier et al., 2009). If their economic condition improves, they may transition into cohabitation or marriage. Thus, young adults may have higher expectations of living together with their current partners in the future. However, in later life, marriage or even cohabitation is not the primary concern for these older adults. LAT relationships provide the opportunity to have a committed relationship that can protect the autonomy and limit the obligations among older adults. Older adults feel uncomfortable calling their partner ‘boy/girlfriend’ (Benson & Coleman, 2016b; Connidis et al., 2017) which also indicated different meanings of LAT relationships.

Benson and Coleman (2016a) interviewed older adults who were at least age 60 and in LAT relationships. They concluded that older adults recognized their LAT relationships as a family form rather than a precursor to cohabitation or marriage. They found that older adults in LAT relationships wanted to avoid the obligations of traditional gender norms or to keep autonomy and independence. Having children or financial issues were also common reasons for older adults being in LAT relationships. These reasons provided evidence that older adults in LAT relationships often did not want to either cohabit or get married to their current partners.

Older adults often have responsibilities to family members, such as children or aging parents, and these responsibilities may decrease their willingness to be in a new coresidential relationship. Thus, LAT relationships become a new type of partnership for older adults (De Jong-Gierveld, 2002). Family members, especially children, play an essential role for unmarried older adults in LAT relationships. Having children increased the probability of being in a LAT relationship versus a coresidential relationship (De Jong Gierveld & Mert, 2013).

The other important factor in an intimate relationship is commitment. Skeptics may view LAT relationships as having less commitment than other union types, such as cohabitation or marriage. However, researchers have shown that LAT couples display similar levels of commitment as cohabiting and married couples (Duncan & Phillips, 2010). The levels of commitment in LAT relationships may depend on the relationship stage and the reasons for living apart. For example, individuals who are still dating and living apart may report less commitment in their relationships than those who are more established but have chosen to live separately for various reasons. Living apart offers more independence with the context of an intimate relationship yet even LATs typically maintain high levels of commitment (Carter, Duncan, Stoilova & Phillips, 2016). Castro-Martin et al. (2008) considered LATs as only those romantic partnerships that have lasted for more than two years to focus on couples most likely to contemplate living together and disregard less committed relationships.

Another explanation for choosing or staying in LAT relationships are related to personal autonomy or independence. Among older adults, LAT relationships represent the acceptance of alternative long-term relationships that allow the possibilities of personal autonomy within the context of a committed relationship. Additionally, LAT relationships may help to avoid gender inequities in cohabiting relationships (Funk & Kobayashi, 2016; Kobayashi et al., 2017). LAT



relationships can provide unmarried older adults who experienced divorce or widowhood with a fulfilling intimate relationship but also ensure they maintain a significant degree of autonomy at the same time. Older women would be more likely than men to choose in LAT relationships rather than either cohabitation or marriage. By preserving her own household, a woman in a LAT relationship may avoid the unequal distribution of household labor and being a caregiver for a new partner because she may have experienced caregiving in a previous marriage (Karlsson & Borell, 2002; 2005). LAT relationships not only have the potential to protect older adults against the erosion of autonomy in an intimate relationship, but also to avoid the erosion of resources following relationship dissolution (Upton-Davis, 2012; 2015). Thus, if individuals have higher levels of autonomy and hold more non-traditional gender role attitudes, they are more likely to be in LAT relationships and are reluctant to transition into cohabitation or marriage.

#### *Expectations of Cohabitation and Marriage*

Research has estimated relationship transitions among older adults and focused on those in cohabiting union. A recent study indicated that cohabitation might be an alternative to marriage that replaces remarriage after marital dissolution, either divorce or widowhood, for older adults (Brown & Wright, 2017). Older cohabitators are in stable unions and unlikely to move into marriage (Brown et al., 2012; Vespa, 2013). However, little research on LAT relationships considers expectations of cohabitation and marriage in older adulthood. The research about expectations of cohabitation and marriage may raise a question: whether LAT relationships are an alternative to marriage or even an alternative to cohabitation. If LATs are satisfied in their current relationships, LAT relationships may be a new form of family, and an alternative to cohabitation or marriage. Moreover, if older adults who are in LAT relationships are unlikely to expect to marry, it may also imply that LAT relationships are part of the SDT.

Expectations of cohabitation and marriage are also associated with age. Malta and Farquharson (2014) explored the initiation and progression among older Australians who were in romantic relationships. They found older adults in long-term relationships are likely to live apart together and do not think about cohabitation necessarily. Older women even resisted marriage. A study from Australia also showed that older and previously married adults in LAT relationships are more likely to have no intention to cohabit within next three years than young adults. Among older adults in LAT relationships, a majority (68%) report no intention of living together with next three years. Those older adults also had higher probabilities of reporting that they were unlikely to marry or remarry (Reimondos, Evans, & Gray, 2011).

A study in Canada also demonstrated similar results: roughly 80% of young adults in LAT relationships wanted to live with their current partner one day whereas less than 30 % of adults aged 60 and over intended to do that (Turcotte, 2013). Coulter and Hu (2017) estimated intentions of cohabitation among individuals who are in LAT relationships in Britain and found that older adults in LAT relationships are less likely to intend to cohabit than young adults. Cohabitation intentions were most common among young adults. When the relationship duration among older adults in LAT relationships was longer, the probability of cohabitation intentions was lower. Additionally, LATs who meet their partner infrequently also had a reduced probability of cohabitation intentions. Less contact with partners implies less commitment in LAT relationships. Régnier-Loilier (2015) examined the stability of relationships in France. The evidence pointed out that after six years, older adults who are in LAT relationships have remained stable and the likelihood of moving in with their partner is low. Strohm et al. (2009) predicted expectations of marriage by comparing cohabitation and LAT relationships in the United States. The findings indicated that individuals in LAT relationships are less likely to

expect marriage than cohabitators. However, their study did not examine differences of expecting marriage by age. A recent study showed that individuals in LAT relationships are less likely to expect marriage in the future than daters in the U.S. However, the study also did not examine the differences of expecting marriage by age. Thus it is unclear how often older adults in LAT relationships expect to marry in the future (Brown et al., 2016).

Different types of LATs have various attitudes toward the expectations of cohabitation or marriage. Duncan et al. (2014) conceptualized types of LAT relationships by respondents' reasons for living apart. Their finding showed that LATs who preferred to live apart because of various reasons, such as obligations to children or fears about bad experiences in cohabitation were most likely to say they were unlikely to live with their partners in the next two years. However, Duncan and his colleagues did not examine individuals who were in LAT relationships by age. Thus, attitudes about expecting to cohabit are unclear for older adults. Pasteels et al. (2017) found that LATs who were younger and had shorter relationship duration have higher intentions to cohabit within three years. In contrast, LATs who were older and their relationship duration were long-standing had lower intentions to cohabit within three years. Researchers concluded that age, relationship duration, previous union experiences, and intentions of cohabitation in the future might be relevant to classify LAT relationships.

### **CURRENT STUDY**

The purpose of this study is to conceptualize LAT relationships and provide a definition of LAT relationships among older adults. Prior research usually included a wide age range for examining LAT relationships which ignores the fact that young and older adults have different experiences in their life stages that lead to distinct motivations for LAT relationships (Connidis

et al., 2017). In this study, I focus on middle-age and older adults who are age 50 and older to examine LAT relationships.

The first part of this study is designed to identify what characteristics are related to older adults in LAT relationships. I gather information about LAT relationships by presenting descriptive statistics. The first step is to define LATs. I define LATs as those have a steady partner and the length of the relationship with their partner is one year or more. I exclude older adults in intimate relationships that are less than one year duration. My assumption is that those older adults may be less committed in their relationships because their relationship duration is short. Additionally, I exclude daters in this study because the WLS did not ask expectations of union formation for daters. Thus, I cannot compare expectations of union formation between daters and LATs. The second step is to show descriptive statistics by social and economic demographic characteristics, relationship features, attitude and values, self-reported health, and expectations of cohabitation and marriage among LATs.

The second part of this study examines expectations of cohabitation and marriage among older adults in LAT relationships to conceptualize whether LAT relationships function as an alternative to cohabitation or marriage. I use multivariate analyses to examine what factors are related to expectations of cohabitation and marriage among LATs.

Finally, I include older adults who are cohabiting to do a comparison of expecting to marry. The purpose of this section is to differentiate LAT relationships and cohabitation. Comparing expectations of marriage between LATs and cohabitators helps me to explore whether LAT relationships are different from cohabitation and marriage.

In sum, the definition of LAT relationships in this study are older adults who have a steady partner and their relationship duration are one year or more. The longer relationship

duration with their partner indicate that LATs have a long-term and relatively committed intimate relationship. Additionally, older adults in LAT relationships may be reluctant to expect to cohabit and get married in the future, showing LAT relationships may be an alternative to cohabitation or marriage.

Social and economic demographic characteristics, relationship features, the scales of traditional gender ideology and autonomy, and self-reported health are all included for descriptive statistics. I anticipate that LATs are likely to have high educational attainment, be employed, have high personal income, and live in a private home. Older adults who had coresident children increased probabilities to be in LAT relationships (De Jong Gierveld, 2004; De Jong Gierveld & Merz, 2013), thus LATs are more often to have coresident children. LATs are unlikely to live alone. LATs may also receive social supports from their children. Most LATs experienced divorce or widowhood. LATs may have good health generally. Additionally, researchers found that LAT relationships are an important type of relationship among older women (Upton-Davis, 2012). Thus, I expect that older women are more often in LAT relationships than older men. Maintaining autonomy and holding more non-traditional gender role attitudes may lead to older adults choosing LAT relationships, particularly among women (Karlsson & Borell, 2002, 2005; Upton-Davis, 2012; 2015).

The second part of this study focuses on discussing whether LAT relationships are a new family form by using multivariate analysis. If LATs are unlikely to expect to cohabit and marry in the future, it implies that LAT relationships may be an alternative to cohabitation or marriage, respectively. I examine what factors are associated with expectations of cohabitation and marriage among LATs. I hypothesize that older women in LAT relationships are less likely to expect cohabitation and marriage than men. LATs who have higher educational attainment, are

employed, have higher total personal income, have ownership of the home, have better self-rated health, have children, and have experiences of divorce or widowhood will have higher probabilities of not expecting cohabitation and marriage than LATs who do not have those demographic characteristics.

A prior study indicated that LATs who meet their partner infrequently are less likely to expect to cohabit. When relationship duration among LATs is shorter, the probability of expecting to cohabit is lower (Coulter & Hu, 2017). Thus, older adults in LAT relationships who less often meet their partners are less likely to expect to cohabit and marry. If the relationship duration in LAT relationships is short, then LATs are also less likely to expect cohabitation and marriage in the future.

Additionally, I examine how traditional gender ideology and autonomy are associated with LATs' expectations of cohabitation and marriage. I hypothesize that older adults in LAT relationships who have a higher level of autonomy or hold more non-traditional gender role attitudes, are less likely to expect to cohabit or marry than those who have a lower level of autonomy and hold less non-traditional gender role attitudes

The third part of this study is to differentiate LAT relationships and cohabitation by comparing attitudes toward the expectation of marriage. Previous research showed that cohabitation is an alternative to marriage for older adults (Brown et al., 2012). Additionally, LAT relationships are similar to cohabitation in that they are less likely to be formalized through marriage (Reimondos et al., 2011; Brown et al., 2016). Scant research examines the expectation of marriage by comparing LAT relationships and cohabitation. Understanding whether LAT relationships and cohabitation are distinctive can provide researchers new insights into intimate relationships in later life. It also helps to clarify the debate about whether LAT relationships are a

new family form. There are two possible hypotheses. The first is that LATs are less likely to expect to get married than cohabitators. If LATs are different than cohabitators, it means that LAT relationships have unique meanings and LAT relationships are a new family form. The second is that LATs and cohabitators do not differ regarding their expectations. That means both LATs and cohabitators are unlikely to expect marriage in the future. This possible hypothesis indicates that LAT relationships are similar to cohabitation. I hypothesize that LATs are less likely to expect to get married than cohabitators because LAT relationships have unique meanings and are different than cohabitation. LATs are likely to remind their current relationships. LAT relationships are not a stepping stone of cohabitation and marriage.

### **Data and Methods**

Data came from the Wisconsin Longitudinal Study (WLS). The WLS is a longitudinal survey that includes 10,317 men and women who graduated from Wisconsin high schools in 1957. The graduate respondents were born between 1938 and 1940. The WLS not only interviewed graduates but also included a randomly selected sibling of these graduates (Herd, Carr, & Roan, 2014).

The original sample size in 2011 was 9,684 respondents. The majority of those respondents were born between 1930-1948, including 6,152 graduates and 3,532 siblings. The graduates are homogeneous in age, but ages of siblings vary widely. Sewell, Hauser, Springer & Hauser (2003) indicated that ages of selected siblings were mainly ten years older to ten years younger than the graduates. The age range was 71 to 74 years old among graduates and was 51 to 93 years old among siblings in 2011 survey. The majority of respondents were 63 to 81 years old in the 2011 survey, including graduates and siblings (93%). Only 2% were 51 to 62 years old and 5% were 82 to 93 years old.

Although there were minimal numbers of minorities among Wisconsin high school graduates when the survey began, the sample in the WLS is representative of white, non-Hispanic American men and women who have completed at least a high school education. The WLS collected data broadly from graduates, graduates' parents, graduates' siblings, and graduates' spouses. The WLS interviewed the original respondents or their parents in 1957, 1964, 1975, 1992, 2003, and 2011. The study design was expanded to collect sibling data of the initial respondents in 1977. Additionally, the sample was developed to contain a randomly selected sibling of every respondent with at least one brother or sister in the 1992-93 round of the WLS. The selected sibling was interviewed in 1977, 1993, 2004, and 2011. Furthermore, the WLS continued to collect data from the graduates' spouses in 2004, and the spouses of the siblings in 2005.

The WLS has estimated that about 75 percent of Wisconsin youth graduated from high school in the late 1950s, and every respondent in the initial WLS sample graduated from high school. About 7 % of their siblings did not graduate from high school. Roughly two-thirds respondents lived in Wisconsin, and about one-third lived elsewhere in the U.S. or abroad, according to the survey in 1964, 1975, 1992 and again in 2003 (Herd et al., 2014). The WLS provides valuable information for estimating life course, intergenerational transfers and relationships, intimate relationships, family functioning, physical/mental health and well-being, and morbidity and mortality from late adolescence through 2011.

Data for this study came from the wave of 2011 CAPI, including the sample of graduates and siblings. There are several advantages of the WLS. First, the WLS has a series of questions about dating behaviors in the 2011 survey that allows researchers to conceptualize LAT relationships. These questions can differentiate between daters and LATs, and other types of



partnerships, such as cohabitation and marriage. Second, the WLS asks questions about whether unmarried respondents expect to live together or get married to their partners in the future. These two questions allow this study to examine expectations of union formation among older adults in LAT relationships. Moreover, the WLS includes several questions about gender norms and personal autonomy. Thus, I can test how gender ideology and autonomy are related to relationship expectation among LATs. Finally, respondents who are cohabiting are also asked their expectations of marriage. Comparing expectations of marriage between cohabitators and those in LAT relationships can help me to answer the research question of whether LAT relationships are an alternative to cohabitation or marriage.

Nineteen cases were excluded from the analytic sample because they were missing valid information about relationship status. Thus, the sample size dropped from 9,684 respondents to 9,665 respondents. This study focused on older adults who were in LAT relationships and cohabitation, thus the sample excluded another older adults (N=9,181). The final analytic sample in this study was 484 respondents who were aged 50 and older, including 250 respondents were in LAT relationships (52%) and 234 respondents were in cohabitation (48%).

## **Data and Methods**

### *Dependent Variables*

This study examines expectations of cohabitation and marriage to understand whether LAT relationships are a new relationship type and are different from cohabitation and marriage. The expectation of cohabitation was created by using the question “How likely is it that you and partner will decide to live together without being married?” The label values were 1” Definitely won’t live together,” 2 “Probably won’t,” 3 “About a 50-50 chance “, 4” Probably will,” and 5” Definitely will live together.” Respondents who refused to answer this question or reported

“don’t know” were coded as missing values. Three respondents answered “Already live together,” indicating an actual behavior rather than the expectation of cohabitation. Thus, I exclude those cases to reduce bias in measurement. The total missing cases were four. The expectation of cohabitation is a continuous variable that was coded from 1 to 5. Higher scores represented higher chances that respondents expected to live together with their partners in the future.

The expectation of marriage was coded by using the question “How likely is it that you and partner will get married?” The original coding values were 1” Definitely won’t get married,” 2 “Probably won’t,” 3 “About a 50-50 chance,” 4” Probably will,” and 5” Definitely will get married.” Respondents who refused to answer this question or reported “don’t know” were coded as missing values. Seven cases were coded as “Other specify” in data. Because the survey did not provide more information about these cases, it is unclear what the actual expectation of marriage was for those respondents. I coded these cases as missing values. Three respondents reported “Already married” that may lead to bias in the analysis. Hence, those cases were also coded as missing values. The total missing cases were five. The expectation of marriage is a continuous variable that ranged from 1 to 5. Higher scores represented higher chances that respondents expected to get married to their partners in the future.

### *Independent Variables*

LAT relationships and cohabitation were coded as binary variables. Unmarried respondents were asked if they are living in a marriage-like relationship or cohabiting. If respondents reported “yes,” they were coded as cohabitators.

Respondents who were neither currently married nor cohabiting answered series of questions about dating behaviors. I used two questions to define LAT relationships. The first

question is: “Do you go out on dates?” Respondents who reported “yes” were asked: “Do you regularly date one person that you consider your steady partner?” Then, I calculated relationship duration among respondents who reported that they go out dates and regularly date with their steady partner. Among respondents who had a steady partner (N=300), 89 respondents reported that their relationship duration was less than 2 years, which was nearly 30% among respondents who had a steady partner. If I defined LATs as those who have relationship durations of at least 2 years, the sample size became too small and may have had measurement issues. Thus, I excluded only the 50 respondents who had a steady partner and relationship duration was less than one year (roughly 17% among respondents who had a steady partner). Those respondents were not categorized as LATs. LATs were defined as respondents who go out dates and have a steady partner, and their relationship duration is one year or more (N=250).

### *Control Variables*

Control variables are several social demographic characteristics, socioeconomic characteristics, relationship features, scales about attitudes and values, and a health indicator. The social demographic characteristics include gender, age, previous marital status, and the presence of children. Gender was a dummy variable with women coded as 1 and men 0 (reference group). Age is a continuous variable that was created using year of survey (2011) minus participants' birth year. Previous marital status was coded as three categories, including never married (reference group), divorced or separated, and widowed. The variable of children was created by using several questions in household roster: a total number of children, whether children are alive, children's current age, and whether children live with participants. Additionally, the relationship of children to participants was limited to be biological children, adopted children, and stepchildren. Respondents who did not report any children in the WLS survey or who

reported their biological children, adopted children or stepchildren deceased were coded as “childless.” Respondents who reported relative children or other children in their household were also coded as childless regardless of whether those children were alive or deceased. Ultimately, the presence of children was coded as three categories: respondents had children, but did not live with their children, respondents had children who live with them, and respondents were childless (reference group).

Socioeconomic characteristics included educational attainment, employment, total personal income, and the ownership of the home. Educational attainment was coded as a series of dummy variables: a high school degree or less (reference group), some college, Bachelor’s degree, and Master’s degree or higher. Employment status was categorized as currently unemployed (reference group) and currently employed. Total personal income was calculated from all sources of income, such as wages, salaries, social security, or pensions. It was a continuous variable and measured in dollars. The ownership of the home was coded as a dummy variable: the respondent rented or do not live in a private residence (reference group), or the respondent owned a private residence.

Relationship features included relationship duration and the frequency of getting together with a partner in the last week. Relationship duration is a continuous variable and was created by using questions about the length of relationship with a partner. For respondents in LAT relationships, the survey asked the length of relationship with a partner by unit and number. The unit included days, weeks, months, and years. The units of the length of relationship was coded into years. After calculating the unit and number in the length of relationship, I created years of relationship duration in LAT relationships. Respondents who reported less than 365 days, 52 weeks, or 12 months in their relationships that were coded as 0 “less than one year.”

Respondents who reported more than one year were coded as numbers of years in their relationship duration.

The WLS asked what month and year that respondents begin living with their partner. According to the information on beginning month and year, the WLS provides a variable called century month for the beginning of the current cohabiting relationship. I calculated the beginning year of cohabitation by using the century month for the beginning of the current cohabiting relationship. Then, I subtracted the beginning year of cohabitation from the survey year (2011) to get the total years of relationship duration in cohabitation. If the value of relationship duration was 0, it meant that cohabitators who began living with their partner less than one year ago. If the value of relationship duration was one or more, it indicated that cohabitators started living with their partner at least one year or more ago.

The frequency of getting together with a partner in the last week is a continuous variable. This question was only asked of respondents who were in LAT relationships. The variable was created from the question: "How many days last week did you get together with your partner?" The range of values was from 0 to 7. Respondents who reported less than one day of getting together with a partner in the last week were coded as 0.

There were two scales to measure attitudes and values. First, traditional gender ideology was created by using three questions in the survey. The questions include "to what extent do you agree that a working mother can establish just as warm and secure of a relationship with her children as a mother who does not work?", "to what extent do you agree that when a husband and wife make decisions about buying major things for the home, the husband should have final say? (reverse coded)", and "to what extent do you agree that it is much better for everyone if the man earns the main living and the woman takes care of the home and family? (reverse coded)"

Responses ranged from 1 “Strongly Agree” to 5 “Strongly Disagree.” The sum of scores ranged from 3 to 15 ( $\alpha=0.56$ ). Higher values reflected more traditional beliefs about work and family. These items were consistently used to measure gender ideology in previous research (Davis, 2011).

Second, the scale of autonomy was created by three items: “to what extent do you agree that you have confidence in your opinions even if they are contrary to the general consensus?” (reverse coded), “to what extent do you agree that you are not afraid to voice your opinions, even when they are in opposition to the opinions of most people?” (reverse coded), and “to what extent do you agree that it is difficult for you to voice your opinions on controversial matters. For each item, responses range from 1 “strongly agree” to 6 “strongly disagree.” The scale sums responses across the three items and ranges from 3 to 18. The sum of scores ranged from 3 to 18 ( $\alpha=0.57$ ). Higher scores indicate higher levels of autonomy. The scale of autonomy followed Magee (2006)’s analytic strategy to verify autonomy is distinct from the other dimensions of Ryff’s scales of psychological well-being.

The health indicator used self-rated health. Poor health may undermine the desire for having a romantic relationship (Benson & Coleman, 2016a; Bulcroft & Bulcroft, 1991; Watson & Stelle, 2011). Thus, I included a health indicator in analyses. Self-rated health was a five-point scale that ranged from 1=poor to 5=excellent.

#### *Multiple Imputation for Missing Cases*

Variables have some invalid cases because respondents did not offer their responses, or their answers were inappropriate for analysis. Seven variables have some invalid cases in this study. The number of the lowest missing was 1 case for employment status and the highest missing was 104 cases for the scale of autonomy. The average of missing values was 7% in the

analysis. The analysis managed those missing values by using multiple imputations in descriptive statistics and regression models.

### **Analytic Strategy**

In the first section of the analysis, I will measure how to define LAT relationships. I use several dating questions to determine older adults who have an intimate partner but do not live together. Additionally, I examine relationship duration to signal if older adults in LAT relationships have long-term relationships (Hasky, 2005; Duncan & Phillips, 2011). Scholars indicated long-term relationship duration can help researchers to focus on the most stable relationships and discard less committed relationships when measuring LAT relationships (Castro-Martín et al., 2008). I will demonstrate descriptive statistics (Table 2.1) for all variables among LATs, including social and economic demographic characteristics, relationship features, levels of autonomy, levels of traditional gender ideology, and self-reported health. The descriptive statistics include characteristics of cohabitators to compare the differences between LATs and cohabitators. The distribution of expectation of union formation is shown in Table 2.2 and Table 2.3. These tables indicate general information about LATs' expectations their future union formation.

Next, I will examine expectations of cohabitation and marriage among LATs by using ordered logistic regression models. I will predict what factors are associated with the expectations of cohabitation and marriage among LATs. The analyses examine the research question: are LAT relationships are a new family form? The first ordered logistic regression model is the expectation of cohabitation among LATs, with controls for social and economic demographic characteristics, relationship features, attitudes and values, and self-reported health.

The second ordered logistic regression model is the expectation of marriage among LATs, net of all control variables (Table 2.2).

Finally, I will examine the expectation of marriage by comparing LATs and cohabitators (Table 2.5). The model provides a further analysis to test the difference between LAT relationships and cohabitation. The ordered logistic regression model will compare the levels of expecting to marry among LATs and cohabitators, controlling for all social and economic demographic characteristics, relationship features, traditional gender ideology, autonomy, and self-reported health.

## **Results**

### *Demographic Characteristics among LATs and Cohabitators*

The results of social demographic characteristics in Table 2.1 showed that those who were in LAT relationships were more often women than men. Among LATs, 52% were women and 48% were men. Among cohabitators, 51% were men and 49 % were women. The average age among LATs was 71.1 years old. Cohabitators were younger than LATs. The average age among cohabitators was 69.7 years old. Over half of LATs were divorced or separated (52%), 42% of LATs were widowed, and only 6% of LATs were never married. The majority of cohabitators were divorced or separated (53%). Cohabitators were more likely to be never married (17%) than LATs (6%). However, cohabitators were less likely to be widowed (30%) than LATs (42%). Among LATs, about 79 % reported that they have non-resident children. Only 7% lived with their children, and 14% reported that they were childless. Cohabitators had a higher percentage of non-resident children than LATs. Among cohabitators, about 83% had non-resident children. Merely 4% lived with their children, and 13% were childless.



Over half of LATs had a high school degree or less (52%), and nearly 21% had some college degree. Among LATs, roughly 12% had a bachelor's degree and 15% had a master degree or higher. Cohabitors tended to have lower levels of education. About 57% of cohabitators had no more than a high school degree. The majority of LATs were currently not employed (62%), and 38% were currently employed. Among cohabitators, 64 % were currently not employed and 36% were currently employed. The average total personal income among LATs was \$36,900, which was higher than cohabitators (\$31,673). The majority of LATs owned private residence (87%). Cohabitors had 92% that owned private residences.

The mean relationship duration among LATs was 8.7 years. LATs averaged 2.7 days of getting together with their partner within last week. Cohabitors had a longer relationship duration (13.2 years) than LATs. Relationship duration is significantly different between LATs and cohabitators.

The average score of traditional gender ideology was 6.5 among LATs. The scores of traditional gender ideology ranged from 3 to 15. Higher values reflected more traditional beliefs about work and family than cohabitators. The finding showed that LATs tended to have less traditional beliefs about work and family. The average score of autonomy was 13.4 among LATs. The average score of gender ideology among cohabitators was 6.1, slightly lower than LATs. The scores of autonomy ranged from 3 to 18. Higher scores indicated higher levels of autonomy. LATs tended to have a high level of autonomy. This result was related to findings of previous research, which emphasized the importance of maintaining autonomy for LAT relationships (Benson & Coleman, 2016a; Karlsson & Borell, 2002, 2005; Upton-Davis, 2012; 2015). The average score of autonomy among cohabitators was 13.9 that slightly higher than LATs.

The average score of self-rated health was 3.7 indicating that LATs had good health generally. The average score of self-rated health among cohabitators was 3.7. There is no difference in self-rated health between LATs and cohabitators.

Table 2.2 shows that few older adults who were in LAT relationships expected to live together in the future. Among LATs, about 39% reported that they definitely won't live together, and another 37% reported that they probably won't live together. Only 8% reported that they probably will live together or definitely will live together, and 16% had ambivalent attitudes toward cohabitation that reported about a 50-50 chance to live together in the future.

LATs were even more likely to report that they won't get married. Roughly 47% reported that they definitely won't get married, and another 30% reported that they probably won't get married. Merely 8% reported that they probably will or definitely will get married, and 15% showed ambivalent attitudes toward marriage that reported about a 50-50 chance to get married in the future. Compared with cohabitators, fewer LATs reported that they probably will or definitely will get married. Among cohabitators, 39% reported that they definitely won't get married, and 34% reported that they won't get married. Approximately 15% reported that they probably will or definitely will get married, and about 12% showed ambivalent attitudes toward marriage that reported about a 50-50 chance to get married in the future. Nearly 86 % of LATs reported that they did not expect to live together and get married (Table 2.3). The results confirmed that LAT relationships tend to be a new family form rather than a stepping stone to cohabitation or marriage.

#### *Ordered Logistic Regression Models of Union Formation Expectation among LATs*

Table 2.4 showed the ordered logistic regression models of union formation expectation among older adults who were in LAT relationships. The first model examined the expectation of

living together among LATs. The finding indicated that women had lower odds of expecting to live together than men. Age was a significant factor that related to the expectation of living together. LATs were less likely to expect to live together as age increased. Relationship duration showed a significant negative association with the expectation of living together among LATs. When relationship duration was longer, LATs had lower odds of expecting to live together. Days of getting together with a steady partner within last week had a significant positive association with the expectation of living together among LATs.

The second model examined the expectation of getting married among LATs. Gender and age showed significant negative associations with the expectation of getting married. Women who were in LAT relationships were lower odds of expecting to marry when compared to men. When LATs became older, they were less likely to expect to marry than LATs who were younger. LATs who owned private residences showed a significant positive association with the expectation of getting married. Relationship duration also had a significant negative association with the expectation of getting married among LATs. When relationship duration was longer, LATs were lower odds of expecting to marry. However, days of getting together with a steady partner within last week did not have statistically significant associations with the expectation of getting married.

#### *The Ordered Logistic Regression Model of Marital Expectation among LATs and Cohabitors*

Table 2.5 examined the ordered logistic regression model of expectations of getting married among LATs and cohabitators. The result found a statistically significant difference of the marital expectation between LATs and cohabitators. LATs had lower odds of expecting to marry when compared to cohabitators. This result confirmed that LAT relationships are different than cohabitation. Women were less likely to expect to marry than men. When age became older,

LATs and cohabitators had lower odds of expecting to marry. Older adults owned private residences that had greater odds of expecting to marry than those who did not live in a private residence. When compared to older adults with non-resident children, older adults who were childless had greater odds of expecting to marry. Relationship duration still played an important role. If older adults had long relationship duration with their partners, they were less likely to expect to marry in the future.

### **Discussion**

This study aims to conceptualize LAT relationships and examine whether LAT relationships are a new family form in older adulthood. Scant research in the United States has examined LAT relationships by using quantitative data. The quantitative data came from the WLS, which allows researcher to construct an innovative, new measure of LAT relationships in later life. The WLS had a set of questions about dating behaviors and relationship features for measuring LAT relationships. According to the partnership status and relationship duration, I define LATs as whom those have a steady partner and relationship duration with their partner is one year or more. In the first part, the research results not only showed the definition of LAT relationships but also showed descriptive statistics by social and economic demographic characteristics, relationship features, traditional gender ideology, autonomy, self-reported health, and expectations of cohabitation and marriage among LATs. The findings also provided a general portrait of LAT relationships among unmarried older adults that can help researchers to conceptualize LAT relationships. The second part of the study focused on examining expectations of cohabitation and marriage among older adults in LAT relationships to clarify whether LAT relationships function as an alternative to cohabitation or marriage. The findings suggested that LAT relationships may be evidence of the unfolding SDT (Lesthaeghe, 2014;

Levin, 2004; Strohm et al., 2009). LAT relationships may be part of the SDT and indicate unique meanings of partnership in older adulthood (Manning et al., 2019). Understanding whether LAT relationships and cohabitation are distinctive can provide researchers new insights into intimate relationships in later life.

The research results showed that LATs are likely to have high educational attainment, be employed, have high personal income, and live in a private home. Previous studies have demonstrated that resident children play an important role when adults are in LAT relationships (De Jong Gierveld & Merz, 2013; Lewin, 2017b). LATs more often had resident children than cohabitators. However, the results from the ordered logistic regression did not find that resident children significantly affect expectations of union formation among LATs. Roughly half of LATs were divorced or separated. LATs were more often cohabitators than widows. Although the descriptive statistics showed that most LATs experienced divorce or widowhood, previous marital status did not exhibit significant associations with expectations of union formation among LATs. The findings were not consistent with prior research, which emphasized the importance of experiencing divorce and widowhood (Steven, 2002; De Jong Gierveld, J., 2002, 2004). One possible explanation for these results is selection. Older adults who had resident children may be reluctant to have a coresident partner. Thus, the survey may only include older adults who choose to have a partner but also live with their children or those older adults may prefer to remain single. Older adults who are divorced or widowed may not want to have a new partner. A study found that most older singles do not repartner through either cohabitation or remarriage after the marital dissolution (Brown et al., 2018). If older adults who are divorced or widowed decide to repartner, it may imply that those older adults tend to insist on LAT

relationships rather than cohabitation or marriage. Older adults who prefer cohabitation or marriage may already be cohabiting or married when the WLS survey begins.

The finding supported the hypothesis to show that nearly all LATs reported no expectations to live together or marry in the future. LATs tended to remain their current partnerships rather than entering a union. Multivariate analyses examined expectations of union formation confirmed that women were less likely to expect of living together and getting married than men among LATs. The increase in age also declined the intentions of union formation in the future. Those findings provided the same results as prior studies that gender and age are important factors of being LAT relationships (Bildtgård & Öberg, 2017; Lewin, 2017b). The findings supported the hypothesis that LAT relationships are an important type of relationship among older women (Upton-Davis, 2012). Researchers have argued that autonomy plays an important factor for women who chose to stay in LAT relationships (Karlsson & Borell, 2002; Upton-Davis, 2012; Ayuso, 2019). However, there was little evidence to support that LATs were reluctant to live together or get married because they want to maintain autonomy. One reason for the inconsistent results may be due to how autonomy was measured. Prior studies used qualitative data to discuss autonomy (Karlsson & Borell, 2002; Upton-Davis, 2012, 2015) or do not provide any scale about autonomy. Scant studies have estimated autonomy by using quantitative data. Future research may consider exploring the measurement of autonomy.

Finally, this study found that relationship duration is another essential factor that is associated with expectations of union formation. When relationship duration was longer, LATs were reluctant to expect to live together and get married. The finding reflected that older adults who were in LAT relationships remained long-term relationships with their partners (Krapf, 2018). Furthermore, the result indicated that LATs and cohabitators had a different expectation of

marriage. LATs were less likely to expect to marry than cohabitators. Older adults who are in LAT relationships tended to be in a stable and long-term state and had fewer intentions to cohabit or marry in the future (Régnier-Loilier, 2015; van der Wiel, Mulder, & Bailey, 2018). Unlike the debates argued that LAT relationships are less as a family form (Levin, 2004; Coulter & Hu, 2017), this study confirmed the hypothesis that LAT relationships are a new family form rather than a stepping stone of cohabitation and marriage. The findings also supported concepts of the SDT theory. This study confirmed that LAT relationships have unique meanings and LAT relationships are a new family form in older adulthood. Older adults who were in LAT relationships were reluctant to cohabit and marry in the future. LAT relationships were long-term relationships, and LATs were likely to remain their current partnerships. When the SDT has occurred, LAT relationships appear to be a new type of partnership (Coulter & Hu, 2017; Lesthaeghe, 2014; Levin, 2004; Strohm et al., 2009). The change of attitudes and norms about intimate relationships indicates that LAT relationships are becoming more acceptable and are an alternative to marriage or remarriage (Lesthaeghe, 2014).

The other explanation may be that older adults who are in LAT relationships have uncertainty and ambivalent attitudes toward the partnerships (Benson & Coleman, 2016a, 2016b; Connidis et al., 2017). The uncertainty may be associated with some concerns in life, such as negative experiences of previous marriage. Older adults might not have time to overcome or negotiate conflicts in relationships like young adults (Bildtgård & Öberg, 2017). Thus, LAT relationships become another option for partnerships that have flexibility in later life. This study provided a new insight into conceptualizing LAT relationships in the United States by using quantitative data and found that LAT relationships can be a permanent state in an intimate relationship as a new family form in later life.

There are limitations to this study. First, nearly all respondents are white in the WLS. Prior studies found that black older adults were more likely to be in non-marital relationships than marriage, including dating and LAT relationships (Brown et al., 2017; Lewin, 2017a). However, this study cannot examine racial/ethnic differences in LAT relationships because of the limitation of data. The analysis does not capture whether black older adults are more often in LAT relationships than other racial/ethnic groups. Second, the WLS does not have direct questions about levels of commitment among LATs. The analysis cannot directly capture the commitment among LATs when commitment may play an important role in expecting future partnerships (van der Wiel et al., 2018). Future research should consider racial/ethnic differences in LAT relationships and recognize how commitment is associated with LAT relationships in older adulthood. Finally, the WLS did not have questions about relationship features of daters, such as relationship duration and expectations of future union formation. Future studies should collect data that can examine expectations of union formation for older adults who are in dating relationships. That may help to differentiate dating and LAT relationships and provide a more accurate definition of LAT relationships.

Despite these limitations, this study contributes by providing new insights into the definition of LAT relationships and confirms that LAT relationships are distinctive from cohabitation and marriage in older adulthood. Future studies should distinguish LAT relationships from cohabitation and marriage when examining partnership status in older adulthood.



Table 2.1. Mean or Percentage of Demographic Characteristics among LATs and Cohabitators

	LATs	Cohabitators
<b>Sociodemographic Characteristics</b>		
Gender		
Men	48%	51%
Women	52%	49%
Age	71.1	69.7 <sup>a</sup>
Previous marital status		
Never married/single	6%	17% <sup>a</sup>
Divorced/separated	52%	53%
Widowed	42%	30% <sup>a</sup>
Presence of children		
Non-resident children	79%	83%
Resident children	7%	4%
childless	14%	13%
<b>Socioeconomic Characteristics</b>		
Educational attainment		
HS or less than HS	52%	57%
Some college	21%	16%
BA	12%	12%
MA & MA+	15%	16%
Employment status		
Currently employed	38%	36%
Currently not employed	62%	64%
Total Personal Income	36900	31673
Status of owned home		
Rented or not live in a private residence	13%	8% <sup>a</sup>
Owned private residence	87%	92%
<b>Relationship Features</b>		
Relationship Duration (Years)	8.7	13.2 <sup>a</sup>
Days of getting together last week	2.7	
<b>Attitudes and Values</b>		
Traditional gender ideology (score range: 3-15)	6.5	6.1
Autonomy (score range: 3-18 )	13.4	13.9
<b>Health Indicator</b>		
Self-rated health (score range: 1-5)	3.7	3.7
Total N	250	234
	52%	48%

Note: <sup>a</sup> LATs are significantly different from cohabitators (<.05).

Table 2.2. Percentage of Expectations of Union Formation among LATs and Cohabitators

	LATs	Cohabitators
Expectation of living together		
Definitely won't live together	39%	
Probably won't	37%	
About a 50-50 chance	16%	
Probably will	6%	
Definitely will live together	2%	
Expectation of getting married		
Definitely won't get married	47%	39%
Probably won't	30%	34%
About a 50-50 chance	15%	12%
Probably will	5%	9%
Definitely will get married	3%	6%
Sample N (%)	N=250 (52%)	N=234 (48%)

Table 2.3. Percentage of Expecting Union Formation among LATs

Expectation of union formation	
Neither of cohabitation & marriage	86%
Only expect cohabitation	6%
Only expect marriage	6%
Expect cohabitation & marriage	1%

Table 2.4. Ordered Logistic Regression of Union Formation Expectation among LATs

Odds Ratios	Expectation of living together	Expectation of getting married
Sociodemographic Characteristics		
Gender		
Women	0.47*	0.29***
Ref: Men		
Age	0.89***	0.88***
Previous marital status		
Divorced/separated	0.55	1.59
Widowed	0.56	1.11
Ref: Never married		
Presence of children		
Resident children	0.93	1.15
childless	0.72	2.16
Ref: Non-resident children		
Socioeconomic Characteristics		
Educational attainment		
Some college	1.45	1.78
BA	0.9	0.65
MA & MA+	1.07	1.69
Ref: HS or less than HS		
Employment status		
Currently employed	1.16	1.42
Ref: Currently not employed		
Total personal income	1.00	1.00
Status of owned home		
Owned private residence	1.36	2.71*
Ref: Rented or not live in a private residence		
Relationship Features		
Relationship duration	0.97*	0.95**
Days of getting together last week	1.27***	1.06
Attitudes and Values		
Traditional gender ideology	1.13	0.99
Autonomy	0.95	0.93
Health Indicator		
Self-rated health	0.95	1.19
cut1	0.00***	0.00***
cut2	0.00**	0.00**
cut3	0.01*	0.00*
cut4	0.04	0.01*
N	250	250

\* p&lt;.05; \*\* p&lt;.01; \*\*\* p&lt;.001

Table 2.5. Ordered Logistic Regression of Marital Expectation among LATs and Cohabitators

Odds Ratio	Expectation of getting married
LATs	0.67*
Ref: cohabitators	
Sociodemographic Characteristics	
Gender	
Women	0.36***
Ref: Men	
Age	0.89***
Previous marital status	
Divorced/separated	0.76
Widowed	0.7
Ref: Never married	
Presence of children	
Resident children	1.33
childless	2.02*
Ref: Non-resident children	
Socioeconomic Characteristics	
Educational attainment	
Some college	1.37
BA	0.85
MA & MA+	1.04
Ref: HS or less than HS	
Employment status	
Currently employed	1.17
Ref: Currently not employed	
Total personal income	1.00
Status of owned home	
Owned private residence	2.16*
Ref: Rented or not live in a private residence	
Relationship Features	
Relationship duration	0.97**
Attitudes and Values	
Traditional gender ideology	0.96
Autonomy	0.94
Health Indicator	
Self-rated health	1.09
cut1	0.00***
cut2	0.00***
cut3	0.00***
cut4	0.00***
N	484

\* p&lt;.05; \*\* p&lt;.01; \*\*\* p&lt;.001

### CHAPTER III: OLDER ADULTS WHO LIVE APART TOGETHER (LAT): A COMPARISON OF SINGLE, DATING, LAT, COHABITATION, REMARRIAGE, AND FIRST MARRIAGE

Living apart together (LAT) relationships involve two people who are in an intimate and committed relationship, but they live in separate households (Benson & Coleman, 2016a, 2016b; Connidis et al., 2017). Scholars tended to agree that LAT relationships have different meanings for individuals. LAT relationships allowed people to remain autonomy and independence. LATs can have intimate relationships but also protect against negative experiences from previous marriage, particular for older adults (Duncan & Phillips, 2010, 2011; De Jong Gierveld, 2002; 2004; Liefbroer et al., 2015; Lewin, 2017b). Because LAT relationships have unique meanings, a debate about whether LAT relationships are different from other relationship types has risen.

Some studies suggested that age is a crucial factor to conceptualize LAT relationships (Connidis et al., 2017; Lewin, 2017b; Pasteels et al., 2017). Older adults seem to see LAT relationships as an alternative to either cohabitation or marriage (Benson & Coleman, 2016a), signaling the special meaning of LAT relationships in later life. Various types of partnerships can have unique meanings and benefits for older adults' well-being and social support. For example, men who are cohabitators have a similar level of psychological well-being as married men, and better than daters and unpartnered men (Wright & Brown, 2017). If research does not include LAT relationships in the comparison of relationships, it may lose some critical features of relationships among older singles and cannot capture a whole understanding of union status in later life. Moreover, dating and LAT relationships are often confounded in research that may lead to a misunderstanding of the effects of romantic relationships among older adults. This study will shed light on comparing a variety of relationship types to decipher what differentiates LAT relationships from other relationship types.

A limited number of studies have addressed LAT relationships in comparisons of relationship types among older adults. One study examined relationship quality by comparing LAT, first marriage, remarriage and cohabiting (Lewin, 2017a), but results may confound LAT and dating relationships. In Lewin's study, LAT relationships were defined by a question about whether respondents who were neither married nor cohabiting currently had a romantic, intimate, or sexual partner. The definition of LAT relationships is imprecise and may mix up daters and LATs. Another study examined relationship quality among daters, LATs, cohabitators, remarried, and first married adults. The study estimated roughly 17% of adults who were aged 50-65 were unmarried, 3.6% of these adults were daters, 5.4 % were LATs, and 8.2% were cohabitators (Brown et al., 2017). The results focused on middle-aged adults who were aged 50-65, so it is unclear what features of relationships are among adults who are ages 65 and older. Although the research has some limitations, it offers an initial comparison of relationship types in later life.

The aim of this study is to conceptualize LAT relationships by comparing their characteristics with singles, daters, cohabitators, remarrieds, and first marrieds. An additional focus concerns the factors related to being either a dater, LAT, or cohabitor in later life. The data for this study came from the Wisconsin Longitudinal Study (WLS) in 2011. The sample of graduates were born between 1938 and 1940, and the sample of siblings were born between 1930 and 1948. The characteristics include gender, age, previous marital status, presence of resident children, educational attainment, employment, total personal income, the ownership of private residence, relationship duration, traditional gender ideology, autonomy, and self-rated health.

This study consists of two parts. The first part is to show descriptive statistics by relationship status: single, dating, LAT relationships, cohabitation, remarriage, and first marriage. Because scant research compares these six relationship types at the same time, the

demographic portrait can provide a basic understanding of characteristics among older adults. This portrait shows how features of older adults differ by relationship type.

In second part, the analysis focuses on unmarried partnerships, including dating, LAT relationships and cohabitation. I examine what factors are related to being daters, LATs, or cohabitators. One of the purposes of this section is to distinguish dating and LAT relationships. Because prior research may confound dating and LAT relationships (Connidis et al., 2017), it is important to examine the different features between daters and LATs to determine whether and how they are distinctive. Furthermore, researchers indicated that LATs resemble cohabiting couples in demographic and social characteristics even though the motivations are diverse (Duncan & Phillips, 2011). If LATs and cohabiting couples are similar, the question is why individuals choose LATs rather than cohabitation. Little is known about whether there are significant differences in social and economic demographic factors between LATs and cohabitation. If daters have different characteristics than LATs, it may also imply daters differ from cohabitators. The comparison of these three non-marital relationship types can help us to understand what features among unmarried older adults prompt them to choose various partnerships. I perform a multivariate analysis to answer these research questions.

### **Background**

Although scholars have discussed what reasons are related to being in LAT relationships (Duncan & Phillips, 2010, 2011; Duncan et al., 2014; Liefbroer et al., 2015), the definition of LAT relationships is ambivalent (Connidis et al., 2017). One critique of LAT relationships is how to differentiate LAT relationships from dating relationships. Older adults who are in LAT relationships are uncertain how to define their relationships even though they recognize that they are not daters (Benson & Coleman, 2016b). Older adults who are in LAT relationships continue

to negotiate their feelings, responsibility and commitment in their current intimate relationships (Bildtgard & Oberg, 2017). The ambivalence of defining LAT relationships raise questions: how to identify older adults who are in LAT relationships and whether LAT relationships are different from other union forms, such as cohabitation or marriage.

To better understand whether LAT relationships are a new family form, it is essential to recognize what factors are associated with older adults being in LAT relationships by comparing different types of relationships. For instance, if daters are more likely to get married than LATs or LATs have similar features to cohabiting and married older adults, then we can be more confident that LAT relationships tend to be a new form of relationship.

#### *Dating and LAT Relationships*

The proportion of adults who are probably in a LAT relationship is roughly 7% to 10% of the population in Australia, North American, and European countries (Connidis et al., 2017; Reimondos et al., 2011; Haskey, 2005; Strohm et al., 2009; Turcotte, 2013). Young adults are more likely to be in LAT relationships than older adults. For example, 31 % of individuals ages 20 to 24 were in LAT relationships, which was defined in this study as unmarried and non-cohabiting individuals who reported being in an intimate relationship with someone in Canada (Turcotee, 2013). The estimates of LAT relationships include age ranges from young adulthood to older adulthood. Scholars also compare LAT relationships with other relationship types, such as cohabiting and married couples. However, a dating relationship is not necessarily one of the comparison groups (Reimondos et al., 2011; Strohm et al., 2009; Turcotte, 2013). The estimates of LAT relationships may confound dating relationships. Additionally, ignorance of age effect that may lead to inaccurate estimates of LAT relationships. A study distinguished dating and LAT relationships by asking individuals whether they agree with the statement that “Nowadays,



many couples are in committed, long-term relationship and choose to live apart rather than cohabit or marry. This describes my current relationship with my partner.” Respondents who either strongly agreed or agreed were classified as being in a LAT relationship. Respondents who neither agreed or disagreed, disagreed, or strongly disagreed were categorized as in a dating relationship (Brown et al., 2016). The study used a direct question to compare dating and LAT relationships. The findings indicated that daters were often be in the younger age group whereas LATs were often to be in middle and older age group. Among daters, nearly 70% were aged 18-34, 18% were aged 35-49, and 12% were aged 50-65. Among LATs, roughly 38% were aged 18-34, 25% were aged 35-49, and 37% were aged 50-65 (Brown et al., 2016). Research results not only showed that age is an important factor to conceptualize LATs but also indicated previous studies may confound dating and LAT relationships (Connidis et al., 2017).

It is challenging to pinpoint what constitutes LAT relationships rather than dating relationships because these relationships do not involve co-residence (Strohm et al., 2009). Unlike marriage (a legal status) or cohabitation (physically living together), in dating and LAT relationships there are no clear “cut-off” time points to distinguish the differences (Duncan & Phillips, 2010). Some researchers used motivations to identify LAT and dating relationships. Duncan & Phillips (2010; 2011) conceptualized people who are in LAT relationships as “dating LATs” and “partnered LATs.” They used questions about why individuals live apart to identify dating LATs and partner LATs. Respondents who reported ‘too early in their relationship’ or ‘not ready to live together’ were taken to be dating LATs, and the rest as partnered LATs. Dating LATs were those who see themselves as more resembling traditional steady or special boy/girlfriends rather than an established couple, and partnered LATs were those who see themselves as a couple who think their relationship is long-term. Duncan and his colleagues

(2013) also found that the reasons for being in LAT relationships are significantly associated with age. Dating LATs tended to be young adults who were aged 18-34, and most of them thought their relationships were ‘too early or not ready to live together.’ Most LATs lived apart because of external constraints, such as financial issues, especially among young adults. In contrast, partnered LATs were in the early middle age group and a small proportion of older adults. Partnered LATs resembled ‘commuter marriages.’ Partnered LAT were often reported that they just did not want to live together and they wanted keep their own homes. However, their discussion did not actually separate dating from LAT relationships. Both “dating LATs” and “partnered LATs” were included under the umbrella of LAT relationships in the study.

Some scholars define dating and LAT relationships by the length of relationship. Older adults engage in a casual/short-term romantic relationship to seek a potential partner. That means dating is a way to find a partner, and the length of relationship tends to be short (Malta & Farquharson, 2014). Castro-Martin et al. (2008) only focused on LATs who with a stable partner more than two years to discard less committed relationships.

The research examining older adults who were in dating relationships shows features similar LAT relationships. Older adults with dating partners are often reluctant to get married although some older singles see dating as a pathway to remarriage. Older women especially want to maintain their independence and avoid traditional gender norms (Dickson, Hughes & Walker, 2005; Watson & Stelle, 2011). However, these studies only examined dating among older adults, and it is unclear what differences exist between dating and LAT relationships for older adults.

#### *LAT and Other Relationship Types*

Adults who are in LAT relationships are a relatively smaller population than adults who are in marriage, cohabitation, or singlehood. The argument that LAT relationships are a new

family form (Levin, 2004; Duncan & Phillips, 2011) yields another hypothesis: if LAT relationships are a new relationship type, LAT relationships may be an alternative to other relationship types, such as marriage or cohabitation. Liefbroer et al. (2015) examined individuals who were aged 18 to 79 and concluded that LAT is neither an alternative to singlehood nor an alternative to cohabitation and marriage. LAT relationships may be an alternative to cohabitation and marriage in specific groups. For example, divorced and widowed older adults were more likely to be in LAT relationships after marital dissolution than to be remarried or cohabiting (De Jong Gierveld, 2004). Having children played a major role in LAT relationships among older adults. Repartnered older adults were more likely to choose cohabitation and LAT than remarriage when their children had negative attitudes about parental repartnering (De Jong Gierveld & Peeters, 2003; De Jong Giverveld & Merz, 2013).

Ross (1995) mentioned that living arrangements are indicative of levels of commitment by various partnerships. Adults who live with their partners tend to have higher levels of commitment, such as cohabitation and marriage. In contrast, adults who have a partner but do not live together have less commitment, such as daters. Thus, some scholars have argued that LAT relationships entailed less commitment than other union forms, such as cohabitation or marriage (Karleson & Borell, 2002). However, other researchers found that adults who are in LAT relationships display similar levels of commitment as cohabiting and married couples (Duncan & Phillips, 2010). Moreover, some scholars emphasized that the levels of commitment in LAT relationships may depend on the reasons for living apart and the relationship stage. Individuals who are dating and living apart may report less commitment in their relationships than those who are more stable in their relationships but have chosen to live separately for various reasons (Carter et al., 2016).

Older adults who are in LAT relationships are distinctive from young adults who are in LAT relationships (Benson & Coleman, 2016a, 2016b; Connidis et al., 2017). Older adults who are in LAT relationships are more likely to have children, have experienced union dissolution, and own their private home (Regnier-Loilier et al., 2009; Brown et al., 2016, 2017). Additionally, LAT relationships are often long-term relationships among older adults. Older adults who are LATs are particularly unlikely to share financial costs or obligations. LATs appear to maintain personal autonomy and independence. LAT relationships may help to reduce the gender inequalities in cohabiting relationships or marriage (Funk & Kobayashi, 2016). Older women particularly play a vital role in establishing and upholding LAT relationships.

Recent research in the United States showed that cohabitators are slightly younger than LATs among middle-aged and older adults who are ages 50-65. Among daters, 52% were men and 48% were women. Among cohabitators, 56% were men and 44% were women. Those middle-aged and older adults who were in LAT relationships had 51% of men and 49% of women. Comparing among these three non-marital relationships, women tended to be in LAT relationships whereas men were in cohabitation (Brown et al., 2017). LATs had the highest educational attainment among the types of relationships. Nearly 33% of LATs had a bachelor's degree or higher (Lewin, 2017a). Cohabitators had the lowest proportion of having a bachelor's degree or higher (Brown et al., 2017). White middle-age and older adults had the highest proportions married. In contrast, black older adults were more likely to in non-marital relationships than marriage. For example, 28 % of blacks were daters while roughly 11% of blacks were married in their middle age (Brown et al., 2017). In Lewin (2017a)'s article, 31% of black older adults were in LAT relationships whereas 11% of black older adults were first married. LATs and married couples were characterized by a higher percentage of home

ownership than other types of unions. LATs more often had children under age 18 in the household than daters and lived in metropolitan areas. LATs also showed lower household income than other types of unions to indicate that LATs may have financial constraints as prior research found (Milan & Peters, 2003; Duncan et al., 2013; Brown et al., 2016, 2017). Daters had significantly shorter-term relationships than LATs. The mean relationship duration was 3.6 years among daters whereas 5.4 years among LATs (Brown et al., 2017).

In the comparison of relationships, married individuals were more advantaged than unmarried individuals in social or economic resources. In a study of daters and singles, the researchers found that unpartnered singles were more disadvantaged than dating individuals (Brown & Shinohara, 2013). Individuals have an intimate partner can enjoy some social or economic resources, even though they are not married or cohabiting. The comparison of the relationships implies marital status, coresidential status, and partnerships that shape individuals' social and economic advantages (Ross, 1995; Wright & Brown, 2017). Thus, comparing different types of relationships can provide a comprehensive understanding of how relationships shape individuals' social and economic resources, especially among older adults who need care and social support in later life.

### **Current Study**

The present study is designed to examine social and economic characteristics of older adults across a range of relationship types, including single, dating, LAT relationships, cohabitation, remarriage, and first marriage. Although previous research compared LATs with single, married or cohabiting individuals in descriptive demographic portraits, few of these studies include dating relationships in the comparison (Haskey, 2005; Liefbroer et al., 2015; Reimondos et al., 2011; Strohm et al., 2009). Hence, little is known about how dating

relationships differ from LAT relationships. Additionally, prior research usually included a wide age range for examining LAT relationships which ignores the fact that young and older adults have different experiences in their life stages that lead to distinct motivations for LAT relationships (Connidis et al., 2017). In this study, I focus on middle-age and older adults who are age 50 and older to examine LAT relationships by comparing various unions status.

The first research question sheds light on whether LATs have different features from daters. I not only examine the difference between dating and LATs, but also test whether relationship type differences exist in demographic characteristics by comparing dating, LAT relationships, cohabitation, and marriage in later life. Additionally, I include older adults who are unpartnered (singles) to capture the whole range of relationships in later life.

A national portrait showed that 14% of singles are in a dating relationship in the United States, and men are more often in dating relationships than women in older adulthood. Daters have higher educational attainment, more assets, and better health than non-daters on average (Brown & Shinohara, 2013). In this national portrait, daters included those who are in LAT relationships. Thus, I will provide more accurate demographic characteristics by distinguishing dating and LAT relationships among adults in later life. I hypothesize LATs are more likely to have higher educational attainment, be employed, have higher income, live in a private home, have children in the household and better health than daters. Additionally, researchers found that LAT relationships are an important type of relationship among older women (Upton-Davis, 2012). Thus, I expect that older women are more likely to be LATs than daters. I also hypothesize LATs are more often divorced or widowed than daters. I expect that LATs are less likely to hold traditional gender ideology than daters and LATs have higher levels of autonomy than daters.

Some studies have shown that married older adults are more advantaged than unmarried adults (Tai et al., 2014; Lewin, 2017a; Brown et al., 2017). However, it is unclear how unmarried older adults decide on their partnership type, particularly in non-marital relationships.

Cohabitation and LAT relationships are becoming more acceptable (Brown, Lee, & Bulanda, 2006; Connidis et al., 2017) which may imply that older adults choose to be in non-marital relationships have special reasons. Previous studies indicated that older adults who are in LAT relationships are reluctant to get married (Connidis et al., 2017), and cohabitation serves as an alternative to marriage (Brown et al., 2012). Understanding non-marital relationships in older adulthood can provide new insight into unmarried older adults' well-being. Thus, the second question of this study focuses on what factors are associated with being in a non-marital relationships, including dating, LAT relationships, and cohabitation. Researchers pointed out that LATs resemble cohabiting couples in demographic and social characteristics even though the motivations are diverse (Duncan & Phillips, 2011). Previous research suggested that LAT relationships are similar to cohabitation. Thus, I hypothesize that older adults who are in LAT relationships have the same socio-demographic features as cohabitators. LATs and cohabitation will have relatively high proportions being women, having a college degree, having a job and high income, living in a private home, having children in the household, and being healthier. Because daters and LATs should have distinct demographic characteristics, I hypothesize the demographic features of daters should differ from cohabitators as well. In multinomial logistic regression analysis, I expect that older adults who are younger, women, have lower educational attainment, lower income, do not live in a private home, do not have children in the household, and are less healthy are more likely to be daters than LATs or cohabitators.

Some scholars emphasized the importance of autonomy or non-traditional gender norms in LAT relationships, particularly among older women (Kobayashi et al., 2017; Upton-Davis, 2012, 2015). Thus, I also examine the scale of traditional gender ideology and the scale of autonomy to test whether autonomy or traditional gender norms had differences between LAT relationships and other relationships. I expect that LATs are less likely to hold a traditional gender ideology and have higher autonomy than daters or cohabitators.

Finally, research indicated that divorced or widowed older adults tend to be in LAT relationships for keeping their autonomy and intimate relationships at the same time. That means previous marital experiences affect older adults' decisions about partnerships (Karlsson & Borell, 2002). Thus, I hypothesize that older adults who divorced or widowed are more likely to be LATs than cohabitators. Older adults still want to maintain committed intimate relationships. Thus they would be more likely in LAT relationships than in dating relationships.

### **Data and Methods**

In this study, data came from the Wisconsin Longitudinal Study (WLS). For details on the Wisconsin Longitudinal Study see Chapter 1. I used data in 2011 wave of CAPI. The sample comprised graduates and siblings. The graduate respondents were born between 1938 and 1940. The majority of sibling respondents were born between 1930 and 1948 (N=7928) (Herd et al., 2014). The WLS included a variety of questions on measuring relationship types. Particularly in 2011, the WLS has a section about respondents' dating behaviors. These questions can categorize different types of partnerships, such as dating, LAT relationships, cohabitation and marriage.

The majority of respondents were born between 1930-1948, including 6,152 graduates and 3,532 siblings. The graduates are homogeneous in age, but ages of siblings vary widely



(Sewell et al., 2003). The age range was 71 to 74 years old among graduates and was 51 to 93 years old among siblings in 2011 survey. The majority of respondents were 63 to 81 years old in the 2011 survey, including graduates and siblings (93%). Only 2% were 51 to 62 years old and 5% were 82 to 93 years old.

The original sample size in 2011 was 9,684 respondents. Nineteen cases were missing valid information about relationship status, and thus they were excluded from the analytic sample. The final analytic sample was 9,665 respondents, including 1,983 respondents were single, 291 respondents were in dating relationships, 250 respondents were in LAT relationships, 234 respondents were cohabitation, 1,458 respondents were in remarriages, and 5,449 respondents were in first marriages. The subsample for examining unmarried relationships were 775 respondents, including 38% of daters, 32% of LATs, and 30% of cohabitators.

## **Measures**

### *Dependent Variable*

The relationship type was coded as series of binary variables, including singles, daters, LATs, cohabitators, remarrieds, and first marrieds. Respondents who were not in any partnerships were coded as singles. Respondents who were neither currently married nor cohabiting answered series of questions about dating behaviors. The first question was: “Do you go out on dates?” Respondents who reported “yes” were asked: “Do you regularly date one person that you consider your steady partner?” If respondents reported that they go out dates but do not regularly date with a steady partner, those respondents were coded as daters (N=241). If respondents reported that they go out dates and regularly date with their steady partner, those respondents were coded as LATs (N=300). Because LAT relationships are a long-term committed relationship, the relationship duration are less than one year should be seen as dater who are in a

short-term and arguably less committed relationship. Additionally, among respondents who had a steady partner (N=300), 89 respondents reported that their relationship duration was less than 2 years, which was nearly 30% among respondents who had a steady partner. If I defined LATs as those who have relationship durations of at least 2 years, the sample size became too small and may have had measurement issues. Thus, I excluded 50 respondents who had a steady partner and relationship duration was less than one year from LAT relationships (roughly 17% among respondents who had a steady partner). Those 50 respondents were categorized as daters. LATs were defined as respondents who go out dates and have a steady partner, and their relationship duration is one year or more (N=250). Daters were respondents who go out dates but do not have a steady partner or if they do have a steady partner, their relationship duration is less than one year (N=291).

Unmarried respondents were asked if they are living in a marriage-like relationship or cohabiting. If respondents reported “yes,” they were coded as cohabitators. Respondents who were currently married were separated from coding as remarried and first married.

### *Independent Variables*

The descriptive statistics include a variety of variables to show characteristics by relationship type. Social demographic characteristics include gender, age, previous marital status, and the presence of children. Gender was a dummy variable with women coded as 1 and men 0 (reference group). Age was a continuous variable using year of survey (2011) minus participant’s birth year. Previous marital status was coded as binary variables, including never married, divorced or separated, and widowed. The analysis includes previous marital status to examine the differences among daters, LATs, and cohabitators. Because daters, LATs, and cohabitators are all unmarried, their previous experiences of marital status may be related to the choice of

relationship types. The presence of children was coded as three categories: resident children, non-resident children (reference group), and childless.

Socioeconomic characteristics included educational attainment, employment, total personal income, and home ownership. Educational attainment was coded as a series of dummy variables: a high school degree or less (reference group), some college, Bachelor's degree, and Master's degree or higher. Employment was a dummy variable coded as 1 currently employed and 0 currently not employed. Total personal income was a continuous variable measured in dollars. Total personal income included all sources of income, such as wages, salaries, social security, or pensions. Home ownership was coded as a dummy variable: the respondent rented or did not live in a private residence (reference group), and the respondent owned a private residence.

A key relationship feature is relationship duration. Relationship duration was a continuous variable and was created by using questions about the length of relationship with a partner. For respondents in LAT relationships, the survey asked the length of relationship with a partner by unit and number. The unit included days, weeks, months, and years. The units of the length of relationship was coded into years. After calculating the unit and number in the length of relationship, I created years of relationship duration in LAT relationships. Respondents who reported less than 365 days, 52 weeks, or 12 months in their relationships that were coded as 0 "less than one year." Respondents who reported more than one year were coded as numbers of years in their relationship duration.

The WLS asked what month and year that respondents began living with their partner. The WLS provides a variable called century month for the beginning of the current cohabiting relationship in the dataset. I calculated the beginning year of cohabitation by using the century

month for the beginning of the current cohabiting relationship. Then, I subtracted the beginning year of cohabitation from the survey year (2011) to get the total years of relationship duration in cohabitation. If the value of relationship duration was 0, it meant that cohabitators began living with their partner less than one year ago. If the value of relationship duration was one or more, it indicated that cohabitators started living with their partner at least one year ago.

The WLS has a variable called century month of start of current marriage. I calculated the beginning year of marriage by using the century month of current marriage. Then, I subtracted the beginning year of marriage from the survey year (2011) to get total years of relationship duration for current married older adults. The number of relationship duration showed how many years ago the respondent got married with their current spouse. If the value of relationship duration was 0, it meant that married older adults began their marriage with their current spouse was less than one year ago. If the value of relationship duration was one or more, it indicated that married older adults began their current marriage at least one year ago.

There were two scales to measure attitudes and values. The first scale was traditional gender ideology. Traditional gender ideology was created by using three questions. The questions were “to what extent do you agree that a working mother can establish just as warm and secure of a relationship with her children as a mother who does not work?”, “to what extent do you agree that when a husband and wife make decisions about buying major things for the home, the husband should have final say? (reverse coded)”, and “to what extent do you agree that it is much better for everyone if the man earns the main living and the woman takes care of the home and family? (reverse coded)” Responses ranged from 1 “Strongly Agree” to 5 “Strongly Disagree.” The sum of scores ranged from 3 to 15 ( $\alpha=0.56$ ). Higher values reflected more

traditional beliefs about work and family. These items were consistently used to measure gender ideology in previous research (Davis, 2011).

The second scale was autonomy. Three items were coded as the scale of autonomy: “to what extent do you agree that you have confidence in your opinions even if they are contrary to the general consensus?” (reverse coded), “to what extent do you agree that you are not afraid to voice your opinions, even when they are in opposition to the opinions of most people?” (reverse coded), and “to what extent do you agree that it is difficult for you to voice your opinions on controversial matters?” The original scale of autonomy is a six-point scale, ranging from 1 “strongly agree” to 6 “strongly disagree.” The sum of scores ranged from 3 to 18 ( $\alpha=0.57$ ). Higher scores indicate higher levels of autonomy. The scale of autonomy followed Magee (2006)’s analytic strategy to verify autonomy is distinct from the other dimensions of Ryff’s scales of psychological well-being.

The health indicator captured self-rated health. I controlled for health in the analyses because poor health may undermine the desire to have an intimate partner (Benson & Coleman, 2016a; Bulcroft & Bulcroft, 1991; Watson & Stelle, 2011). Self-rated health was a five-point scale that ranged from 1=poor to 5=excellent.

#### *Multiple Imputation for Missing Cases*

Some variables have invalid cases because respondents did not provide information, or their answers were inappropriate for analysis. The number of the lowest missing was 4 case for employment status and the highest missing was 1,897 cases for the scale of autonomy. The average missing cases was 5% in the analysis. The analysis deals with missing cases by using multiple imputation in descriptive statistics and multinomial logistic regression models.

## **Analytic Strategy**

The first step in this study is to examine the demographic characteristics by relationship type. The demographic portrait provides initial insights to compare the different characteristics of older adults by various relationship types. The portrait comprises social demographic characteristics, economic demographic characteristics, relationship feature, attitudes and values, and self-rated health (Table 3.1).

The second step focuses on non-marital relationships, including dating, LAT relationships, and cohabitation. In Table 3.2, the descriptive statistics show partnership status by gender. Then, the descriptive statistics categorize partnership status as daters, LATs, and cohabitators by gender to understand the distribution of the study variables by partnership status (Table 3.3). The purpose of these tables is to show whether gender difference exist by partnership status among unmarried older adults. Finally, I estimate models by using multinomial logistic regression. The models predict the different features of unmarried relationships by comparing daters, LATs, and cohabitators. LATs are the reference group in the analytic models. The predictor variables include gender, age, previous marital status, the presence of children, educational attainment, employment status, total personal income, ownership of private residence, traditional gender ideology, autonomy, and self-rated health (Table 3.4).

## **Results**

### *Demographic Characteristics by Relationship Types*

Table 3.1 shows all demographic characteristics by the comparison of relationship types. Among single older adults, 76% were women, and only 24% were men. Among daters, 51% were women, and 49% were men. About 52% were women, and 48% were men among LATs. Women showed slightly more often to be in LAT relationships than in dating relationships.

Among remarried older adults, 59% were men, and 41% were women. Among cohabitators, nearly 51% were men, and 49% were women. Among older adults who were at first marriage, roughly 52% were men, and 48% were women. Cohabitators had the lowest average age which was 69.7 years old, and single older adults had the highest average age (72.3 years old) when compared with other relationship types. The average age was 71.1 years old among LATs, 70.8 years old among remarried older adults, and 71.3 years old among first married older adults. Daters tended younger than LATs.

Among single older adults, roughly half were widowed (53%), 35% were divorced, and 12% were never married. Among daters, the majority were divorced (47%), 35% were widowed, and 18% were never married. Among LATs, over half were divorced (52%), 42% were widowed, and only 6% were never married. Among cohabitators, over half were divorced (53%), 30% were widowed, and 17% were never married. LATs were more often than daters to be divorced or widowed, indicating the difference between dating and LAT relationships. The finding also confirmed that marital experiences affected older adults to choose LAT relationships (De Jong Gierveld, 2004; Karlsson & Borell, 2002).

Older adults who were in cohabitation or marriage more often had non-resident children compared with older adults who were in dating or LAT relationships. Older adults who were in cohabitation or marriage were also less likely to be childless than older adults who were in dating or LAT relationships. Single older adults were more likely to have resident children than other relationship types. Among single older adults, nearly 71% had non-resident children, 13% had resident children, and 16% were childless. Among daters, about 66% had non-resident children, 9% had resident children, and 25% were childless. Among LATs, about 79% had non-resident children, 7% had resident children, and 14% were childless. Among cohabitators, roughly

83% had non-resident children, 4% had resident children, and 13% were childless. Among remarried older adults, about 91% had non-resident children, 7% had resident children, and only 3% were childless. Among first married older adults, roughly 88% had non-resident children, 8% had resident children, and merely 4% were childless. LATs were less likely to have resident children than daters. However, LATs were more often than cohabitators to have resident children.

The majority of educational attainment was less than high school or high school degrees among all older adults. However, single older adults more often had lower educational attainment than other relationship types. Among single older adults, roughly 58% had less than a high school degree or a high school degree. Daters were more likely to have bachelor's degrees, master's degrees or higher than other relationship types. Among daters, nearly 39 % had bachelor's degrees, master's degrees or higher. When daters compared with LATs, daters were more likely to have bachelor's degrees and master's degrees or higher than LATs (27%). Single older adults more often were currently not employed than other relationship types. Among single older adults, about 74% were currently not employed. Daters were more likely to be employed than other relationship types. Among Daters, nearly 40% were currently employed. LATs were less likely to be employed than daters but were more likely to be employed than cohabitators. Among LATs, about 38% were currently employed. Among cohabitators, 36% were currently employed. Daters had highest average personal income (\$38,849), followed by LATs (\$36,900), remarried older adults (\$35,421), cohabitators (\$31,673), first married older adults (\$28,944), and single older adults (\$25,679). Most older adults owned private residences. However, single older adults and older adults who were in dating or LAT relationships were less likely to own private residences than older adults who were in cohabitation or marriage. Among single older adults, about 77% owned private residences. LATs (87%) were more often than daters (80%) to own



private residences. Almost nine-tenths of older adults who were cohabiting, remarried, or first married own private residences.

LATs had a shorter relationship duration (8.7 years) than cohabitators and married older adults. Among cohabitators, the mean of relationship duration was 13.2 years. Older adults who were first married had the most extended relationship duration (47.9 years).

The scores of traditional gender ideology ranged from 3 to 15. Higher values reflected more traditional beliefs about work and family. LATs had the same average score of traditional gender ideology as older adults who were single and remarried (6.5). Among daters, the average score of traditional gender ideology was 6.7. The average score of traditional gender ideology among cohabitators was 6.1. The average score of traditional gender ideology among first married older adults was 6.8. Older adults who were first married were more likely to hold traditional gender ideology (6.8) than those who were in LAT relationships.

The scores of autonomy ranged from 3 to 18. Higher scores indicated higher levels of autonomy. The results did not show a clear pattern of autonomy by relationship types. Daters and remarried older adults had higher scores of autonomy than other relationship types, 14.1 and 14.0 respectively. LATs and single older adults had the same scores of autonomy (13.4). LATs did not have high levels of autonomy when comparing with daters. LATs even had lower levels of autonomy than cohabitators (13.9). However, the findings indicated that levels of autonomy among LATs significantly differed from daters and remarried older adults.

Older adults had good health generally. The average scores of self-rated health were similar among older adults except for older adults who were single. Single older adults were a particular lower average score (3.4) of self-rated health than other relationship types (3.7 points). LATs and daters had the same levels of health.

### *The Comparison of Relationship Types among Unmarried Older Adults*

The results in Table 3.2 show the partnership status of unmarried older adults by gender. Unmarried women were disproportionately unpartnered when compared with unmarried men. Among unmarried women, nearly four-fifths were unpartnered, and merely 21% were partnered. Among unmarried men, roughly 55% were unpartnered, and 45% were partnered. Unmarried older men were almost twice more likely to be partnered than unmarried older women.

When partnership status was categorized as daters, LATs, and cohabitators, women were less likely to be cohabitators than men. Table 3.3 showed that among unmarried partnered women, roughly 29% were cohabitators, 38% were daters, and 33% were LATs. Among unmarried partnered men, about 31% were cohabitators, 37% were daters, and 31% were LATs. Women were more often in dating or LAT relationships than were men.

The multinomial logistic regression model predicted what characteristics were associated with unmarried older adults who are in dating, LAT relationships, and cohabitation. The results are shown in Table 3.4. Although the descriptive statistics showed that women were disproportionately in dating or LAT relationships, the regression model did not find a significant association between gender and relationship type. The finding indicated that when age increased, unmarried older adults had lower odds of cohabitation than in dating or LAT relationships. Previous marital status had a significant negative association with relationship type. If unmarried older adults were divorced or widowed, they had lower odds of being daters or cohabitators than to be LATs. In other words, unmarried older adults who were divorced or widowed tended to be in LAT relationships. Resident children were not significantly associated with predicting dating, LAT relationships, and cohabitation among unmarried older adults. However, childless was a

significantly negative association with cohabitation. Unmarried older adults who were childless had lower odds of cohabitation than LAT relationships.

Unmarried older adults who had a bachelor's degree, master's degree or higher had greater odds of being in dating relationships than LAT relationships. However, educational attainment was not significant for predicting cohabitation. Status of the owned home showed a difference between dating relationships and cohabitation. When LAT relationships were the reference group, unmarried older adults who owned private residence had lower odds of being dating relationships. In contrast, unmarried older adults who owned private residence had greater odds of being cohabitation than LAT relationships.

As LAT relationships were the reference group, unmarried older adults who had more traditional gender ideology had greater odds of being in dating relationships. In contrast, unmarried older adults who had more traditional gender ideology had lower odds of cohabitation than LAT relationships. Unmarried older adults who had a higher level of autonomy were greater odds of being in dating relationships than LAT relationships. However, autonomy was not significantly associated with cohabitation when compared to LAT relationships.

### **Discussion**

This study aims to compare several characteristics across a range of relationship types in older adulthood including single, dating, LAT relationships, cohabitation, remarriage, and first marriage. Then, additional analyses focused on non-marital relationships to examine what factors are associated with unmarried older adults to be daters, LATs, or cohabitators. The comparison of relationship types in later life can help researchers to clarify the meaning of LAT relationships. Specifically, little is known about the differences between dating and LAT relationships. I examined the differences between LAT relationships and other relationship types to capture

accurate features of LAT relationships in later life. This study used quantitative data from the WLS. The WLS has several items about sociodemographic characteristics, socioeconomic characteristics, relationship features, attitudes and values, and a health scale that allow the researcher to make a comparison of relationship types in older adulthood. Generally, the findings not only indicated older adults who were in dating and LAT relationships had different features but also showed that those who were in LAT relationships differed from cohabitation. The multinomial logistic regression models demonstrated that several social and economic demographic factors were related to the type of partnership among unmarried older adults. For example, older adults who experienced divorce and widowhood were less likely to be in dating relationships or cohabitation than in LAT relationships. Owning a private residence translated into greater odds of being cohabitators but not be daters. These findings confirmed the hypotheses that LAT relationships have different features from dating relationships, and LAT relationships are not similar to cohabitation. Additionally, the demographic features of daters differed from cohabitators as well.

The first part of this study examined whether LATs have different features from daters and compared LAT relationships with other relationships. The result did not support the hypothesis that LAT relationships play a unique role for older women when compared with daters. However, the results showed that older women tended to be in dating or LAT relationships rather than in cohabitation or marriage if older women formed an intimate relationship.

Daters were more likely than LATs to have higher educational attainment, be employed, have higher income and have resident children. These results did not align with the hypothesis that LATs are more likely than daters to have higher educational attainment, be employed, have

higher income, and have resident children. However, the descriptive statistics supported the hypothesis that LATs more often lived in a private home than daters. Daters and LATs both were in good health generally. The results confirmed the hypotheses that LATs are more often than daters to be divorced or widowed, and LATs. The findings also supported the hypothesis that LATs are less likely to hold traditional gender ideology than daters. However, daters had higher levels of autonomy than LATs.

The descriptive statistics did not support the hypothesis that older adults who are in LAT relationships have the same social and economic demographic features to cohabitators. In other words, the findings indicated LAT relationships differed from cohabitation. For example, LATs were more often women than cohabitators. LATs more often had some college than cohabitators. Additionally, LATs had a higher mean of total personal income than cohabitators. LATs were less likely to have a private residence and more often had resident children than cohabitators. LATs were disproportionately widowed although LATs and cohabitators were similarly likely to be divorced or separated.

The multinomial logistic regression models compared unmarried older adults by relationship type and found differences in social and economic demographic features among dating, LAT relationships, and cohabitation. The findings supported the hypothesis that LAT relationships have distinct demographic characteristics and differ from dating relationships and cohabitation. Age, previous marital status, presence of children, education, home ownership, traditional gender ideology and autonomy, showed effects on forming dating or LAT relationships among unmarried older adults. The analysis not only demonstrated some consistent findings with prior studies but also found some inconsistent results. For example, my findings show that previous marital experiences may affect older adults' decision to be in LAT

relationships (De Jong Gierveld, 2004; Karlsson & Borell, 2002). Unmarried older adults who were divorced or widowed were less likely to be daters or cohabitators than to be in LAT relationships. Comparing to live together, unmarried older adults may prefer to stay in LAT relationships to maintain their independence and avoid negative experiences of living together (Duncan et al., 2013; Haskey & Lewis, 2006; Upton-Davis, 2012). At the same time, LAT relationships allow unmarried older adults to have intimate and long-term relationships (Duncan & Phillips, 2010; 2011). However, the results of multinomial logistic regression models did not support the argument that unmarried older adults who lived with children were likely to be in LAT relationships ((De Jong Gierveld & Peeters, 2003; De Jong Giverveld & Merz, 2013) even though the result indicated that unmarried older adults who were childless were less likely to be cohabitators when compared to LATs. One possible explanation is that older adults who have resident children may tend to remain single or choose more flexible partnership types than LAT relationships, such as dating relationships. Indeed, when cohabitators were the reference group, older adults who had resident children had significantly greater odds of being daters (result not shown).

The other explanation for inconsistent findings may be related to the selection. For example, the results did not reveal differences in socioeconomic indicators between LATs and cohabitators, including on educational attainment, employment status, and total personal income. Older adults who have financial issues may live together with their partner to reduce financial stress before the beginning of the survey. Additionally, people who have higher educational attainment are more likely to get married than people who have lower educational attainment (Cherlin, 2010). It may be possible that older adults who have higher educational attainment already have gotten married when the survey begins.

Finally, the results did not support the argument that non-traditional gender norms and autonomy are associated with being in a LAT relationship among unmarried, partnered older adults (Funk & Kobayashi, 2016, Kobayashi et al., 2017), although the results showed that unmarried, partnered older adults who had higher levels of autonomy tended to be in dating relationships. The results imply that dating relationships are even more flexible than LAT relationships. Daters may hold more autonomy or independence than LATs, perhaps because dating relationships involve less commitment than LAT relationships.

This study confirmed that various relationship types have different social and economic demographic characteristics, relationship features, attitudes, and values. Furthermore, LAT relationships have some specific social and economic demographic characteristics that differ from dating relationships and cohabitation among unmarried older adults. One limitation in this study is that the WLS did not ask questions about relationship features to daters, such as relationship duration. Thus, the analysis cannot compare relationship duration between daters and LATs. It is also unclear how commitment is different between daters and LATs.

Second, nearly all respondents in the WLS are white. Prior studies indicated that black older adults were more likely to be in non-marital relationships than marriage, including dating and LAT relationships (Brown et al., 2017; Lewin, 2017a). However, I am not able to examine racial/ethnic differences in LAT relationships among older adults because of the limitation of data. Future research should consider the racial/ethnic variation in LAT relationships. Finally, this study did not include characteristics of partners. Future research may consider dyadic data to provide more details of how older adults and their partners decide to be in LAT relationships.

Despite these limitations, the findings demonstrated that LAT relationships have unique meanings and are a distinct relationship type. This study contributes to the literature by

examining the differences in demographic characteristics across relationship types in older adulthood, particularly comparing LAT relationships with dating relationships and cohabitation. LATs showed different social demographic characteristics from daters and cohabitators, indicating there are specific factors related to the decision of being in LAT relationships. Future research should distinguish LATs from other relationship types, including dating and cohabitation, when examining older adults' partnership status in later life.



Table 3.1. Mean or Percentage of Demographic Characteristics by Relationship Types

	Singles	Daters	LATs	Cohabitors	Remarrieds	First marrieds
Sociodemographic Characteristics						
Gender						
Men	24% <sup>a</sup>	49%	48%	51%	59% <sup>a</sup>	52%
Women	76% <sup>a</sup>	51%	52%	49%	41% <sup>a</sup>	48%
Age	72.3 <sup>a</sup>	70.5	71.1	69.7 <sup>a</sup>	70.8	71.3
Previous marital status						
Never married/single	12% <sup>a</sup>	18% <sup>a</sup>	6%	17% <sup>a</sup>		
Divorced/separated	35% <sup>a</sup>	47%	52%	53%		
Widowed	53% <sup>a</sup>	35%	42%	30% <sup>a</sup>		
Presence of children						
Non-resident children	71% <sup>a</sup>	66% <sup>a</sup>	79%	83%	91% <sup>a</sup>	88% <sup>a</sup>
Resident children	13% <sup>a</sup>	9%	7%	4%	7%	8%
childless	16%	25% <sup>a</sup>	14%	13%	3% <sup>a</sup>	4% <sup>a</sup>
Socioeconomic Characteristics						
Educational attainment						
HS or less than HS	58%	38% <sup>a</sup>	52%	57%	47%	53%
Some college	16%	23%	21%	16%	21%	15% <sup>a</sup>
BA	13%	18% <sup>a</sup>	12%	12%	13%	16%
MA & MA+	13%	21%	15%	16%	18%	16%
Employment status						
Currently employed	26% <sup>a</sup>	40%	38%	36%	34%	31% <sup>a</sup>
Currently not employed	74% <sup>a</sup>	60%	62%	64%	66%	69% <sup>a</sup>
Total personal income	25,679 <sup>a</sup>	38,849	36,900	3,1673	35,421	28,944 <sup>a</sup>
Status of owned home						
Rented or not live in a private residence	23% <sup>a</sup>	20% <sup>a</sup>	13%	8% <sup>a</sup>	6% <sup>a</sup>	4% <sup>a</sup>
Owned private residence	77% <sup>a</sup>	80% <sup>a</sup>	87%	92%	94% <sup>a</sup>	96% <sup>a</sup>
Relationship Features						
Relationship duration (Years)			8.7	13.2 <sup>a</sup>	24.2 <sup>a</sup>	47.9 <sup>a</sup>
Attitudes and Values						
Traditional gender ideology (score range: 3-15)	6.5	6.7	6.5	6.1	6.5	6.8 <sup>a</sup>
Autonomy (score range: 3-18)	13.4	14.1 <sup>a</sup>	13.4	13.9	14.0 <sup>a</sup>	13.6
Health Indicator						
Self-rated health (score range: 1-5)	3.4 <sup>a</sup>	3.7	3.7	3.7	3.7	3.7
Total N	1,983	291	250	234	1,458	5,449
	21%	3%	3%	2%	15%	56%

Note: <sup>a</sup> LATs are significantly different from other relationship types ( $p < .05$ ). LAT relationships are the reference group.

Table 3.2. Partnership Status among Unmarried Older Adults by Gender

	Men		Women <sup>a</sup>	
	Freq.	%	Freq.	%
unpartnered	467	55	1,516	79
partnered	383	45	392	21
Total	850		1,908	

Note: <sup>a</sup> Older women significantly differ from men. Older women are less likely to be partnered than older men ( $p < .05$ ).

Table 3.3. Relationship Types among Unmarried Older Adults who Are Partnered by Gender

Partnered	Men		Women	
	Freq.	%	Freq.	%
Daters	143	37	148	38
LATs	120	31	130	33
Cohabitors	120	31	114	29
Total	383		392	

Note: LATs are the reference group (within column). The results do not find that LATs significantly differ from daters or cohabitators by gender ( $< .05$ ).

Table 3.4. Multinomial Logistic Regression Models Predicting Unmarried Older Adults who are in Dating, LAT Relationships, or Cohabitation

Odds Ratio (Ref: LATs)	Daters	Cohabitors
<b>Sociodemographic Characteristics</b>		
Gender		
Women	1.21 <sup>a</sup>	0.76
Ref: Men		
Age	0.98	0.94**
Previous marital status		
Divorced/separated	0.32** <sup>a</sup>	0.06***
Widowed	0.33* <sup>a</sup>	0.05***
Ref: Never married		
Presence of children		
Resident children	1.30 <sup>a</sup>	0.48
childless	0.98 <sup>a</sup>	0.11***
Ref: Non-resident children		
<b>Socioeconomic Characteristics</b>		
Educational attainment		
Some college	1.44 <sup>a</sup>	0.65
BA	2.34** <sup>a</sup>	0.8
MA & MA+	1.98* <sup>a</sup>	0.8
Ref: HS or less than HS		
Employment status		
Currently employed	1.05	0.82
Ref: Currently not employed		
Total personal income	1.00	1.00
Status of owned home		
Owned private residence	0.56* <sup>a</sup>	1.92*
Ref: Rented or not live in a private residence		
<b>Attitudes and Values</b>		
Traditional gender ideology	1.13* <sup>a</sup>	0.89*
Autonomy	1.09*	1.05
<b>Health Indicator</b>		
Self-rated health	0.99	0.96
cons	2.18	1065.01***
N	775	775

\* p&lt;.05; \*\* p&lt;.01; \*\*\* p&lt;.001

<sup>a</sup> Cohabitors are the reference group and significantly differ from daters.

Note: Gender and previous marital status interactions are not significant (results not shown).

## CHAPTER IV: DEPRESSION IN OLDER ADULTS: A COMPARISON OF SINGLE, DATING, LAT, COHABITATION, REMARRIAGE, AND FIRST MARRIAGE

Different relationship types have various effects on health and well-being among older adults. Ross (1995) noted that social attachments are a sequence of increasing commitments in relationships. Living with a partner is associated with higher levels of attachment and commitment that provide more benefit for psychological well-being, especially for married individuals. The idea of relationships as a continuum of social attachment and commitment implies that married individuals have the highest level of well-being, followed by cohabitators, daters, and singles (Ross, 1995; Kamp Dush & Amato, 2005; Wright & Brown, 2017). However, it is unclear how social attachments are related to psychological well-being in LAT relationships because the theoretical framework of social attachment ignored LAT relationships. Scholars have indicated that LAT relationships have particular meanings for older adults (Connidis et al., 2017; Lewin, 2017b) that may make LAT relationships have unique benefits for older adult well-being. As LAT relationships gain popularity, it is important to assess where they fit on a continuum of social attachment and how LAT relationships are related to psychological well-being in later life.

The perspective of relationships as a continuum of social attachment provides a possible explanation to understand why married persons tend to have higher levels of well-being than other relationship types. Researchers have found that marriage provides benefits for people. Married individuals are typically healthier than unmarried persons (Carr & Springer, 2010; Liu & Umberson, 2008). Marriage has protective effects that enhance well-being relative to other relationship types. For example, scholars have measured psychological well-being by using depressive symptoms to compare cohabitators and marrieds. One study showed that older cohabitators had higher average levels of depression than older married individuals (Brown,

Bulanda, & Lee, 2005). Another study found that cohabiting and married individuals showed similar levels of depression (Musick & Bumpass, 2012). Similarly, a recent study found no difference on depressive symptoms between older cohabiting and older married adults (Wright & Brown, 2017). Relationship types may have different meanings between older adults and younger adults. Prior research typically includes a broad range of ages that blurs the age effect on psychological well-being (Brown et al., 2005; Carr & Springer, 2010; Liu & Umberson, 2008; Musick & Bumpass, 2012).

Additionally, comparisons of marriage and cohabitation ignore the role of partnerships for those in non-coresidential relationships. Wright and Brown (2017) found that older adults who are unpartnered or in dating relationships have higher levels of depression than married and cohabiting older adults. However, this research may confound dating relationships with LAT relationships in older adults' psychological well-being. Although little work examines psychological well-being in LAT relationships, research has provided some insights, such as comparing the differences in demographic characteristics of LAT relationships to other relationship types and motivations for being in LAT relationships (Connidis et al., 2017). These findings allow researchers to link theories of psychological well-being with LAT relationships and create hypotheses to examine psychological well-being in LAT relationships.

This study examines how relationship types are associated with psychological well-being. The measurement of psychological well-being focuses on depressive symptoms among older adults by using data from the Wisconsin Longitudinal Study (WLS) in 2011. The comparison of relationship types spans single, dating, LAT relationships, cohabitation, remarriage, and first marriage. Additionally, the analysis measures whether relationship types are more salient for men's than women's psychological well-being. This study sheds light on the theoretical

framework concerning relationships as a continuum of social attachment. According to this concept, a sequence of increasing commitments in relationships is an important factor for well-being (Ross, 1995). Relationship types may accumulate different levels of commitment and lead to different levels of psychological well-being. One study found that older adults in LAT relationships have lower levels of commitment than marriage, but higher levels of commitment than dating relationships. LAT relationships showed the same levels of commitment as cohabitation (Brown et al., 2017). The order in levels of psychological well-being from high to low by relationship types may be first marriage, remarriage, cohabitation, LAT relationships, dating relationships, and no partnership. Alternatively, cohabitation may have similar levels of psychological well-being to LAT relationships, mirroring the comparable commitment levels for the two groups documented in earlier research (Brown et al., 2017).

### **Background**

The increase in older adults forming various types of relationships (De Jong Gierveld, 2004; Malta & Farquharson, 2014; Brown et al., 2018) in later life signal that different relationship types have distinct meanings and benefits for older adults. The diversity of relationship types also brings different effects on health and well-being for older adults. Early research provided evidence that married older persons experience more benefits in health and well-being than other relationship types (Carr & Springer, 2010; Liu & Umberson, 2008; Kim & McKenry, 2002; Umberson, Thomeer, & Williams, 2013). However, a more recent study has found unique results for older adults. Older cohabitators had similar levels of psychological well-being to marrieds. The findings indicated that marriage is not the only relationship providing high levels of well-being among older adults (Wright & Brown, 2017).

Most research focuses on well-being for older adults who are married or cohabiting (Brown, 2000; Musick & Bumpass, 2012), ignoring unmarried older adults who may have an intimate partner outside of the household, such as older adults who are in LAT relationships. LATs feel that living apart is a good arrangement for several reasons (Duncan & Phillips, 2010, Connidis et al., 2017). For example, LAT relationships can help to minimize conflict and maintain intimate relationships for older adults who have children in the household (De Jong Gierveld & Marz, 2013). LAT relationships may have unique benefits that can reduce stress and enhance well-being relative to dating or being unpartnered. Indeed, these potential benefits in LAT relationships may also indicate that LAT relationships are as desirable a choice as cohabitation or marriage for older adults. Research has demonstrated that LATs are reluctant to cohabit or get married in the future, particularly among older adults (Benson & Coleman, 2016a; De Jong Gierveld, 2004; Lewin, 2017; Strohm et al. 2009). Little research examines health and well-being of older adults in LAT relationships by comparing them to other relationship types. LAT relationships have become increasingly acceptable in recent years (Connidis et al., 2017), and thus it is important to understand well-being for older adults in LAT relationships.

### *Theoretical Background*

Ross (1995) defined social attachment as a sequence of increasing commitment in relationships. Three essential elements affect the levels of social attachment: whether persons have a partner, marital status, and living arrangements with a partner. The idea of social attachment argues that partners who live together are more committed to their relationships than those who do not. Having a co-resident partner provides social, emotional, and economic support that make persons have lower distress levels, especially for married persons. Ross argued that different relationship types have different levels of social attachment. The order of social

attachment from low to high is: no partner, having a partner who lives outside the household (e.g., dating relationships), cohabiting with a partner, and living with a married partner in the household. Marriage is associated with well-being because married people are more likely to have significant social attachment than other relationships types. The psychological well-being varies by order of social attachment. Persons who are unpartnered should have the highest levels of depression, followed by persons who have a partner who lives outside the household, persons who are cohabiting, and married persons, who have the lowest levels of depression.

Extending the framework of social attachment, Kamp Dush and Amato (2005) emphasized the importance of commitment in relationships. They argued that the continuum of commitment in romantic relationships is likely to be associated with people's well-being. Married persons exhibit higher levels of commitment than those in other relationship types that bring social, emotional, and economic support to benefit people's mental health and well-being. The finding demonstrated that married adults reported the highest level of subjective well-being, followed by cohabiting adults, adults who have a steady partner in dating relationships, adults who are dating multiple persons, and adults who are not dating. When married people have a longer relationship duration and accumulate more commitment than other relationship types, they may have higher levels of social attachments and commitment to providing more benefits. Prior research found evidence that cohabitators in long union duration reported higher levels of depression than their married counterparts (Brown, 2000). When cohabitators are in long relationship duration, they tend to have higher levels of depression than married people. LAT relationships are ignored in the theoretical framework of social attachments. The lack of attention to the associations between LAT relationships and well-being may be because LAT relationships are confounded with dating relationships in the research literature. Researchers see LAT



relationships as dating relationships which may lead to misunderstanding how LAT relationships affect older adult well-being. Older adults in LAT relationships have their specific reasons for living apart, such as maintaining their freedom or reducing strains in later life (Connidis et al., 2017; Duncan & Phillip, 2011; Karlsson & Borell, 2002). The strains include avoiding unequal demands of caring for a partner or an asymmetrical distribution of household labor (Funk & Kobayashi, 2016; Karlsson & Borell, 2002; Lewin, 2017a). Some researchers have compared relationship quality of LATs with other relationship types (Brown et al., 2017; Tai, Baxter & Hewitt, 2014; Lewin, 2017a). The research indicates LAT relationships may have some benefits for well-being, even though the findings are not directly related to psychological well-being. For example, although LATs are less likely to be happy and have support than married and cohabiting individuals in later life, LATs report lower strain than do those in other types of relationships. The strains are usually from their partners. Among older adults in LAT relationships, their partners are less likely to make too many demands or criticize them than cohabiting or married older adults (Lewin, 2017a). The other study found that LATs, daters, and cohabitators have similar happiness, but LATs have lower support than cohabitators (Brown et al., 2017). Overall, this pattern of findings signals that LAT relationships have some benefits for older adults.

Because LAT relationships seem to be a preferred choice of partnerships for many older adults, researchers have debated whether LAT relationships are an alternative to cohabitation or an alternative to marriage (Benson & Coleman, 2016a; Connidis et al., 2017). The perspective of relationships as a continuum of social attachment points out that couples who do not live together may have less commitment to each other (Ross, 1995; Kamp Dush & Amato, 2005). However, scholars found that adults in LAT relationships have high commitment. LATs

described their commitment as strong, and rooted in exchanges of support, care and love (Carter et al., 2016; Kobayshi et al., 2017). These arguments indicated that adults in LAT relationships might have similar levels of social attachment as cohabitators or even married persons. Thus, adults in LAT relationships should have comparable levels of psychological well-being as cohabitators or married adults. The notion that LAT relationships are an alternative to cohabitation or marriage present a competing hypothesis to the relationships as a continuum of social attachment hypothesis. LAT relationships have similar features to cohabitation and marriage and can lead to having the same levels of psychological well-being as cohabitation or marriage. Unlike the hypothesis from relationships as a continuum of social attainment, there may be no difference in psychological well-being among those in LAT relationships versus either cohabitation or marriage.

Similarly, there is a consensus that cohabitation is an alternative to marriage among older adults (Brown et al., 2012; King & Scott, 2005). Scholars have found that marriage is not always more advantageous than cohabitation especially for older adults. Cohabitators and marrieds had similar psychological well-being (Musick & Bumpass, 2012; Wright & Brown, 2017). Older cohabitators even had similar relationship duration and levels of relationship quality to remarried older adults (Hansen, Moum, & Shapiro, 2007). These latter findings do not support the partnership status as a continuum of social attachment. Thus, I propose a competing hypothesis that cohabitation has similar levels of social attachment and commitment to marriage. Older cohabitators may have the similar psychological well-being to married older adults.

Unmarried and unpartnered older adults have more disadvantages than people who are dating or in LAT relationships. Unmarried older adults who are not living with a partner may live alone and have the higher levels of depression, loneliness or worse health (Lin & Brown,

2012; De Jong Gierveld, 2002). Even though unmarried older adults may have dating relationships, lacking a partner who lives with them implies that those older adults do not enjoy similar levels of social attachment and commitments as those who are cohabiting or married. Thus, older adults who are not living with a partner may show lower levels of well-being than older adults who are cohabiting or married, including dating or LAT relationships. However, LAT relationships have longer relationship durations and are more committed than dating relationships on average (Brown et al., 2016; Brown et al., 2017) indicating a distinction between dating and LAT relationships. When viewing relationships as a continuum of social attachment, LAT relationships should have higher levels of psychological well-being than dating relationships.

### *The Role of Gender*

Previous research found that partnership types have different effects on health and psychological well-being by gender (Brown et al., 2005; Carr & Springer, 2010). There were few differences in psychological well-being among married, cohabiting, dating, and unpartnered women. Relationship type appears to matter more for men than women (Wright & Brown, 2017). For married older men, they may have better psychological well-being than older women even though they are remarried. Scholars have discussed that psychological benefits of remarriage were stronger for men than women (Umberson et al., 2013). Married men had lower levels of depression than cohabiting men (Brown et al., 2005). A recent study even found that older men who were cohabiting had similar levels of psychological well-being to married men, and both were better off than daters and unpartnered men (Wright & Brown, 2017).

The gender differences in psychological well-being among LATs is unknown. Previous research emphasized that older women choose LAT relationships to maintain their autonomy or

avoid obligations of caring (Duncan, 2015; Funk & Kobayashi, 2016; Karlsson & Borell, 2002; Karlsson, Johansson, Gerdner, & Borell, 2007; Upton-Davis, 2015). The findings implied that older women in LAT relationships should have better psychological well-being than other relationship types because they try to reduce conflicts and strains in their life. Alternatively, older women in LAT relationships may not be different from other women because partnership status has few effects on women's psychological well-being.

Unlike older women, partnership status is a key factor for older men (Wright & Brown, 2017). Older men may fit the theoretical framework of the continuum of social attachment. The order of relationship types in levels of psychological well-being from high to low among older men is marriage, cohabitation, LAT relationships, dating relationships, and no partnerships. Moreover, older men may not prefer to partner with older women who want to avoid responsibilities of traditional gender roles (Funk & Kobayashi, 2016; Karlsson & Borell, 2002; Upton-Davis, 2012). Thus, older men may be less likely to be in LAT relationships than older women. The levels of psychological well-being of older men who are in LAT relationships are lower than older women in LAT relationships.

### **Current Study**

The purpose of this study is to examine psychological well-being across relationship types, including single, dating relationships, LAT relationships, cohabitation, remarriage, and first marriage. Psychological well-being is captured by the depression scale. I test several hypotheses about how psychological well-being differs across relationship types.

First, according to the theoretical framework of relationships as a continuum of social attachment (Ross, 1995), I expect that levels of depression among older adults from lowest to highest: first married, remarried, cohabiting, LAT relationships, dating relationships, and single.

I hypothesize that married older adults have the lowest levels of depression. Then the levels of depression followed the order of social attachment: cohabitation, LAT relationships, dating relationships, and single.

Remarriage provides some benefits for psychological well-being. However, those benefits may be weaker than first marriage (Umberson et al., 2013). Hence, remarried older adults may have higher levels of depression than first married older adults. I also anticipate that dating relationships are different from LAT relationships in psychological well-being, because daters tend to have shorter-term relationship duration (Brown et al., 2017; Malta & Farquharson, 2014) and less commitment than LAT relationships. Daters may report higher levels of depression than LATs. Unpartnered singles were more disadvantaged than dating individuals (Brown & Shinohara, 2013). Individuals have an intimate partner can enjoy some social or economic resources. Thus, daters may have better psychological well-being than singles even though those benefits may be weaker than marriage or cohabitation. Unpartnered singles have the worst levels of depression than other relationship types.

Second, a competing hypothesis may be a better fit to explain the association between relationship types and psychological well-being. Because scholars view LAT relationships as an alternative to cohabitation or marriage (Benson & Coleman, 2016a; De Jong Gierveld, 2004), I expect that older adults in LAT relationships may have similar levels of depression as those in cohabitation or marriage. Married older adults are not the only ones to have better psychological well-being. Additionally, researchers have argued that cohabitation is an alternative to marriage (Brown et al., 2012). Thus, the competing hypothesis also explains that older adults who are in cohabitation and marriage have similar levels of depression. I hypothesize remarried older adults have similar levels of depression to first married older adults because remarriage may have

similar marriage benefits regardless of marriage orders. In sum, first married, remarried, cohabitators and LATs report similar levels of depression.

Third, this study also examines depression by gender because gender is an important factor for older adults' well-being. I expect relationship type matters more for men's than women's psychological well-being. Among older men, the levels of depression from lowest to highest are first marriage, remarriage, cohabitation, LAT relationships, dating relationships, and no partnerships. This hypothesis is related to the theoretical framework of relationships as a continuum of social attachment (Ross, 1995). In contrast, older women may show no differences on depressive symptoms no matter what type of relationships they have (Wright & Brown, 2017). The hypothesis is that first marriage, remarriage, cohabitation, LAT relationships, dating relationships, and no partnerships have the similar levels of depression among older women.

Some research found that older women have a strong desire to choose LAT relationships (Karlsson & Borell, 2002; Upton-Davis, 2012; 2015; Lewin, 2017b). It implies that LAT relationships have special meanings and some benefits for older women. Thus, I examine the difference within gender among LATs. I hypothesize that older women in LAT relationships have lower levels of depression than older men in LAT relationships. I expect that older women in LAT relationships have better psychological well-being than older men in LAT relationships.

Demographic characteristics may partially account for the psychological well-being of older adults by relationship type. Demographic, social and economic indicators are related to relationship types and psychological well-being. Additionally, those indicators may represent social supports and economic resources that lead to differences in well-being for older adults by relationship type. Having children in the household may increase levels of depression because caring for children can create stress. For example, cohabitators who have children have higher

levels of depression than married adults (Brown, 2000). However, having children may also have lower levels of depression because children provide social supports to their parents. Additionally, older adults who have children and do not live with their partner in the same household may reduce stress and have better psychological well-being. Older adults who have children are more likely to be in LAT relationships to avoid conflicts and strains between their children and partners (Benson & Coleman, 2016a; De Jong Gierveld, 2004; De Jong Gierveld & Merz, 2013). Economic disadvantages may be related to lower psychological well-being. For example, older adults with at least some college degree reported fewer depressive symptoms than those with less education (Wright & Brown, 2017). Therefore, older adults who are economically advantaged may have better psychological well-being. I expect that older adults who have higher educational attainment, are employed, have higher total household income, and have ownership of a home may enjoy higher psychological well-being.

### **Data and Methods**

This study uses data from the Wisconsin Longitudinal Study (WLS). For details on the Wisconsin Longitudinal Study see Chapter 1. The sample included graduates and siblings by using data in the 2011 wave of CAPI. The graduate respondents were born between 1938 and 1940. The sibling respondents were born between 1930 and 1948 (N=7928) (Herd et al., 2014). The WLS has several questions about dating behaviors that allow researchers to conceptualize LAT relationships. The advantage of the WLS is that the survey can capture various relationship types, including older adults who are unpartnered, in dating relationships, LAT relationships, cohabiting, remarried, and first married.

The majority of respondents were born between 1930-1948, including 6,152 graduates and 3,532 siblings. The graduates are homogeneous in age, but ages of siblings vary widely

(Sewell et al., 2003). The age range was 71 to 74 years old among graduates and 51 to 93 years old among siblings in 2011 survey. The majority of respondents were 63 to 81 years old, including graduates and siblings (93%). Only 2% were 51 to 62 years old and 5% were 82 to 93 years old.

The original sample size was 9,684 respondents. Nineteen respondents who were missing valid information about relationship status were excluded from the analytic sample. The analytic sample also excluded respondents if they did not provide valid responses on at least four of the seven items in the depressive symptoms scale. There were 1,741 observations deleted. The final sample size for the analysis was 7,924 respondents who were aged 51 and older. The analytic sample included 1,560 were singles, 222 were daters, 198 were LATs, 185 were cohabiting, 1,194 were in remarriages, and 4,565 respondents were in first marriages.

## **Measures**

### *Dependent Variables*

Depressive symptoms was measured using seven items of the Center for Epidemiological Studies Depression scale (CES-D). The seven items of depressive symptoms were: “Did you feel bothered by things that usually don't bother you?,” “Did you not feel like eating, your appetite was poor,?” “Did you have trouble keeping your mind on what you were doing,” “did you feel that everything you did was an effort?”, “Did you sleep restlessly?”, “Did you talk less than usual?”, and “Did you feel you could not 'get going'?” (Bookwala, Marshall, & Manning, 2014). Respondents answered the actual number of days they had experienced each symptom during the past week (0-7 days). Respondents who did not report at least four of the seven items of depressive symptoms were excluded from the analytic sample. Then, I used multiple imputations to manage the remaining missing items. There were 237 respondents who did not answer one of



the seven items, 25 respondents who did not answer two of the seven items, and only 4 respondents who did not answer three of the seven items. After imputing missing items, I calculated the sum of scores from seven items. The depression scale ranged from 0 to 49 ( $\alpha=0.75$ ). Higher scores indicate higher levels of depression.

### *Independent Variables*

The relationship types were categorized into six groups: singles, daters, LATs, cohabitators, remarrieds, and first marrieds. All relationship types were coded as binary variables. The analysis used two questions to distinguish dating and LAT relationships. The first question was: “Do you go out on dates?” Respondents who reported “yes” were asked the second question: “Do you regularly date one person that you consider your steady partner?” Daters were those who reported that they go out on dates but do not regularly date a steady partner ( $N=241$ ). Among respondents who go out dates and regularly date their steady partner ( $N=300$ ), 89 respondents reported that their relationship duration was less than 2 years, which was nearly 30% among respondents who had a steady partner. If I defined LATs as those who have relationship durations of at least 2 years, the sample size became too small and may have had measurement issues. Thus, I excluded 50 respondents who had a steady partner and relationship duration was less than one year from LAT relationships (roughly 17% among respondents who had a steady partner). Those 50 respondents were classified as daters who were in a short-term and arguably less committed relationships.

LATs were defined as respondents who go out dates and have a steady partner, and their relationship duration is one year or more ( $N=250$ ). Daters included respondents who go out dates but do not have a steady partner, or if they do have a steady partner, their relationship duration is less than one year ( $N=291$ ).

Respondents were coded as singles if they were not in any partnership. Unmarried respondents were asked if they are living in a marriage-like relationship or cohabiting. If respondents reported “yes,” they were coded as cohabitators. Currently married respondents were separated into remarried and first married.

### *Control Variables*

Control variables contained several social and economic demographic characteristics, a health indicator, and social support. Social demographic characteristics included gender, age, and the presence of children. Socioeconomic characteristics were educational attainment, employment, total personal income, and home ownership. Gender was measured as a dichotomous variable. Age was a continuous variable that was created using the year of the survey (2011) minus the respondent’s birth year. The presence of children was coded into three categories: resident children, non-resident children, and respondents were childless (reference group). Resident children indicated at least one child lived with respondents in the household. Non-resident children indicated that respondents had children but none lived with them. Respondents who did not report any children were childless.

Educational attainment was created as less than high school degree or high school degree (reference group), some college, a bachelor’s degree, and a master’s degree or higher. Employment was a dichotomous variable that was coded as 1 currently employed and 0 currently not employed. Home ownership was coded as a dichotomous variable: respondents rented or did not live in a private residence (reference group), and respondents owned a private residence.

A health indicator was measured by using the scale of Activities of Daily Living (ADLs). The 2011WLS had a new collection of items from the Activities of Daily Living (ADLs). The questions about ADLs were reconstituted and expanded from the previous survey in the WLS.

Respondents reported whether they had difficulty with several basic activities of daily living because of a health or memory problem. The basic activities of daily living (ADLs) included dressing, walking across a room, bathing or showering, eating, getting in or out of bed, and using the toilet. The variable of ADLs was coded as a continuous variable. ADLs calculated the number of limitation in activities of daily living. The sum of scores ranged from 0 to 6. Higher scores indicated more ADLs limitations.

Social support was measured by a series of questions about whether respondents could ask for specific kinds of help from anyone other than their spouses if they needed it. The questions included: “If respondents had to borrow \$250 for a few weeks because of an emergency, they could ask anyone other than a spouse for help?” “If respondents had a personal problem and wanted to talk to someone about it, they could ask anyone other than a spouse for help or advice?”, and “If respondents were sick and unable to take care of themselves for a week or more, they could ask anyone other than a spouse for help?”(Fiori & Jager, 2011; Fischer & Beresford, 2015). The variable of social support is a continuous variable. The scale of social support was calculated as the number of support that respondents can receive. The sum of scores ranged from 0 to 3. Higher scores indicated to receive more support.

#### *Multiple Imputation for Missing Cases*

Some variables have invalid cases because respondents did not offer their responses, or their answers were inappropriate for analysis. The number of the lowest missing was 3 cases for employment status, and the highest missing was 384 cases for the scale of social support. The average missing cases were 2% in the analysis. The invalid cases were managed by using multiple imputations in descriptive statistics and regression models.

### **Analytic Strategy**

The analysis first presents mean values of depression by relationship type and gender (Table 4.1). The relationship types include singles, dating, LAT relationships, cohabitation, remarriage, and first marriage. This table shows how levels of depression differ by relationship type and gender. Second, the analysis shows descriptive statistics for all variables by relationship type and gender (Table 4.2 and Table 4.3). The descriptive statistics provide a general portrait among older men and women. Third, the analysis examines the association between depressive symptoms and relationship type net of other factors by using OLS regression. Specifically, I examine gender differences in the effect of relationship types on depressive symptoms by estimating separate multivariate models for men and women. For older men, the first model shows the zero-order model that only have relationship types among older men. The second model shows a full model that adds social and economic demographic characteristics, ADL and social support (Table 4.4). The analysis of older women follows the same process (Table 4.5). Those models link to test the hypothesis that levels of depression are different across relationship types by gender.

### **Results**

#### *Demographic Characteristics by Relationship Types*

Table 4.1 shows the average scores in depression by relationship type. First married older adults had the lowest levels of depression (5.8), followed by remarried (6.3), LATs (6.3), daters (7.1), singles (7.1), and cohabitators (7.3). LATs had the same average score of depression as remarried older adults. Both daters and singles showed the same average scores of depression. Older men who were first married had the lowest levels of depression (5.4), followed by older men who were remarried (6.1), LATs (6.2), singles (6.9), daters (7.2), and cohabitators (7.3). Older

women who were first married also had the lowest level of depression (6.2), followed by older women who were LATs (6.4), remarried (6.6), daters (7.1), singles (7.1), and cohabitators (7.4). Generally, older women had higher levels of depression than older men regardless of their relationship types. However, the findings did not support the hypothesis that relationships are a continuum of social attachment (Ross, 1995). The levels of depression did not follow the order of social attachment, which is contrary to the hypothesis. Cohabitators showed higher levels of depression than LAT relationships and dating relationships among both older men and older women.

Table 4.2 showed demographic characteristics by relationship types among older men. The average ages were similar among older men by relationship type. Among older men who were single and in LAT relationships, their average ages were 72, which were slightly older than men in other relationship types. The majority of older men had less than high school or high school degrees. The majority of older men did not live with their children regardless of their relationship types. However, older men who were single or in dating relationships were more often childless than men in other relationship types. Among single older men, nearly 30% were childless. Among older men who were daters, 26% were childless. Among older men who were cohabitators, they had the lowest percentage of having resident children (2%). Older men who were in LAT relationships had the same proportion of having resident children as older men who were daters and remarrieds (6%).

The distribution of educational attainment by relationship type did not show a clear pattern. However, the results indicated that older men who were daters were more likely to have some college or higher degrees than other relationship types. Among older men who were cohabitators, the findings indicated that they were more likely to have less than high school or high

school degree (62%) than men in other relationship types. The majority of older men were currently not employed. Among older men who were singles, they had the highest percentage of being currently not employed (68%). Among older men who were daters, the finding showed that they were more often currently employed (41%) than those in other relationship types. Older men who were singles had the lowest average personal income (\$30,310), followed by cohabitators (\$33,737), remarried (\$41,613), first marrieds (\$41,338), daters (\$43,516), and LATs (\$47,991). Most older men owned private residences no matter their relationship types. However, single older men and older men who were daters showed lower percentages of owning private residences. Among single older men, roughly 79% owned private residences, and 21% did not live in a private residence. Among daters, nearly 82% owned private residences, and 18% did not live in a private residence. Older men who were single had the highest average score of ADLs (0.3). Older men who were in dating, LAT relationships, and first marriage had lower average scores of ADLs (0.1). Older men received similar social support regardless of their relationship types.

Table 4.3 showed descriptive statistics for older women by relationship types. Among older women who were cohabitators, their average age was 69, which was the youngest than women in other relationship types. The majority of older women had non-resident children regardless of their relationship type. Older women who were daters were more often childless than women in other relationship types. Among older women who were daters, nearly 24% were childless. Single older women and older women who were daters more often had resident children than those in other relationship types. Among single older women, roughly 13% had resident children. Among older women who were daters, nearly 10% had resident children. Older women who were cohabitators had the lowest percentage of having resident children (4%).

The majority of older women had less than high school or high school degrees regardless of their relationship type. However, the results showed that older women who were daters were more likely to have some college or higher degrees than women in other relationship types. Among older women who were daters, only 38% had less than high school or high school degrees, and roughly 62% had some college or higher degrees. The majority of older women were currently not employed. Older women who were in dating and LAT relationships were more often currently employed than those in other relationship types. Nearly 36% were currently employed among older women who were daters. Among older women who were in LAT relationships, roughly 34% were currently employed. Older women generally had lower personal income than older men. Older women who were first married had the lowest average personal income (\$16,580), followed by single (\$24,794), remarried (\$25,693), cohabitators (\$26,717), LATs (\$28,342), and daters (\$35,485). Most older women owned residences no matter their relationship type. However, single older women had the lowest proportion owning a private residence. Among single older women, roughly 79% owned a private residence, and 21% did not live in a private residence. Older women reported similar levels of ADL across relationships. Older women who were in LAT relationships reported slightly higher levels of social support (2.9) than women in other relationship types.

#### *Regression Models Predicting Depressive Symptoms by Gender*

The regression models are estimated separately for older men and women. The results for older men are shown in Table 4.4. The zero-order model in Model 1 shows that LATs and first married older men did not significant differ on depressive symptoms. Also, older men who are in LAT relationships did not significantly differ from other relationship types. The result indicated that first married older men were significantly different from other relationship types except

LAT relationships. Singles, daters, cohabitators, and remarried men had higher levels of depression, on average, than older men who were first married.

Model 2 is the full model that included social and economic demographic characteristics, ADL, and social support. Daters, cohabitators, and remarried older men reported a higher level of depression than first married older men. The findings indicated that older men who were single or in LAT relationships did not significantly differ from first married men. When LAT relationships were the reference group, the findings did not show that LAT relationships significantly differed from other relationship types among older men after controlling for all variables (result not shown).

Older men who had a bachelor's degree or higher reported lower levels of depression than older men with less than high school or high school degree. Older men who had higher personal income also showed lower levels of depression than older men who earned less personal income. Older men who owned a private residence had lower levels of depression than older men did not own a private residence. The presence of children remained an important correlate of depressive symptoms. Older men with resident children reported higher levels of depression than older men who had non-resident children. Older men who were childless did not significantly differ from older men had non-resident children on depressive symptoms. ADLs were positively associated with depression. Older men who reported more ADL limitations had higher levels of depression than older men who had fewer ADL limitations. Older men who reported receiving more social support that had lower levels of depression than older men who had less social support.

The results for older women's depressive symptoms are shown in Table 4.5. The zero-order model in Model 1 found that only single women significant differed from first married



older women. Single older women had a higher level of depression than first married older women. Daters, LATs, cohabitators, and remarried older women did not significantly differ from first married older women consistent with hypothesis that relationship type matters less for older women than older men

Model 2 is the full model. I also did not find that older women who were in LAT relationships significantly differed from other relationship types. The results showed that only single older women reported a higher level of depression than first married older women net of all factors. Daters, LATs, cohabitators, and remarried older women did not significantly differ from first married older women on depressive symptoms. When LAT relationships were the reference group, older women who were in LAT relationships did not significantly differ from other relationship types (result not shown).

Among the covariates, older women had a bachelor's degree or higher reported lower levels of depression than older women had a less than high school or high school degree. Older women currently employed reported lower levels of depression than older women not currently employed. Older women who owned a private residence had lower levels of depression than older women who did not own a private residence. Older women who had resident children reported higher levels of depression than older women who had non-resident children. ADLs were positively related to depression. Older women who reported more ADL limitations had higher levels of depression than older women who reported fewer ADL limitations. Older women reported receiving more social support that had lower levels of depression than older women who were less to receive social support.

## **Discussion**

This study examined depressive symptoms to capture psychological well-being across the full range of relationship types, including single, dating relationships, LAT relationships, cohabitation, remarriage, and first marriage. The theory of relationships as a continuum of social attachment indicates that levels of depression differ by relationship type. Married individuals have the highest level of well-being, followed by cohabitators, daters, and singles (Ross, 1995; Kamp Dush & Amato, 2005; Wright & Brown, 2017). However, little is known about psychological well-being in LAT relationships. The theoretical framework of social attachment ignored LAT relationships. Thus, I used data from the WLS 2011 to examine whether LAT relationships fit on a continuum of social attachment and how LAT relationships are related to psychological well-being in later life.

Generally, the findings demonstrated that married older adults had lower levels of depression than older adults who were unmarried. The result confirmed the hypothesis that married older adults have the lowest levels of depression. Older adults who were not in any partnership had the highest levels of depression. However, the levels of depression did not follow the order of social attachment, which was not consistent with the hypothesis. LAT relationships had lower levels of depression than cohabiting, dating relationships, and singles. The levels of depression among older adults from lowest to highest: first married, remarried, LAT relationships, dating relationships, single, and cohabiting.

Scholars have argued that LAT relationships are an alternative to cohabitation or marriage (Benson & Coleman, 2016a; De Jong Gierveld, 2004). Thus, older adults in LAT relationships may have similar levels of depression to cohabitation or marriage. I found that LAT relationships had similar average scores of depression as remarried older adults. However, those

in LAT relationships showed lower average scores of depression than those in cohabitation. Older adults in LAT relationships had better psychological well-being than older cohabitators. LAT relationships did not significantly differ from other relationship types. The results did not support the hypothesis that older adults who were in LAT relationships were different from those who were in dating relationships in psychological well-being. Additionally, LAT relationships did not differ from cohabitation and marriage in psychological well-being. The result partially supported the competing hypothesis.

The analysis also examined gender difference on depressive symptoms. Among older men, the levels of depression from lowest to highest were first married, remarried, LAT relationships, single, dating relationships, and cohabitation. The levels of depression followed the order of social attachment was not consistent as the hypothesis. Among older women, the levels of depression from lowest to highest were first married, LAT relationships, remarried, dating relationships, single, and cohabitation. Older women who were in LAT relationships had lower levels of depression than other relationship types except first married older women. The results for older women also did not support the theoretical framework of social attachment.

The regression models for older men showed that older men who were daters, cohabitators, or remarrieds had higher levels of depression than first marrieds. However, the results did not support the hypothesis that LAT relationships were different from other relationship types among older men. The results did not demonstrate the hypothesis that older men who were in LAT relationships differed from those who were daters on depressive symptoms. For older women, the results showed that older women were no differences on depressive symptoms by relationship type except single older women. Single older women had higher levels of depression than first married older women. Additionally, older women who were in LAT relationships did

no differ from other relationship types on depressive symptoms. The findings partially supported the hypothesis that psychological well-being of older men was more significantly associated with relationship types than older women. The result also did not demonstrated the hypothesis that older women in LAT relationships had better psychological well-being than older men in LAT relationships.

Even though the results did not confirm a gender difference on depressive symptoms among LATs, the results showed that older adults who were in LAT relationships had lower levels of depression than singles, daters, and cohabitators. In the regression models, first married older adults were the reference group. The findings showed that singles, daters, cohabitators, and remarried older adults significantly differed from first married older adults on depressive symptoms but did not differ from LAT relationships (Appendix Table B4.2). These findings may imply that LAT relationships have unique meanings and benefits for psychological well-being. These benefits may have similar implications as marriage in terms of helping older adults have lower levels of depression.

The concept of social attachment debates that partners who live together are more committed to relationships than who do not because a co-resident partner can provide social, emotional, and economic supports to make people have lower distress levels (Ross, 1995). However, the results demonstrated the idea that LAT relationships may have high commitment and share support, care and love with their partner (Carter et al., 2016; Kobayashi et al., 2017). Older LATs showed that their psychological well-being was no worse than older cohabitators or married older adults. One possible explanation is that older adults in LAT relationships have specific reasons to avoid some strains associated with coresidential relationships and have better psychological well-being. For example, LATs can retain freedom or reduce strains in later life.

The strains like avoiding unequal demands of caring for a partner or an asymmetrical distribution of household labor (Funk & Kobayashi, 2016; Karlsson & Borell, 2002; Lewin, 2017a). The previous study also found that most LATs were emotionally highly attached to their partner and satisfy their relationships. Older LATs thought to live apart that was a better choice than cohabitation or marriage for remaining relationship satisfaction (van der Wiel et al., 2018). LAT relationships allow older adults to have intimate relationships and receive support from their partners. At the same time, LAT relationships relieve stress about living together. Those reasons and motivations may indicate why LAT relationships have benefits for older adults and explain why those in LAT relationships are not different in psychological well-being from married older adults. That also explains why LAT relationships do not fit the order of depression by partnership type according to the theory of social attachment. The theory of social attachment may ignore that LAT relationships provide some benefits to balance stress, especially when stress is related to couples living in the same household.

First marriage may offer the most benefits or advantages for individuals. Thus, if older adults are no longer in a first marriage, the association between other partnership types and psychological well-being may be negligible. Moreover, having a partner confers some benefits, and thus it may not be as important for older adults to be married. That may be another possible reason for why LAT relationships did not show differences on depression symptoms than other relationships, such as dating or cohabitation.

Overall, the study sheds light on the role of relationship types among older adults' psychological well-being, particularly for LAT relationships. This study contributed to provide new evidence about psychological well-being among older LATs by comparing various relationship types. The results demonstrated that relationship type matters more for men's than

women's psychological well-being although the results did not show gender difference among LATs in psychological well-being. The findings indicated that older men who were singles, daters, cohabitators, remarried differed from first married older men in psychological well-being. For older women, only single older women differed in psychological well-being from first married older women. Finally, the results demonstrated that older adults who were in LAT relationships were no worse off than cohabitators and married older adults in psychological well-being regardless of gender. The finding indicated that LATs might have some benefits for psychological well-being. Hence, researchers should not ignore unmarried older adults who were in LAT relationships when they examine the well-being in later life.

There are some limitations to this study. First, this study cannot capture differences by race/ethnicity because nearly all of the sample from the WLS is white. Prior studies found that black older adults were more likely to be in non-marital relationships than marriage, including dating and LAT relationships (Brown et al., 2017; Lewin, 2017a). However, it is unclear whether black older adults who are in non-marital relationships have lower levels of depression than other racial/ethnic groups, especially black older adults who are in LAT relationships. Future research should consider how relationship type is associated with psychological well-being among older adults of various races/ethnicities.

Second, relationship quality and commitment may be related to older adults' well-being in later life. The WLS did not ask questions about relationship quality and commitment for LAT relationships. Thus, future research should consider how relationship quality and commitment are associated with older adults' well-being, particular for LATs. Third, this study only used the scale of depression to measure psychological well-being. Future research should consider other indicators, such as loneliness, stress, or happiness. Finally, this study was limited to cross-

sectional data that may obscure how changes in partnerships affect psychological well-being. Moreover, selection is also a concern. For example, older adults who are more depressed may be less likely to get married than older adults who are less depressed. Thus, older adults who have already gotten married may have lower levels of depression than other unmarried older adults when the survey begins. Future studies should explore the dynamics of partnerships and how those dynamics are associated with psychological well-being in older adulthood, especially among LATs.

Despite the limitations, this study contributed to include LAT relationships into the theoretical framework of social attachments. The results did not support the perspective of relationships as a continuum of social attachment for LAT relationships in psychological well-being. The findings demonstrated that LAT relationships have unique meanings and lead to LATs may have similar benefits as married older adults in psychological well-being.

Table 4.1. Mean of Depression by Relationship Types and Gender

Relationship Types	All	Men	Women
Singles	7.1 <sup>a</sup>	6.9 <sup>a</sup>	7.1 <sup>a</sup>
Daters	7.1 <sup>a</sup>	7.2 <sup>a</sup>	7.1
LATs	6.3	6.2	6.4
Cohabitors	7.3 <sup>a</sup>	7.3 <sup>a</sup>	7.4
Remarrieds	6.3 <sup>a</sup>	6.1 <sup>a</sup>	6.6
First marrieds	5.8	5.4	6.2

Note: <sup>a</sup> First married is reference group (within column) and significantly different from other relationships,  $p < .05$ . When LAT relationships are the reference group, the results show no significant differences with other relationship types.



Table 4.2. Mean or Percentage of Demographic Characteristics by Relationship Types among Men

	Singles	Daters	LATs	Cohabitors	Remarrieds	First marrieds
Sociodemographic Characteristics						
Age	72	71	72	71	71	71
Presence of children						
Non-resident children	61%	68%	80%	86%	91%	88%
Resident children	10%	6%	6%	2%	6%	8%
childless	30%	26%	14%	12%	3%	4%
Socioeconomic Characteristics						
Educational attainment						
HS or less than HS	48%	38%	50%	62%	42%	46%
Some college	17%	24%	21%	9%	22%	16%
BA	15%	17%	15%	15%	16%	16%
MA & MA+	19%	21%	15%	14%	21%	22%
Employment status						
Currently employed	32%	41%	39%	36%	36%	36%
Currently not employed	68%	59%	61%	64%	64%	64%
Total Personal Income	30310	43516	47991	33737	41613	41338
Status of owned home						
Rented or not live in a private residence	21%	18%	10%	7%	5%	3%
Owned private residence	79%	82%	90%	93%	95%	97%
ADL	0.3	0.1	0.1	0.2	0.2	0.1
Social support scale	2.5	2.6	2.6	2.5	2.6	2.6
Total N						
	366	99	96	91	691	2,331
	10%	3%	3%	2%	19%	63%

Table 4.3. Mean or Percentage of Demographic Characteristics by Relationship Types among Women

	Singles	Daters	LATs	Cohabitors	Remarrieds	First marrieds
Sociodemographic Characteristics						
Age	73	70	71	69	70	71
Presence of children						
Non-resident children	74%	66%	78%	79%	92%	89%
Resident children	13%	10%	9%	4%	5%	8%
childless	13%	24%	13%	16%	3%	3%
Socioeconomic Characteristics						
Educational attainment						
HS or less than HS	60%	38%	53%	49%	51%	58%
Some college	15%	21%	23%	20%	20%	15%
BA	13%	21%	10%	12%	11%	16%
MA & MA+	13%	20%	15%	19%	18%	11%
Employment status						
Currently employed	25%	36%	34%	29%	30%	23%
Currently not employed	75%	64%	66%	71%	70%	77%
Total Personal Income	24,794	35,485	28,342	26,717	25,693	16,580
Status of owned home						
Rented or not live in a private residence	21%	18%	12%	5%	6%	4%
Owned private residence	79%	82%	88%	95%	94%	96%
ADL	0.2	0.2	0.1	0.2	0.2	0.2
Social support scale	2.8	2.8	2.9	2.8	2.8	2.7
Total N						
	1,194	123	102	94	503	2,234
	28%	3%	2%	2%	12%	53%

Table 4.4. OLS Regression Models Predicting Depressive Symptoms by Relationship Types among Men

	Model 1	Model 2
<b>Relationship Types</b>		
Singles	1.45***	0.71
Daters	1.72*	1.55*
LATs	0.78	0.65
Cohabiters	1.91*	1.65*
Remarrieds	0.62*	0.56*
Ref: First marrieds		
<b>Sociodemographic Characteristics</b>		
Age		-0.02
Presence of children		
Resident children		1.57***
childless		0.53
Ref: Non-resident children		
<b>Socioeconomic Characteristics</b>		
Educational attainment		
Some college		-0.26
BA		-0.84**
MA & MA+		-1.24***
Ref: HS or less than HS		
Employment status		
Currently employed		-0.2
Ref: Currently not employed		
Total personal income		-0.00**
Status of owned home		
Owned private residence		-1.06
Ref: Rented or not live in a private residence		
ADL		2.23***
Social support scale		-0.31
cons	5.44***	8.73***
N	3674	3674

\* p<.05; \*\* p<.01; \*\*\* p<.001

Note: When LAT relationships are the reference group, depression levels do not significantly differ between LAT relationships and other relationships types.

Table 4.5. OLS Regression Models Predicting Depressive Symptoms by Relationship Types among Women

	Model 1	Model 2
Relationship Types		
Singles	0.91***	0.64**
Daters	0.87	0.87
LATs	0.18	0.53
Cohabitors	1.12	1.21
Remarrieds	0.35	0.52
Ref: First marrieds		
Sociodemographic Characteristics		
Age		-0.03
Presence of children		
Resident children		1.46***
childless		0.35
Ref: Non-resident children		
Socioeconomic Characteristics		
Educational attainment		
Some college		-0.22
BA		-0.66*
MA & MA+		-1.53***
Ref: HS or less than HS		
Employment status		
Currently employed		-0.69**
Ref: Currently not employed		
Total personal income		-0.00
Status of owned home		
Owned private residence		-0.99*
Ref: Rented or not live in a private residence		
ADL		2.24***
Social support scale		-0.92***
_cons	6.23***	11.69***
N	4250	4250

\* p<.05; \*\* p<.01; \*\*\* p<.001

Note: When LAT relationships are the reference group, depression levels do not significantly differ between LAT relationships and other relationships types.

## CHAPTER V: DISCUSSION

Intimate relationships have become more diverse in older adulthood because patterns of partnership formation and dissolution changed rapidly in recent decades. For example, there has been an increase in unmarried baby boomers are either divorced or never married (Lin & Brown, 2012). The gray divorce rate has doubled since 1990 in the United States. One in four divorces in 2010 occurred to persons aged 50 and older (Brown & Lin, 2012). The increase in the unmarried population among older adults implies a large proportion of them have the potential to form new partnerships in later life. A new partnership can be a non-residential relationship, such as dating or living apart together (LAT) relationships.

LAT relationships have raised research interest in recent years (Connidis et al., 2017). Scholars indicated that LAT relationships have unique meanings among older adults (Duncan & Phillips, 2010, 2011; De Jong Gierveld, 2002; 2004; Liefbroer et al., 2015). However, the definition of LAT relationships is the subject of debate. One of the challenges concerns the measurement of LAT relationships. Prior studies may be confounding dating and LAT relationships. Some researchers do not examine LAT relationships by age, which disregards the different meanings and motivations of LAT relationships between younger and older adults (Connidis et al., 2017; Lewin, 2017). Additionally, scant research examines LAT relationships in the United States. Most studies in the United States are qualitative, and national estimates of LAT relationships are limited (Connidis et al., 2017; Strohm et al., 2009).

This dissertation aimed to conceptualize the definition of LAT relationships and explored psychological well-being among LATs for older adults in the United States. The first analytic chapter not only investigated the definition of LAT relationships but also examined expectations of cohabitation and marriage among LATs in older adulthood. LAT relationships are associated

with individualism and the context of the Second Demographic Transition (SDT) (Lesthaeghe, 2014; Levin, 2004; Strohm et al., 2009; Upton-Davis, 2012; 2015). LAT relationships may be a feature of the SDT, indicating changing meanings of intimate relationships, especially for older adults. Low levels of expectations for cohabitation or marriage signaled that LAT relationships are distinctive from cohabitation and marriage. If older adults who are in LAT relationships are unlikely to expect to marry, it also implies that LAT relationships are part of the SDT. LAT relationships appear to be a new family form rather than a stepping-stone for cohabitation or marriage (Levin, 2004; Connidis et al., 2017). The second analytic chapter focused on examining how LAT relationships are different from other relationship types and the factors associated with being in LAT relationships. The comparison of relationship types provided a rich understanding of the characteristics of older adults by partnership status. The analysis also informed an understanding of how unmarried older adults choose non-marital relationships by comparing LAT relationships to dating and cohabitation. The final analytic chapter estimated how relationship type is linked to older adults' psychological well-being by comparing LATs and other relationship types. Other relationship types included dating, cohabitation, remarriage, and first marriage. This chapter investigated psychological well-being according to the perspective of relationships as a continuum of social attachment (Ross, 1995). Particularly, the analysis examined whether LAT relationships fit the theory of social attachment in psychological well-being. All the analyses explored how LAT relationships fit to in the family system and raised new questions for future research.

This dissertation used data from the 2011 Wisconsin Longitudinal Study (WLS) to examine LAT relationships among older adults in the United States. Most importantly, the WLS has a series of questions about dating behaviors in the 2011 survey that allows researchers to

conceptualize LAT relationships as distinct from dating. The questions can be used to examine differences among LATs and other types of partnerships in older adulthood, such as dating, cohabitation, and marriage. Additionally, the WLS asks questions about whether unmarried respondents expect to live together or get married to their partners in the future. Those questions help to measure whether LAT relationships are distinctive from cohabitation and marriage in later life. Finally, the WLS provides the scale of depression across the full range of relationship types, including LAT relationships. This project is the first study to estimate psychological well-being by using the scale of depression among LATs in later life.

### **Key Findings**

This study first focused on conceptualizing LAT relationships and examined expectations of cohabitation and marriage among LATs in older adulthood. I also compared expectations of marriage between LATs and cohabitators to test the hypothesis that LAT relationships are distinctive from cohabitation or marriage. The result showed that most LATs reported no expectations to cohabit or marry in the future. Older adults who were in LAT relationships tended to prefer to remain in their current relationship and were unlikely to want to enter a coresidential relationship. The multivariate analyses indicated gender differences between unmarried older women and men. Older women were less likely to expect to cohabit or marry than older men among LATs. The results supported the notion that LAT relationships are an important type of relationship for older women (Funk & Kobayashi, 2016; Upton-Davis, 2012, 2015). Age was negatively associated with intentions of union formation among LATs. The findings confirmed results consistent with prior studies showing that gender and age are important factors for being in LAT relationships (Bildtgård & Öberg, 2017; Lewin, 2017b). Relationship duration is another essential factor that is associated with expectations of union

formation. Older adults who were in LAT relationships remained in long-term relationships with their partners (Krapf, 2018). LATs had longer relationship duration, and they were reluctant to expect to cohabit and get married.

Additionally, LATs and cohabitators had a different expectation of marriage. Older adults who were in LAT relationships were less likely to expect to marry than cohabitators. LATs tended to be in a stable, long-term relationship and were unlikely to have intentions to cohabit or marry in the future (Régnier-Loilier, 2015; van der Wiel et al., 2018). These findings demonstrated that LAT relationships are more like to be a new family form rather than a stepping stone to cohabitation and marriage. LAT relationships are the desired option for many older adults. LAT relationships may be similar to cohabitation and marriage for older adults. The findings supported concepts of the SDT theory. The change in attitudes and norms about intimate relationships that is emblematic of the SDT are demonstrated by LAT relationships becoming more acceptable and an alternative to marriage or remarriage (Lesthaeghe, 2014).

The second part of the dissertation compared social and economic demographic characteristics by relationship types. The relationship types include single, dating, LAT relationships, cohabitation, remarriage, and first marriage. Overall, the findings confirmed that dating, LAT relationships, cohabitation, and marriage have different social and economic demographic characteristics, relationship features, attitudes and values. The multivariate analyses focused on non-marital relationships, and were designed compare LAT relationships with dating relationships and cohabitation. I not only found that dating and LAT relationships had different social and economic demographic features but also showed that LAT relationships differed from cohabitation. For example, daters were more likely than LATs to have higher educational attainment, be employed, have higher income, and have resident children. Older



adults who were in LAT relationships were less likely to hold traditional gender ideology than daters. However, daters had higher levels of autonomy than LATs. When compared with cohabitators, LATs were more often women, had some college, had a higher mean total personal income, and were more likely to have resident children than were cohabitators. LATs were disproportionately widowed even though similar proportions of LATs and cohabitators were divorced. The findings also showed that previous marital experiences affect older adults' decision to be in LAT relationships (De Jong Gierveld, 2004; Karlsson & Borell, 2002). Unmarried older adults who were divorced or widowed were less likely to be daters or cohabitators and more likely to be LATs. Compared to cohabitation, unmarried older adults may prefer to stay in LAT relationships to retain their independence, or avoid negative experiences of living together (Duncan et al., 2013; Haskey & Lewis, 2006; Upton-Davis, 2012).

However, the results did not indicate that unmarried older adults who lived with children were more likely to be in LAT relationships, which was not consistent with prior studies (De Jong Gierveld & Peeters, 2003; De Jong Giverveld & Merz, 2013). I only found that older adults who were childless were less likely to be cohabitators than LATs. The possible explanation is that older adults who have resident children may prefer to be single or choose more flexible partnerships than LAT relationships, such as dating relationships.

The other essential arguments about LAT relationships are autonomy and non-traditional gender norms. Prior studies have emphasized that autonomy and non-traditional gender norms are important explanations for older adults in LAT relationships (Funk & Kobayashi, 2016; Kobayashi et al., 2017). The analysis did not show consistent findings, although unmarried older adults who had higher levels of autonomy tended to be in dating relationships. The result implies

that dating relationships are even more flexible than LAT relationships. Daters may hold more autonomy than LATs perhaps because dating relationships involve less commitment.

Finally, I examined depressive symptoms to capture psychological well-being across the full range of relationship types in older adulthood. The perspective of relationships as a continuum of social attachment and commitment implies that married individuals have the highest level of well-being, followed by cohabitators, daters, and singles (Ross, 1995; Kamp Dush & Amato, 2005; Wright & Brown, 2017). The perspective of relationships as a continuum of social attachment may also explain the association between LAT relationships and psychological well-being. Because LATs do not live together, LATs may have lower levels of commitment than cohabitators and marrieds that leads to lower levels of psychological well-being. In short, LATs may have higher levels of depression than older cohabitators and married older adults. However, the findings did not support the hypothesis. I found that the levels of depression did not correspond with the order of social attachment as hypothesized. The descriptive statistics showed that LAT relationships had lower average scores of depression than cohabitators. The regression models did not find that LATs significantly differ on depressive symptoms from cohabitators or marrieds. The results partially supported the competing hypothesis that LAT relationships had similar levels of psychological well-being to older cohabitators and married older adults.

When examining differences in psychological well-being by gender, the findings also did not support the theory of social attachment. Those in LAT relationships did not differ in psychological well-being with those in cohabitation for both older men and women. Among older men, the average scores of depression from lowest to highest were first marrieds, remarrieds, LATs, singles, daters, and cohabitators. The average scores of depression among older

women from lowest to highest: first marrieds, LATs, remarrieds, daters, and singles, and cohabitators. The regression models indicated that relationship types showed differences on depressive symptoms among older men. Older men who were daters, cohabitators, and remarried had higher levels of depression than first married older men. However, the findings did not show that older men who were in LAT relationships significantly differed from men in other relationship types. For older women, only single older women showed significantly higher levels of depression than first married older women. Single older women indicated the worst psychological well-being. Relationship type matters more for older men's than older women's psychological well-being (Wright & Brown, 2017). I found that older adults who were in LAT relationships were no worse than cohabitators and married older adults in psychological well-being regardless of gender. The similar levels of depression between LATs and first married older adults may imply that LAT relationships have similar levels of social attachment and commitment to marriage. The findings were consistent with the argument that LATs have high commitment and share support, care, and love with their partner (Carter et al., 2016; Kobayashi et al., 2017). Thus, LAT relationships may have benefits akin to marriage. Older adults in LAT relationships have specific reasons to avoid strains, such as avoiding unequal demands of caring for a partner (Funk & Kobayashi, 2016; Karlsson & Borell, 2002; Lewin, 2017b) and have better psychological well-being. LAT relationships appear to be an alternative to marriage in older adulthood (Benson & Coleman, 2016a; Connidis et al., 2017).

### **Contributions**

A contribution of this dissertation is to use an innovative measure to conceptualize LAT relationships in the United States with quantitative data. Prior research may confound dating and LAT relationships when measuring LAT relationships (Connidis et al., 2017) and lead to a

misunderstanding of the effects of romantic relationships among older adults. I used several dating questions from the 2011 WLS to differentiate daters and LATs in older adulthood. I employed a definition of LAT relationships in this study of older adults who have a steady partner with a relationship duration of one year or more. This definition indicates that LAT relationships are a long-term committed relationship and differ from dating, which is a short-term and less committed relationship.

This study also contributes by comparing the differences in social and economic demographic characteristics, relationship features, attitude and values, and health indicators by relationship type in older adulthood, including singles, daters, LATs, cohabitators, remarrieds, and first marrieds. Whereas researchers may confound daters and LATs, or ignore LAT relationships as a type of partnership, this project is the first to include all possible intimate relationships to measure the differences in social and economic demographic characteristics among older adults. The findings showed that LATs have unique social and economic demographic characteristics from daters and cohabitators, indicating there are specific factors related to the decision of being in LAT relationships. This study not only showed that LAT relationships are different from dating but also are distinctive from cohabitation and marriage in older adulthood. LATs are likely to prefer to remain in their current relationships rather than move to cohabitation or marriage. Later life and young adulthood have different life phases and face different challenges. Older adults might not have time to overcome or negotiate conflicts in an intimate relationship like young adults (Bildtgård & Öberg, 2017). For example, the role of children. Young adults may live together to raise children. For older adults, they may face different problems, such as how to respond children's negative attitudes toward repartnering (Bildtgård & Öberg, 2017; De Jong Gierveld & Merz, 2013; Lewin, 2017b). Thus, LAT relationships are another option for

partnership. LAT relationships provide the flexibility of intimate relationships for older people. LAT relationships may be a permanent state in an intimate relationship, a new family form in later life.

Finally, this dissertation contributes by providing an understanding of psychological well-being in LAT relationships. This study is the first to examine psychological well-being by using depressive symptoms for older adults who are in LAT relationships. It is also the first study to estimate psychological well-being among LATs according to the theoretical framework concerning relationships as a continuum of social attachment (Ross, 1995). The findings demonstrated that LAT relationships do not fit the theoretical framework of a continuum of social attachment. Among older adults who are in LAT relationships, their psychological well-being is no worse than that of older cohabitators or married adults. It implies that LAT relationships could have similar social attachment and commitment as cohabitators and married people. This study contributes by providing new evidence that LAT relationships have unique meanings and benefits in older adulthood.

### **Limitations**

This dissertation offers new insights on LAT relationships in older adulthood. However, there are some limitations to the study. First, nearly all respondents in the Wisconsin Longitudinal Study (WLS) are white. Prior studies found that black older adults were more likely to in non-marital relationships than marriage, including dating and LAT relationships (Brown et al., 2017; Lewin, 2017a). Because of the limitation of data, I am not able to measure racial/ethnic differences in LAT relationships among older adults. The analysis does not capture whether black older adults are more often in LAT relationships than other racial/ethnic groups,

for instance. Racial/ethnic variation in LAT relationships is an important topic for future research.

Second, although the WLS provides several questions about dating behaviors, those questions do not apply to all daters. The questions only apply to respondents who date a steady partner, ignoring daters who are in short term relationships. For example, I am not able to account for the frequency of getting together with a partner in the last week and relationship duration among daters. Relationship duration is one factor that can differentiate daters and LATs. Prior research defined dating and LAT relationships by using relationship duration: LATs were with a stable partner more than two years (Castro-Martin et al. 2008). Although this study can capture relationship duration among LATs, the analysis does not include relationship duration among daters. Thus, the analysis does not demonstrate that older adults who are daters engage in a casual/short-term romantic relationship to seek a potential partner (Malta & Farquharson, 2014). If the questionnaire can include questions about relationship features for daters, the measures may be more accurate to differentiate dater and LATs.

Third, this study only used depressive symptoms to measure psychological well-being. There are other indicators that may be associated with psychological well-being, such as loneliness or perceived stress. For example, researchers found that older daters and unpartnered older adults were more likely to report loneliness than those in other relationship types (Wright & Brown, 2017). A study measured relationship quality to show that married older adults were more likely than LATs to have high levels of strain, but they also were more likely to report high levels of support and happiness (Lewin, 2017a). Thus, future studies should consider additional indicators to examine psychological well-being, particularly for older adults who are in LAT relationships.

Finally, this study used cross-sectional data that may ignore dynamic changes in intimate relationships. Moreover, selection may be an issue when using the cross-sectional data. Older adults who prefer cohabitation or marriage may already be cohabiting or married when a survey begins. Thus, the analysis cannot capture the process that older adults who are in LAT relationships decide to live together or get married. Limited studies from European countries examined the process of partnership among LATs (Krapf, 2018; Mortelmans, Pasteels, Régnier-Loilier, Vignoli, & Mazzuco, 2015; Wagner, Mulder, Weiß, & Krapf, 2019). However, the WLS does not provide enough information to trace changes in intimate relationships among LATs. Although the study examined expectations of cohabitation and marriage, I am not able to test whether LAT relationships remain stable or break up in the future, an important topic for future research. Additionally, the selection effect may be related to partnership status and psychological well-being. Individuals who got divorced or widowed may already have low levels of psychological well-being and be unlikely to repartner. Repartnering probably provides some positive effects on psychological well-being after marital dissolution (Lin, Brown, Wright, & Hammersmith, 2019). Older adults who are single and decide to be in LAT relationships may have higher levels of psychological well-being than older adults who remain single. However, the analysis cannot capture changes in psychological well-being when older adults choose different relationship types. Future study should consider how changes in partnership status are related to psychological well-being over time.

### **Future Research**

Most studies about LAT relationships in the United States are qualitative and lack of national estimates of LAT relationships (Connidis et al., 2017). LAT relationships have gained attention and are seen as a new type of partnership in older adulthood. Thus, future research may

include LAT relationships when measuring the association between the partnership type and the well-being of older adult. The national survey may also consider people who engage in non-coresidential relationships, including dating and LAT relationships.

Additionally, future studies should collect data that allow tracing changes in partnership status among LATs. The dynamic changes of the partnership may help to conceptualize LAT relationships and provide a more accurate definition of LAT relationships in older adulthood. Future studies may also estimate associations with changes in health and well-being over time among older adults who are in LAT relationships.

Older adults may face issues about health. Notably, the gradual deterioration of health raises the demand for support and care. However, little is known about giving and receiving care in LAT relationships. Prior research indicated that LATs reported they would like to provide support and care to their partner. However, the attitude towards support and care may vary by different characteristics of LATs, such as levels of commitment (De Jong Gierveld, 2015; Karlsson et al., 2007). Some studies found that older adults in LAT relationships emphasized autonomy and independence (Kobayashi et al., 2017; Upton-Davis, 2012, 2015). Hence older women even were unlikely to take the obligation as a caregiver (Karlsson & Borell, 2002; 2005). It may imply that LATs have different attitudes or behaviors to give and receive care from other relationships, such as cohabitators and married older adults. Thus, future research may examine how LATs give and receive care in later life, particularly in comparison to other relationships, including singles, daters, cohabitators, remarrieds, and first married older adults.

Moreover, characteristics of partners may affect well-being of older adults by partnership status. A study showed that the partner's health was related to relationship quality (Lewin, 2016). Thus, future studies may use dyadic data to measure how couples see their relationships and



whether they have similar levels of relationship quality or well-being, particularly for older adults who are in LAT relationships. Finally, several indicators are associated with psychological well-being, such as loneliness, perceived stress, and happiness. Future research may consider estimating different indicators to provide more details of psychological well-being for older adults who are in LAT relationships.

### **Conclusion**

LAT relationships have gained more attention in recent research. Scholars have argued the importance of LAT relationships among older adults and debated whether LAT relationships are an alternative to cohabitation or marriage (Benson & Coleman, 2016b; Connidis et al., 2017; De Jong Gierveld, 2004). These debates indicate that LAT relationships should not be ignored when measuring partnerships among older people. Little research in the United States has examined LAT relationships by using quantitative data. The quantitative data for this study came from the WLS and allowed me to construct an innovative, new measure of LAT relationships in later life. I define LATs as those whom have a steady partner and the relationship duration with their partner is one year or more. The findings provide a rich demographic portrait of LAT relationships and show LATs' expectations for future relationships, namely cohabitation or marriage. This study also demonstrates that older adults who are in LAT relationships have similar levels of psychological well-being to cohabitators or marrieds.

Overall, I found that LAT relationships are distinctive from dating, cohabitation, and marriage. LAT relationships demonstrate different social and economic demographic characteristics when compared to dating relationships and cohabitation among unmarried older adults. For example, the finding confirmed that gender and age are important factors for being in LAT relationships (Bildtgård & Öberg, 2017; Lewin, 2017b). LAT relationships are an important

type of relationship among older women (Upton-Davis, 2012). Older adults who are in LAT relationships tend to be in a stable, long-term union and are unlikely to have intentions to cohabit or marry in the future (Krapf, 2018; Régnier-Loilier, 2015; van der Wiel et al., 2018). Unlike prior research debating whether LAT relationships are less of a family form (Levin, 2004; Coulter & Hu, 2017), this study confirmed that LAT relationships are a new family form rather than a stepping stone to cohabitation and marriage. The measure of psychological well-being also showed that LAT relationships do not differ from older married adults. LAT relationships may have high commitment and are rooted in exchanges of support, care, and love (Carter et al., 2016; Kobayashi et al., 2017).

Older adults may choose LAT relationships because of the uncertainty and ambivalent attitudes toward partnerships (Benson & Coleman, 2016a, 2016b; Connidis et al., 2017). The uncertainty may be associated with social or economic demographic factors, such as children or negative experiences in a previous marriage. LAT relationships become another partnership option that allows older adults to have the flexibility for intimate relationships in later life. The flexibility of LAT relationships let older adults retain freedom or reduce strains in later life. Potential strains include unequal demands of caring for a partner or an asymmetrical distribution of household labor (Funk & Kobayashi, 2016; Karlsson & Borell, 2002; Lewin, 2017a). Older adults in LAT relationships have an intimate relationship and receive support for their partner. At the same time, older adults who are in LAT relationships have less stress. That may be one explanation for why LAT relationships do not fit the theoretical framework of a continuum of social attachment. LATs have similar psychological well-being to married older adults because LATs can receive support from their partner and avoid stressful obligations from traditional gender norms (Lewin, 2017a; Upton-Davis, 2012, 2015).

In sum, my analyses have shown that LAT relationships have different features from cohabitation and marriage, and the psychological well-being of LATs is no worse than cohabitators or marrieds. Given that LAT relationships have unique meanings and motivations among older adults, it is important to consider the implications of how LAT relationships affect the well-being of older adults and how LAT relationships play a different role from other relationship types in later life. Future research should expand on research questions about LAT relationships and provide additional insights into the implications of LAT relationships in older adulthood.

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## APPENDIX A: SUPPLEMENTAL TABLES FOR CHAPTER II

Table A2.1. Mean or Percentage of Demographic Characteristics among LATs by Expectations of Union Formation

	Expectation of living together			Expectation of getting married		
	Won't live together	Ambivalent	Will live together	Won't get married	Ambivalent	Will get married
<b>Sociodemographic Characteristics</b>						
Gender						
Men	44%	65%	56%	44%	65%	53%
Women	56%	35%	44%	56%	35%	47%
Age	71	70	68	72	70	67
Previous marital status						
Never married/single	7%	3%	6%	5%	16%	0%
Divorced/separated	52%	55%	44%	51%	51%	58%
Widowed	41%	43%	50%	44%	32%	42%
Presence of children						
Non-resident children	78%	80%	89%	81%	76%	63%
Resident children	7%	10%	6%	8%	3%	11%
childless	15%	10%	6%	11%	22%	26%
<b>Socioeconomic Characteristics</b>						
Educational attainment						
HS or less than HS	53%	46%	53%	56%	41%	47%
Some college	20%	23%	33%	19%	30%	27%
BA	12%	13%	14%	13%	8%	8%
MA & MA+	15%	18%	0%	13%	22%	17%
Employment status						
Currently employed	37%	40%	50%	34%	49%	63%
Currently not employed	63%	60%	50%	66%	51%	37%
Total Personal Income	35918	45338	33769	35392	51413	30051
Status of owned home						
Rented or not live in a private residence	14%	13%	6%	14%	11%	5%
Owned private residence	86%	88%	94%	86%	89%	95%
<b>Relationship Features</b>						
Relationship Duration (Years)	9.5	5.5	6.8	9.6	6.1	4.3
Days of getting together last week	2.4	3.1	4.8	2.6	2.8	2.7
<b>Attitudes and Values</b>						
Traditional gender ideology (score range: 3-15)	6.3	7.4	6.4	6.4	6.6	6.5
Autonomy (score range: 3-18 )	13.4	13.6	13.1	13.5	13.1	13.5
<b>Health Indicator</b>						
Self-rated health (score range: 1-5)	3.7	3.8	3.7	3.7	3.7	3.8

Table A2.2. Mean or Percentage of Demographic Characteristics among Cohabiters by Expectation of Getting Married

	Won't get married	Ambivalent	Will get married
Sociodemographic Characteristics			
Gender			
Men	43%	76%	68%
Women	57%	24%	32%
Age	70.5	69.7	66.7
Previous marital status			
Never married/single	15%	12%	19%
Divorced/separated	54%	44%	58%
Widowed	31%	44%	23%
Presence of children			
Non-resident children	88%	80%	81%
Resident children	3%	12%	3%
childless	10%	8%	16%
Socioeconomic Characteristics			
Educational attainment			
HS or less than HS	59%	68%	48%
Some college	17%	8%	16%
BA	10%	12%	16%
MA & MA+	14%	12%	19%
Employment status			
Currently employed	34%	32%	48%
Currently not employed	66%	68%	52%
Total Personal Income	27,867	43,658	49,566
Status of owned home			
Rented or not live in a private residence	8%	0%	10%
Owned private residence	92%	100%	90%
Relationship Features			
Relationship Duration (Years)	13.5	12.2	10.4
Attitudes and Values			
Traditional gender ideology (score range: 3-15)	6.0	6.7	6.3
Autonomy (score range: 3-18 )	13.9	13.9	13.9
Health Indicator			
Self-rated health (score range: 1-5)	3.7	3.4	3.7



Table A2.3. Multinomial Logistic Regression of Union Formation Expectation among LATs

Odds Ratio	Model 1		Model 2	
	Expectation of living together (Ref: Won't live together)	Will live together	Expectation of getting married (Ref: Won't get married)	Will get married
<b>Sociodemographic Characteristics</b>				
<b>Gender</b>				
Women	0.55	0.30	0.38	0.22*
Ref: Men				
<b>Age</b>	0.90*	0.83**	0.93	0.83**
<b>Previous marital status</b>				
Divorced/separated	2.39	0.00	0.32	6.50E+06
Widowed	1.86	0.00	0.22	5.20E+06
Ref: Never married				
<b>Presence of children</b>				
Resident children	1.67	0.65	0.39	3.74
childless	0.79	0.00	1.21	13.61**
Ref: Non-resident children				
<b>Socioeconomic Characteristics</b>				
<b>Educational attainment</b>				
Some college	1.66	2.44	3.18*	3.76
BA	1.16	1.28	0.66	0.29
MA & MA+	3.07	0.00	2.07	7.01
Ref: HS or less than HS				
<b>Employment status</b>				
Currently employed	0.86	1.37	1.9	3.84*
Ref: Currently not employed				
Total personal income	1.00	1.00	1.00	1.00
<b>Status of owned home</b>				
Owned private residence	0.9	2.08	1.19	3.9
Ref: Rented or not live in a private residence				
<b>Relationship Features</b>				
Relationship duration	0.91**	0.93	0.91**	0.82*
Days of getting together last week	1.26*	2.00***	1.11	1.04
<b>Attitudes and Values</b>				
Traditional gender ideology	1.41**	0.94	1.09	1.1
Autonomy	1.00	0.96	0.91	0.88
<b>Health Indicator</b>				
Self-rated health	0.99	0.53	0.91	1.04
cons	21.03	7.00E+1 1	263.29	0.02
N	250		250	

\* p&lt;.05; \*\* p&lt;.01; \*\*\* p&lt;.001

Table A2.4. Multinomial Logistic Regression of Marital Expectation among LATs and Cohabitators

Odds Ratio	Expectation of getting married (Ref: Won't get married)	
	Ambivalent	Will get married
LATs	1.03	0.34**
Ref: cohabitators		
Sociodemographic Characteristics		
Gender		
Women	0.34**	0.40*
Ref: Men		
Age	0.93*	0.86***
Previous marital status		
Divorced/separated	0.49	1.34
Widowed	0.52	1.36
Ref: Never married		
Presence of children		
Resident children	1.41	1.53
childless	1.74	6.05**
Ref: Non-resident children		
Socioeconomic Characteristics		
Educational attainment		
Some college	1.38	1.64
BA	0.69	1.08
MA & MA+	1.01	1.21
Ref: HS or less than HS		
Employment status		
Currently employed	1.16	1.55
Ref: Currently not employed		
Total personal income	1.00	1.00
Status of owned home		
Owned private residence	1.78	1.35
Ref: Rented or not live in a private residence		
Relationship Features		
Relationship duration	0.96*	0.94**
Attitudes and Values		
Traditional gender ideology	1.05	1.12
Autonomy	0.99	0.96
Health Indicator		
Self-rated health	0.84	1.02
cons	78.42	4362.70**
N	484	

\* p&lt;.05; \*\* p&lt;.01; \*\*\* p&lt;.001

## APPENDIX B: SUPPLEMENTAL TABLES FOR CHAPTER IV

Table B4.1. Mean or Percentage of Demographic Characteristics by Relationship Types

	Singles	Daters	LATs	Cohabiters	Remarrieds	First marrieds
Sociodemographic Characteristics						
Gender						
Men	23%	45%	48%	49%	58%	51%
Women	77%	55%	52%	51%	42%	49%
Age	72	71	71	70	71	71
Presence of children						
Non-resident children	71%	67%	79%	83%	91%	89%
Resident children	12%	8%	8%	3%	6%	8%
childless	17%	25%	13%	14%	3%	3%
Socioeconomic Characteristics						
Educational attainment						
HS or less than HS	57%	38%	51%	55%	46%	52%
Some college	16%	22%	22%	15%	21%	15%
BA	13%	19%	12%	13%	14%	16%
MA & MA+	14%	20%	15%	17%	19%	16%
Employment status						
Currently employed	27%	38%	36%	32%	33%	30%
Currently not employed	73%	62%	64%	68%	67%	70%
Total Personal Income	26088	39066	37869	30170	34906	29222
Status of owned home						
Rented or not live in a private residence	21%	18%	11%	6%	5%	4%
Owned private residence	79%	82%	89%	94%	95%	96%
ADL	0.2	0.2	0.1	0.2	0.2	0.2
Social support scale	2.7	2.7	2.8	2.6	2.7	2.7
Total N	1,560	222	198	185	1,194	4,565
	20%	3%	3%	2%	15%	58%

Table B4.2. OLS Regression Models Predicting Depressive Symptoms by Relationship Types

	Model 1	Model 2
Relationship Types		
Singles	1.26***	0.65***
Daters	1.31**	1.19**
LATs	0.49	0.55
Cohabiters	1.52**	1.41**
Remarrieds	0.46*	0.54**
Ref: First marrieds		
Sociodemographic Characteristics		
Gender		
Women		0.42**
Ref: Men		
Age		-0.02
Presence of children		
Resident children		1.51***
childless		0.43
Ref: Non-resident children		
Socioeconomic Characteristics		
Educational attainment		
Some college		-0.22
BA		-0.77***
MA & MA+		-1.38***
Ref: HS or less than HS		
Employment status		
Currently employed		-0.43**
Ref: Currently not employed		
Total personal income		-0.00
Status of owned home		
Owned private residence		-1.01***
Ref: Rented or not live in a private residence		
ADL		2.25***
Social support scale		-0.52***
_cons	5.82***	9.66***
N	7924	7924

\* p<.05; \*\* p<.01; \*\*\* p<.001

Note: When LAT relationships are the reference group, depression do not significantly differ between LAT relationships and other relationships types