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A Life Course Investigation of the Differences in Psychological Distress of Mothers by Family Structure Trajectories

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Graduate Program in Sociology

A thesis submitted in partial fulfillment of the requirements for the degree in Master of Arts

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A LIFE COURSE INVESTIGATION OF THE DIFFERENCES IN PSYCHOLOGICAL
DISTRESS OF MOTHERS BY FAMILY STRUCTURE TRAJECTORIES

(Spine title: Family Structure and Mental Health)

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by

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Graduate Program in Sociology

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts

The School of Graduate and Postdoctoral Studies
The University of Western Ontario
London, Ontario, Canada

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Abstract

The purpose of this thesis is to examine the relationships between family structure, employment patterns, and mental health among mothers using the life course perspective. The Single Parent Family Data Set conducted in London, Ontario, Canada by Avison et al. (2008) is used for this research. The sample consists of 349 single mothers and 430 married mothers. The Center for Epidemiologic Studies Depression Scale (CES-D) is used as a measure of psychological distress. This thesis reveals significant differences in levels of psychological distress by family structure trajectory. In addition, the employment patterns of single mothers are more likely to be characterized by discontinuity and financial strain, compared to stably partnered mothers. Finally, multivariate analysis reveals that employment patterns, socioeconomic characteristics, and work-family demand variables explain family structure trajectory differences in psychological distress.

Keywords

Sociology of mental health, medical sociology, life course research, social inequality, health inequality, quantitative analysis

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Preface

A common finding in the sociology of mental health is that there are differences in levels of psychological distress among mothers by family structure, with single mothers having poorer mental health than their married counterparts. In raising children alone, single mothers often lack the vital social support provided by marriage that frequently mitigates the pressures of parenthood (Ross and Goldsteen 1990). At a bivariate level, studies have found that there is a significant difference in psychological distress between single and partnered mothers, with single mothers reporting higher levels of distress than partnered mothers (Cairney et al. 2003, Hilton and Kopera-Frye 2004, Wade et al. 2011). Furthermore, studies have found that these family structure differences in distress can be explained, in part, by the higher degree of adversity that is associated with the employment patterns of single mothers (Ali and Avison 1997, Davies and McAlpine 1998, Avison et al. 2010). Other studies point to the importance of both employment patterns and family characteristics (Wilk 2001, Williams and Umberson 2004, Avison et al. 2007), for example, elevated expectations for single mothers to perform the instrumental role of childcare (Kitson and Holmes 1992), increased pressures for them to contribute financially to their families (Umberson et al. 2010), increased burdens related to their lower level of financial resources (Edin and Lein 1996), greater family/work demands (Simons et al. 1996), and reduced likelihood of stable employment (Ali and Avison 1997). The bulk of this research, however, is based on cross-sectional data that considers family structure at one point in time. While useful, such studies are not able to capture change in family structure over time and are in danger of implicitly supporting the erroneous assumption that family structure at one data point reflects a long-term family arrangement.

The life course perspective is a theoretical framework that recognizes the importance of the past when examining current circumstances. One of its main themes has involved an investigation of the impact of childhood circumstances upon subsequent educational attainment, economic wellbeing, and health outcomes (Hunt 2005). In conjunction with life course research, cumulative advantage/disadvantage theory is recognized as an important approach to study how disadvantage at one period of the life course continually manifests itself in subsequent disadvantage (O’Rand 2002). In this thesis, I draw on the life course perspective and cumulative advantage/disadvantage theory to study family structure trajectory differences in psychological distress among mothers. According to the life course perspective, it may be that being stably single over a long period of time represents

cumulative disadvantages in employment patterns and family stress that have negative consequences for mental health (Ali and Avison 1997). Conversely, being stably partnered over a long period of time may represent a process of cumulative advantage with regard to family and employment patterns that would explain lower levels of psychological distress (Avison et al. 2007).

The purpose of this thesis is to examine the relationships between family structure, employment patterns, and mental health among partnered and single mothers.

This thesis represents an amalgamation of the sociology of work and the sociology of mental health by examining if employment patterns and family characteristics explain family structure trajectory differences in psychological distress. I will begin by conducting a review of the life course perspective and cumulative advantage/disadvantage theory. I will then examine the literature on the mental health consequences of family structure, paying particular attention to differences in occupational status and job transitions by family structure. In the methods chapter, I will describe the sample and variables used for data analysis. Thereafter, I will present and explain the results of analysis of variance (ANOVA) and Ordinary Least Squares (OLS) regression models that examine the three research objectives of this thesis. Finally, in the discussion/conclusion chapter I will summarize the research findings, explain pertinent methodological issues that limit the conclusions that can be drawn from this thesis, and provide suggestions for future research.

Chapter One

1 Theoretical Development of the Life Course Perspective

The life course perspective has emerged as a prominent theoretical perspective within medical sociology. One of its themes has been the investigation of the impact of childhood circumstances upon subsequent educational attainment, economic wellbeing, and health trajectories (Hunt 2005). Importantly, the life course perspective represents an intersection between structure and agency in sociological analysis (Settersten 2003). While it is possible for those who have been disadvantaged by the economic structure of society to exercise human agency and extricate themselves from their situation, the life course perspective states that those who have been economically well off for their entire lives are more likely to have a greater degree of human agency (i.e. power to act with intent to influence their lives) than those who have been constantly economically disadvantaged (Settersten 2003). In order to introduce the life course perspective, I will provide a brief historical background of its development and use within sociology and outline central tenets of the perspective, as well as the disadvantages and advantages.

1.1 Historical Background

In examining the historical origins of the life course perspective, Elder (1985) identifies two phases – the pre-World War II period (generally occurring from the early 20th century to 1940) and anything that has transpired in the field of life course research since 1960. Elder (1985) traces its origins to the intellectual influence of the Chicago school (which lasted from approximately 1915 to 1935). Much of the research that had been conducted by the Chicago school focused specifically on the numerous crises that American society had been experiencing at the time, with a particular emphasis on high rates of delinquency, family disorganization, and the adversities that immigrants experienced (Elder et al. 2004). Although the life course perspective had not developed as a methodological approach to sociology prior to the 1960s, many of the sociological studies that focused on the hardships experienced within American society utilized many of the tenets of the life course perspective that would later become part of its theoretical

foundation (Elder 1985). Being largely influenced by the Chicago school, Thomas and Znaniecki (1918) were among the first sociologists to utilize the life course perspective, as evident from their research on social change and individual trajectories of recent Polish immigrants to the United States (Elder 1985). However, by the start of World War II, life course research had dropped out of favour because of the popularity of positivism (Elder 1985).

The beginning of the 1960s brought a resurgence in life course inquiries (Heinz et al. 2009). Elder (1985) traces this revival to an awareness of the interplay between social change and the life course of individuals. This renewal was directly stimulated by the ongoing rapid pace of social change, as exemplified by the Vietnam War, the Civil Rights Movement, the Women's Movement, and the volatility of the American economy (Elder et al. 2004). A new series of longitudinal studies influenced by ongoing social change was launched in the early 1960s (Elder and Johnson 2003). One example is the Michigan Panel Study of Income Dynamics, which is an ongoing longitudinal study that measures the economic, social, and health factors impacting the life course trajectories of American families (Elder and Johnson 2003). Additionally, numerous sociological inquiries throughout the 1960s began to establish the link between social change and the life patterns of individuals (Giele and Elder 1998). Sociologists formally realized at this time that "socialization and role allocation link people and social roles in the process of aging and cohort succession" (Elder 1985:26) and acknowledged that life events exert a tremendous influence on the life course trajectories of individuals (Heinz et al. 2009). Elder (1985) has formally outlined the theoretical basis of the life course perspective as it exists today.

1.2 Central Tenets of the Life Course Perspective

Elder (1994) identifies five themes that are central to the life course paradigm: (1) human agency in choice making, (2) linked lives, (3) the principle of life-span development, (4) the principle of timing, and (5) the principle of time and place. First, human agency refers to the ability of individuals to take control of their lives and influence their life course trajectories; for example, Elo and Preston (1992) claim that individuals who have been economically well off for their entire lives are best able to exercise human agency.

Second, the theme of linked or interdependent lives refers to the influence of social relationship dynamics within life course trajectories; for example, studies have examined the impact of family living arrangements upon the health trajectories of its members. Third, the principle of life-span development refers to the fact that human development and aging are life-long processes. Given that adults are subjected to and undergo vital biological, psychological, and social changes throughout their lives, it is important for sociologists to examine lives over time (Mortimer and Shanahan 2004). Although the principle of life-span development highlights the importance of investigating childhood conditions throughout the life course, it also emphasizes the impact of various agentic lifestyle choices and experiences exclusively throughout adulthood (Mortimer and Shanahan 2004). This principle has aided sociologists in examining the influence of social change upon individual development by asserting that development and aging both involve a life-long progression (Mortimer and Shanahan 2004). Fourth, the principle of timing claims that the causes and consequences of transitions and events are partially dependent on when they occur over the life course (Mortimer and Shanahan 2004), and an ongoing event or phenomenon will likely affect respective cohorts differently (George 1993). Finally, the principle of time and place states that the individual's life course will be simultaneously influenced by the historical context and geographical milieu (Elder et al. 2004). This means that members of geographically discrete areas will experience and be impacted by certain historical episodes in different ways, as evident by the differing levels of mastery associated with living in a specific location during a particular historical period (Kuh and Hardy 2002).

Transitions and trajectories are key concepts in life course research. According to George (2003), "life course trajectories are simply long-term patterns of change and stability" (162). They are characterized in terms of their timing in the life course, the length of time (duration) that they last, the sequencing at which they occur within the life course, and the density by which they occur (i.e. how many transitions occur simultaneously at one specific period of time within the life course). Studies that have been conducted on transitions and trajectories are generally divided into those that are population-based and individual-based (George 1993). An example of a population-based study on transitions and trajectories is the macro-sociological examination of educational

attainment and the transition to adulthood within urban America (Mortimer et al. 2005). For this thesis, the life course perspective will be used as a framework for examining the effects of patterns of work and family on mothers' mental health.

1.3 Disadvantages and Advantages of the Life Course Perspective

Despite the innovative features of the life course perspective, its detractors have focused on the challenges inherent in this sociological approach. One challenge is the difficulty that heterogeneity poses to studying sociological phenomena (George 1993). In order to effectively undertake life course analyses, one must examine both modal (average) configurations and diverse arrangements (Bengston and Allen 1993). George (1993) illustrates this point by citing a study conducted by Rindfuss et al. (1987) that examines the different pathways people took following their high school graduation. They found that the number of different pathways was too numerous to examine each separately, but collapsing the pathways into a dichotomy would be imprecise. Instead, they identified five possible sequences (work, education, homemaking, military, and other). George (1993) notes that it is almost impossible to fully address all of the variation that exists across the life course, because it is both time consuming and expensive. Another potential disadvantage of the life course perspective is the difficulty with using a comparative approach (Elder et al. 2003). It is often unrealistic and unfeasible to conduct life course studies that involve a comparative focus across a vast geographical expanse, owing to the expense and time commitment involved. For example, a life course study comparing different cohorts across Canada at one particular time might be problematic to carry out (Shuey 2010). Also, Settersen (1999) raises concerns with the possibility of life course investigators incorporating elements of personal bias into their research by attempting to subjectively explain the reasoning behind the choices people make, instead of using objectively obtained evidence. Overall, the challenges of the life course perspective allude to the fact that its expansive and multidimensional focus is often unable to be matched. Nevertheless, the life course perspective has gained prominence as a method of sociological research, particularly in the field of medical sociology.

The results of long-term longitudinal studies have contributed significantly to sociological knowledge of the interplay between societal change and individual health trajectories (Heinz et al. 2009). According to George (1993), population based studies investigating the timing of transitions, sequence of transitions, and transitions as life course markers have been vital in describing the variability in life course experiences across cohorts and in showing how historical events and social change have impacted the development of life course experiences among members of cohorts. Furthermore, studies that examine the effects of early events and explore the links between historical events, life transitions, and outcomes have advanced our understanding of the impacts of early transitions on late life health outcomes (George 1993). The life course perspective encourages the study of linkages between individual lives and contextual change and moves sociological researchers away from cross-sectional research (Elder et al. 2003). The central principle of the life course perspective (that the life course involves an intersection of social and historical factors with personal biography) has allowed a breadth of studies to be conducted on the differing impacts and implications of historical events on various cohorts (George 2003).

1.3.1 Cumulative Advantage/Disadvantage Theory

Cumulative advantage/disadvantage theory is recognized as an important approach to be used in conjunction with life course research. Cumulative advantage/disadvantage refers to an ongoing, multi-level process that involves numerous factors synergistically interacting to influence the life course trajectories of individuals. The concept of cumulative advantage focuses upon “the ways in which initial comparative advantage of trained capacity, structural location, and available resources make for successive increments of advantage such that the gaps between the haves and have-nots widen” (Merton 1988:606). Essentially, this theory posits that economic disadvantage at one period of the life course continually manifests itself in subsequent disadvantage (O’Rand 2002). Initial economic advantage or disadvantage during one’s upbringing is thereby a robust predictor of similar experiences and, therefore, of health trajectories (O’Rand 2002).

Willson et al. (2007) demonstrate that cumulative advantage/disadvantage theory is directly applicable to studying the health trajectories of specific populations across the life course. They examined the results of five waves of the Michigan Panel Study of Income Dynamics (from 1984 – 2001) in order to explore how economic history and socioeconomic resources influence the relationship between health and socioeconomic status over the long term. By examining the health outcomes between age cohorts (while taking such factors as educational attainment and socioeconomic status across the life course into account), they estimated change in self-rated health and found that growing up in economically disadvantageous circumstances has a negative effect upon one's long-term health outcomes. Accordingly, Willson et al. (2007) state that one's upbringing represents a developmentally salient period, such that even those who witness upward social mobility are still likely to experience negative health consequences emanating from their childhood experiences with poverty.

According to life course and cumulative advantage/disadvantage theories, studies aimed at understanding variation in mental health should look beyond current circumstances for explanations. Patterns and trajectories in women's family and work circumstances, currently and over time, could inform our understanding of current levels of wellbeing. In this study, I am interested in the effect of work and family circumstances on mothers' mental health, with a specific focus on family structure. The life course perspective is useful for this research because the data provide information on women's jobs and family structure over a 12 to 14 year period. Cumulative advantage/disadvantage theory is relevant because it provides a framework for understanding differences between women who have been stably single, stably partnered, or re-partnered during this time. Although cumulative advantage/disadvantage theory is usually used to capture change over time beginning in childhood, in this thesis I focus on the period of 12 – 14 years in adulthood. I will consider these family structure trajectories within this framework and apply them to the patterns of psychological distress found.

Chapter Two

2 Employment Patterns and Psychological Distress of Mothers by Family Structure

2.1 Mental Health Differences by Family Structure

Studies show that single mothers have poorer mental health than their married counterparts (Hope et al. 1999, Hilton and Kopera-Frye 2004, Wade et al. 2011); for example, single mothers have a significantly higher prevalence of depressive episodes than married mothers (Cooper et al. 2007). According to the 2000 National Psychiatric Morbidity Survey conducted in Britain, lone mothers scored 2.2 on the Revised Clinical Interview Schedule (CIS-R) regarding their prevalence of depressive episodes; whereas, partnered mothers scored 1.0 (Cooper et al. 2007). Also, Cairney et al. (2003) and Wang (2004) find that single mothers have a higher level of psychological distress than married mothers. For this thesis, we examine depressive symptoms which capture mood, wellbeing, and social functioning (Radloff, 1977).

Higher levels of stress may explain higher levels of distress and depression among single mothers. Single mothers assume both provider and caregiver roles simultaneously, without having a partner to share the responsibilities (Davies and McAlpine 1998). Given the gendered nature of work and family roles, it is more common for these families to experience poverty (Davies et al. 1997) and for mothers to struggle with combining paid and unpaid work (Ali and Avison 1997). Single mothers who are not in the labour force are viewed less positively than their married counterparts because they often must rely on the State for social assistance (Davies and McAlpine 1998).

In examining the hardships that accompany single motherhood, Williams and Umberson (2004) describe two models that explain the link between family structure and mental health outcomes – the marital resource model and the crisis model. The marital resource model attributes family structure differences in mental health to the greater levels of social capital and economic resources that the married typically experience, compared to those who are unmarried (William and Umberson 2004). Booth and Amato (1991) claim that the crisis model accounts for family structure differences in mental health owing to the strains that divorce and widowhood exert on mental health. Williams

and Umberson (2004) argue that the crisis model better explains the divergent mental health trajectories of those who are married, compared to those who are unmarried. They state that “although the never married all presumably lack the resources that marriage provides, it is only the previously married who [are] psychologically disadvantaged by being unmarried” (82). Those who were previously married typically experience psychological distress upon the termination of their marriages owing to the stressors that are inherent in this process, whether they are divorced or widowed. Williams and Umberson (2004) further provide support for the crisis model through their analysis of three waves of the Americans’ Changing Lives survey. They emphasize that being married over the long-term can explain the better overall mental health outcomes of those who are married compared to those who undergo divorce or widowhood. At the same time, Amato (2000A) cautions that we should not ignore the negative mental health outcomes that result from long term stressful marriages.

Wheaton (1990) examines how the presence of children within the specter of marital dissolution exacerbates the mental health difficulties that are experienced by parents who assume full custody. Among working mothers, psychological distress related to divorce was positively related to the number of offspring (Wheaton 1990); whereas, it was negatively associated with the average age of the children (Hope et al. 1999) and the average amount of time spent with children (Cunningham and Knoester 2007). Barrett and Turner (2005) also demonstrate how divorce and widowhood increase the likelihood of psychological distress with a greater number of marital dissolutions throughout one’s life being positively correlated with a greater likelihood of mental health consequences.

Ali and Avison (1997) note that “marriage is a particularly important source of social support to the extent that support is a built-in feature of interaction in the relationship, [such that] married mothers do not bear the sole responsibility for childcare, finances, and housework as do single mothers” (347). Accordingly, the higher level of psychosocial resources available to married mothers (in comparison to single mothers) improves mental health for the duration of their childbearing careers and beyond and also reduces the likelihood of depression (Wade et al. 2011). Mothers in dual-income marriages have less work-family stress compared to single mothers who are solely responsible for the financial wellbeing of their families (Burden 1986). For married

mothers, levels of self-esteem and perceived mastery are maximized and the amount of stress that they experience is minimized. Over the long term this results in a discrepancy in mental health outcomes that benefits married mothers (Maughan 2002).

In summary, it is reasonable to expect that single mothers will have higher levels of distress than partnered mothers and differences in work and family conditions may explain this difference. However, we do not know the mental health consequences of family structure when examined as a trajectory over time. This involves a comparison of stably single, stably partnered, and re-partnered mothers. I now turn to the literature that examines women's employment patterns by family structure.

2.2 Employment Status and Income by Family Structure

A historical examination of the trends in women's employment status over time reveals two key findings: (1) a dramatic increase in women's enrolment at Canadian and American universities since the 1960s (Beaujot and Kerr 2004) and (2) a subsequent increase in the rates of female participation in the labour force (Ravanera et al. 1999). This period has been referred to as the second demographic transition. Lesthaeghe (1995) explains that this transition involves three sub-stages that directly correspond to changes in the employment patterns and divorce rates of women in Western countries. The first sub-stage (1960 – 1970) involved the end of the widespread prevalence of early marriage, a dramatic upturn in the divorce rate, and a substantial downturn in the fertility rate (Lesthaeghe 1995). The second sub-stage (1970 – 1985) involved an increase in the number of common-law unions and, concomitantly, the number of children being born within such unions (Lesthaeghe 1995). By the end of the second sub-stage, the divorce rate had reached an all-time high and the fertility rate had reached an all-time low (Lesthaeghe 1995). The third sub-stage (since 1985) involved the stabilization of the divorce rate, along with a rise in post-marital cohabitation, a levelling off of the fertility rate, and an increase in the number of women giving birth after age 30 (Lesthaeghe 1995).

Between 1971 and 2001, the number of single parent households increased. According to Statistics Canada (2007) data, the number of families headed by a single parent was 9.4 percent in 1971, 11.3 percent in 1981, 13.0 percent in 1991, and 15.7

percent in 2001. The percentage of single families has stabilized in recent years. In 2006 the number of single parent families continued to be 15.7 percent (Statistics Canada 2007). An examination of the most current data available on male-headed and female-headed single parent families (the 2006 Canadian Census) reveals that the majority (80.1%) of single parents were women in 2005 (Statistics Canada 2006A).

Table 2.1: Labour Force Activity and Marital Status for the Female Population 15 Years and Over Living in Private Households in Canada, Living With Children at Home – 2006 Census

Marital Status	Total n	In Labour Force n (% of total)	Employed n (% of total)	Unemployed n (% of total)
All mothers	5 196 850	3 785 170 (72.8%)	3 555 765 (68.4%)	229 405 (6.1%)
Never married	344 695	246 050 (71.4%)	215 975 (62.7%)	30 075 (12.2%)
Ever married or common law	4 852 155	3 539 120 (72.9%)	3 339 790 (68.8%)	199 330 (5.6%)
Married	4 300 105	3 219 815 (74.9%)	3 038 850 (70.7%)	180 695 (5.6%)
Divorced	328 150	260 720 (79.5%)	246 250 (75.0%)	14 470 (5.6%)
Widowed	233 905	58 850 (26.2%)	54 685 (24.4%)	3895 (6.6%)

Source: Adapted from Statistics Canada, *2006 Census of Canada – Topic Based Tabulations – Labour Force Activity (8), Presence of Children by Age Groups (11), Number of Children (5), Age Groups (9), Marital Status (7), and Sex (3) for the Population 15 Years and Over Living in Private Households of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations*. Ottawa: Statistics Canada, 2006B

As shown in Table 2.1, among all mothers, divorced mothers have the highest

labour force participation rate¹ (79.5%) and widowed mothers have the lowest (26.2%) (Statistics Canada 2006B). Comparing the labour force participation outcomes of all mothers, never married mothers have an unemployment rate (12.2%) that is about two times that of the other groups of mothers. Comparing the respective labour force participation rates of the three groups of single mothers (divorced, never married, and widowed) to married mothers, never married and widowed mothers have lower labour force participation rates than married mothers and divorced mothers have higher labour force participation rates than married mothers (Statistics Canada 2006B).

A comparison of families with single mothers and married mothers (according to the 2006 Canadian Census) reveals that 33.8 percent of single mothers were within the low-income cut-off bracket before taxes (compared to 9.1% of couples) (Statistics Canada 2006C). The income disparity between lone parent and two-parent families is highlighted by Statistics Canada (2008A and B), which reports that, in 2007, the median income for lone income families was \$36 100, compared to \$75 320 for two-parent families.

2.3 Occupational Status and Job Transitions by Family Structure

Comparing the employment patterns of single and married mothers reveals that a greater proportion of single mothers work in low-skilled, low-status occupations. Married mothers are more likely to work in higher-ranking jobs with more job security (Avison 2010). According to Lambert (1999), the higher preponderance of never-married and divorced mothers in low-skilled, low-paid occupations makes them more likely to experience elevated levels of job insecurity and exploitation within the workplace.

¹ The **labour force participation rate** is defined as the total number of people within a specific group who are either employed or actively seeking employment (which constitutes the labour force) out of the total number within the group (Statistics Canada 2006B). The **employment rate** is defined as the total number of people who are working out of the combined total number within a particular group (Statistics Canada 2006B). The **unemployment rate** is defined as the total number of people who are not working, but who are currently seeking employment out of the total number of people within the labour force (Statistics Canada 2006B).

Although single mothers in such lower status occupations have better financial prospects than single mothers who are not employed, they are vulnerable to the insecure economic trends in the labour market (Cox and Pressner 2000). Indeed, many multinational corporations will frequently discharge single mothers in lower status jobs in response to prevailing economic conditions (Cox and Pressner 2000). Single mothers are particularly vulnerable to such dismissal practices because employers often view familial commitments as interfering with their ability to constantly conform to the onerous demands of bosses and supervisors (Harknett 2006). Consequently, being subjected to the workplace vulnerabilities of economically unstable labour markets has resulted in many single mothers perpetually searching for new work opportunities (Sigle-Rushton and McLanahan 2002).

Ali and Avison (1997) compare the employment trajectories of mothers who experience job transitions and mothers whose employment is more continuous. They also examine the consequences of labour force transitions on single and married mothers and find that “the jobs of both single and married mothers who make employment transitions are lower paying, lower status, and average fewer hours per week than the jobs of stably employed mothers” (Ali and Avison 1997:358). Economic instability (with regard to annual income) (McKeever and Wolfinger 2011) and psychological distress (Wilk 2001) are more common among mothers who work in unstable occupations and are frequently searching for employment. Harris (1996) also highlights the additional adversities among single mothers who experience unstable employment patterns. She asserts that the employers of single mothers who work in lower status occupations (such as the service industry) are less likely to be cooperative with the increased familial demands that accompany lone parenthood. The unwillingness of supervisors to institute policies that could support the demands of single parent employees within their respective domestic roles is exemplified by their reluctance to approve employees’ requests for time off to care for their offspring, their reluctance to provide any form of childcare support, and the unpredictability of work hours (Harris 1996). Employees who are single mothers are also additionally disadvantaged by their diminished social network and level of social capital (in comparison to that of married mothers). Thus, they bear the majority of childcare while contributing financially to their families through full-time employment (Urban and

Olson 2002). The exposure of single mother employees to these challenging burdens increases work-family demands and the likelihood of their dismissal, which further contributes to a labour force trajectory marked by multiple transitions (Hershey and Pavetti 1997). The financial consequences of long periods of unemployment further contribute to the caregiving strain that single mothers experience – government assistance provides minimal relief (Amato 2000B). Subsequent re-employment at similar status jobs only marginally improves the financial circumstances of single mothers (Edin 1995). The most effective prospects for single mothers who are employed in low status occupations to become upwardly mobile is for them to acquire higher levels of education in order to obtain better paying and higher status jobs (Haleman 2004) or to get married (Lichter et al. 2004).

The lower status occupations of economically disadvantaged single mothers frequently involve various types of exploitation and abusive workplace practices (Edin and Lein 1997). According to Roscigno et al. (2009), corporate downsizing practices contribute to workplace incivility against minority workers, such as single mothers. Workplace incivility against single mothers is particularly apparent in jobs within the service industry that involve employees directly interacting with customers, for example serving patrons in restaurants (Roscigno et al. 2009). Expanding on this assertion, Sloan (2004) claims that “workers in the service sector are particularly restricted in their expression of negative emotions” (40), given that (in Goffmanian terms) they are coerced into optimizing their front stage appearance to customers in such a manner that completely conceals the stressors they are experiencing from their treatment by their colleagues and clientele at work.

Roscigno et al. (2009) also find that the lack of proper workplace codes of conduct to protect workers from abuses of power leads to the manifestation of interest conflicts against the wellbeing of workers. Organizational chaos, therefore, allows dominant groups to carry out processes of social closure against subordinate groups, such that “individuals and collectivities maximize [their] advantage by restricting access and privileges to others” (Roscigno et al. 2009:750). Burris (1991) concludes that the widespread prevalence of poor single mothers who are subjugated to overtime work and non-standard employment schedules substantively intensifies the degree to which they

experience work-family demands. The subjection of mothers to a high degree of work-family demands heightens the level of stress to which they are exposed (Ali and Avison 1997) and increases the likelihood that they will become unemployed (Williams 2001).

Not all single mothers are employed in bad jobs. Some divorced mothers are employed in higher status professional occupations that entail substantively less workplace exploitation than 'bad' jobs (Smock et al. 1999). The labour market outcomes of poor divorced mothers (in terms of job stability, salary, and the degree of exploitation in the workplace) are substantively worse than those of single mothers from higher socioeconomic positions, even if these single mothers had previously been homemakers (Smock et al. 1999). Additionally, while many higher income divorced mothers who had worked for the majority of their marriages will struggle with the work-family stressors, the vast majority will be able to keep their higher status jobs (Smock et al. 1999).

Mueller and Parcel (1981) have also examined how being employed in a high status occupation and experiencing economically advantageous circumstances at the time of divorce protects single mothers from many of the consequences that poor single mothers experience upon divorcing their spouses. Single mothers who are employed in higher status occupations are more likely to have experienced greater levels of job stability and lower levels of workplace exploitation, which sets the stage for fewer work-family demands (Ali and Avison 1997).

Indeed, exposure and vulnerability to stress is a dominant explanation for the lower levels of mental health of single mothers compared to married mothers. In accordance with the life course perspective's cumulative advantage/disadvantage theory, Avison et al. (2007) posit that, because they are not solely responsible for childcare and for providing economically for their children, married mothers are generally exposed to a lower degree of work-family demands than single mothers. Contributing to this is the fact that they are more likely to be employed in the higher status and more stable jobs (Ali and Avison 1997). Heinz (2004) also claims that there is an absence of work-family demands among upper class married mothers who leave the labour market and become full-time homemakers. Many married mothers who are employed in the labour force have experienced mental health consequences arising from the stressors that are associated with their occupational characteristics, their experiences with work-family demands, and

the typically greater responsibility for childcare (compared to their husbands). In such cases, the likelihood of married mothers experiencing psychological distress as a result of these stressors is negatively associated with their socioeconomic status (Cairney et al. 2003, Mistry et al. 2007). Shanafelt et al. (2009) claim that married parents who are employed in professional occupations (such as those relating to law and medicine) will experience a high amount of stress arising from the occupational characteristics of the workplace and the work-family demands; however, the financial benefits arising from such professional vocations reduce the likelihood of experiencing mental health problems. In addition, when compared to unmarried parents who are employed in professional occupations, married professional parents experience substantially fewer work-family demands (Bellavia and Frone 2005).

In summary, as a group, single mothers are more likely to hold lower status jobs and have less job stability. Both of these conditions increase the likelihood of low income, add to their levels of work-family stress, and may potentially undermine their mental health.

2.4 Research Objectives

On the basis of my literature review, the following research objectives will guide the data analysis. I first examine levels of psychological distress by family structure trajectories (stably single, stable partnered, and re-partnered). Secondly, I examine differences in employment patterns of mothers by these family structure trajectories. This examination includes job status, the number of jobs (both part-time and full-time) held over the 12 year period, and duration of employment during this time. I also examine differences in terms of reliance on social assistance and current income. In addition to the employment variables, I examine family indicators (number of children and time lived with children over the 12 year period) and two measures of work-family demands. Finally, I conduct a multivariate analysis to determine, first, if the work and family indicators explain differences in psychological distress among the three groups and, second, how these variables affect distress levels of mothers directly.

Chapter Three

3 Methods

3.1 The Sample

The primary objective of this thesis is to investigate the relationships between family structure over a period of the life course and psychological distress to discover if family and employment status and characteristics explain the differences. For my analysis, I draw on data from a case-comparison, three-wave panel study of single and partnered mothers living in London, Ontario, Canada, collected by Avison and colleagues (Avison et al. 2008). In producing the first wave of this data set, a sampling frame from the 1989 London (Ontario) Municipal Assessment File was generated, which enumerated every household within the city at that time and the number of households that were headed by single mothers with at least one child under the age of 17 (Avison et al. 2008). The sample was generated by “stratifying the lists of single-parent [family households] into 13 geographic areas that reflected differences in household income, [in order] to ensure adequate representation of single-parent families across socioeconomic circumstances” (Avison et al. 2008:238). In order to compare the mental health outcomes of single mothers (within their sample) to that of married mothers, Avison et al. (2008) “used a two-stage sampling strategy to produce a sampling pool of families to match the sampled single-parent families on sex and age of the oldest child under 17” (Avison et al. 2008:238).

In total, 518 single mothers and 502 married/cohabiting mothers were interviewed, representing a response rate of 66.5 percent (Avison et al. 2008). No statistically significant rates of refusal were found between the 13 different geographical areas (from which the sample of the first wave was generated), thereby minimizing biases due to non-response (Avison et al. 2008). Subsequently, the second wave of the Single Parent Family Data Set was initiated in late 1994, which involved re-interviewing each of the respondents who had participated in the first wave of the study (Avison et al. 2008). Given that the attrition rate was extremely low (with 91.1 percent of single mothers and 94.8 percent of married mothers from the first wave responding again), the reliability of the second wave of the Single Parent Family Data set was demonstrated (Avison et al.

2008). Approximately 12 years later (between 2005 and 2008), efforts to locate and re-interview participants began. In total, 349 single mothers were re-interviewed, representing 73.3 percent of respondents from the second wave of the study and 67.1 percent of the original sample (Avison et al. 2008). Additionally, 430 married mothers were interviewed during this period, representing 85.7 percent of the second wave of the study and 90.3 percent of the original sample (Avison et al. 2008). In this final wave of data collection, respondents' interviews included both an interview schedule, similar to earlier waves, and a life history calendar that covered the period between the second and third waves (approximately 12 years). The life history calendars were designed to collect data on the timing and sequencing of events related to household composition, employment, and income sources. It is the third wave of data that I use in this thesis.

3.2 Measurement

The variables selected for these analyses were chosen based on the literature review and the life course perspective. Psychological distress is the dependent variable, family structure trajectory is the key independent variable, and the other independent variables assess family characteristics, employment characteristics, and work-family balance indicators.

3.2.1 Dependent Variable

Psychological Distress

Psychological distress is measured with the Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff et al. 1977). This is a 20-item scale assessing an individual's current level of depressive symptoms (Avison et al. 2008). Studies have demonstrated the excellent validity and reliability of this scale (Husaini et al. 1980, Roberts and Vernon 1983, Okun et al. 1996). Scores can range from 0 to 60, with higher scores indicating more distress (Avison et al. 2008). Psychological distress among respondents was captured by a scale which summed the answers to such questions as: "I was bothered by things that usually don't bother me", "I felt fearful", "my sleep was restless", "I had crying spells", and "I felt sad". The 20 individual items for psychological distress were

answered with the following scale, based on how often a respondent felt a certain way: (1) rarely or none of the time (less than 1 day), (2) some or a little of the time (1 – 2 days), (3) occasionally or a moderate amount of time (3 days), and (4) most or all of the time (5 – 7 days).

3.2.2 Independent Variables

Family Structure Trajectory

To assess stability and change in family structure over time, I used the family structure trajectory variable. This was created by Seabrook (2012) using latent class analysis, in order to determine how many respondents have a similar trajectory of family structure. Variables used in the analysis were the family structure variables (single or two-parent) from the baseline data, Wave 2, and Wave 3. The latent class analysis included the number of times the respondent was partnered over the 12 year period (between Wave 2 and Wave 3) (Seabrook 2012). A respondent qualified as being considered partnered if they were married or cohabiting. Using these four family structure variables, the family structure trajectories were created and include the following three categories: (1) long-term partnered families, (2) long-term single families, and (3) re-partnered families. Repartnered mothers refer to women who made a change in their marital status, either from single to partnered or partnered to single during the 14 year period. This variable, therefore, captures stability and change in family structure over the 14 year period.

Employment Variables

Duration employed During the life history interviews covering the period between Wave 2 and Wave 3 (12 years), respondents were asked to identify the periods of time (in months) they were employed. Duration employed was calculated by dividing the total months employed by the total of months in the life history calendar, then multiplying by 100. This resulted in a continuous variable capturing percentage of time employed, ranging from 0 to 100 percent.

Employment status This variable is presented as a categorical measure, indicating whether respondents were currently not employed (coded as 0) or employed (coded as 1).

Total number of full-time jobs This measure was constructed from the life history calendar, where respondents were asked to identify the number of full-time jobs they held since the start of the calendar. The total number of full-time jobs within this data set ranges from 0 to 8.

Total number of part-time jobs This measure was constructed from the life history calendar, where respondents were asked to identify the number of part-time jobs they held since the start of the calendar. The total number of part-time jobs within this data set ranges from 0 to 7.

Work Status Variables

Status of longest job held The Hollingshead scale is used to measure the occupational rank of the longest job held since the start of the calendar. This scale is a seven categorical variable measuring occupational rank (Hollingshead 1957). The following seven categories of occupations in order from the highest status to lowest status are as follows: higher executives, business managers, administrative personnel, clerical and sales workers, skilled manual employees, machine operators/semi-skilled employees, and unskilled employees (Hollingshead 1957). This variable was re-coded for data analysis so that a lower ordinal rank is equated with a lower status job (i.e. unskilled employees = 1, machine operators/semi-skilled employees = 2, skilled manual employees = 3, clerical and sales workers = 4, administrative personnel = 5, business managers = 6, higher executives = 7).

Income Variables

Low income: Duration of social assistance use Respondents were asked to identify the periods of time (in months) they received social assistance. Duration of social assistance use was calculated by dividing the total months receiving social assistance by the total of months in the life history calendar, then multiplying by 100. This resulted in a continuous variable capturing percentage of time on assistance, ranging from 0 to 100 percent.

Low income: Use of social assistance as main income source This categorical measure (0 = no, 1 = yes) covers the period of the life history calendar.

Personal income Personal income is measured with respondents being asked their total personal income in dollars over the previous year, according to one of the following

20 categories: under 5000, 5000 – 7999, 8000 – 10 999, 11 000 – 14 999, 15 000 – 19 999, 20 000 – 24 999, 25 000 – 29 999, 30 000 – 34 999, 35 000 – 39 999, 40 000 – 44 999, 45 000 – 49 999, 50 000 – 54 999, 55 000 – 59 999, 60 000 – 64 999, 65 000 – 69 999, 70 000 – 74 999, 75 000 – 79 999, 80 000 – 84 999, 85 000 – 89 999, and 90 000 and above. Each of these categories comprises a score in the data set, with under 5000 corresponding to a score of 1 up to the category 90 000 and above corresponding to a score of 20.

Household income Household income is measured with respondents being asked their total household income in the previous year. The survey asked respondents to identify their current household income according to one of the same categories and scoring (1 to 20) used to measure total personal income above.

Education

Number of years of education Education is a continuous variable measured by the number of years of schooling, ranging from 0 to 19. In this study, the educational attainment of respondents ranges from 7 to 19 years.

Child Status

Time with children During the life history interview, respondents were asked to identify the periods of time (in months) that they lived with their children. Time with children was calculated by dividing the total months respondents lived with at least one child by the total of months in the life history calendar, then multiplying by 100. This resulted in a continuous variable capturing percentage of time, which ranged from 0 to 100 percent.

Presence of at least one child This is a dichotomous variable (0 = no, 1 = yes) representing the presence or absence of at least one child under the age of 18 currently within the household.

Work-Family Demand Variables

Work-family strain The level of work support among respondents was captured by a scale which summed the answers of respondents to the following questions: “things going on at home make me tense and irritable at work”, “the demands of my family interfere with my work on the job”, “the demands of my job interfere with my family life”, “when I’m at work, I often think about things going on at home”, and “when I’m at home, I

often think about things going on at work” (Avison 1995). The five individual items for work support were answered with the following response scale: (1) strongly disagree, (2) somewhat disagree, (3) somewhat agree, and (4) strongly agree (Jaremchenko 2012). Scores ranged from 5 (lowest level of strain) to 15 (highest level of strain) (Jaremchenko 2012). The scale was originally derived from several items of the enduring/chronic stressors component of the life stress index that Turner et al. (1995) used in their study. As explained by Turner et al. (1995), the enduring/chronic stressors inventory was originally developed by Wheaton (1994). Cronbach’s alpha for this scale is 0.63 (Jaremchenko 2012).

Work support The level of work support among respondents was captured by a scale which tabulated the answers of respondents to the following questions: “my work is a source of great satisfaction for me”, “I feel close to the people I work with”, “I have people at work who would always take the time to talk over my problems should I want to”, and “I often feel really appreciated by the people I work with” (Jaremchenko 2012). The four individual items for work support were answered with the following response scale: (1) strongly disagree, (2) somewhat disagree, (3) somewhat agree, and (4) strongly agree (Jaremchenko 2012). Scores ranged from 4 (lowest level of support) to 16 (highest level of support) (Jaremchenko 2012). In the third wave of the Single Parent Family Data Set, the work support scale was derived from subsets of items from the Provisions of Social Relations Scale that Turner and Marino (1994) used in order to assess the support that their respondents received from their spouse/partner, relatives, friends, and co-workers. Cronbach’s alpha for this scale is 0.73 (Jaremchenko 2012).

3.2.3 Control Variable

Age

In all multivariate analysis, age is controlled for. It is a self-report, continuous variable ranging from 35 to 74 years.

Chapter Four

4 Analyses

The following analyses address the three research objectives of this thesis – first, to investigate the psychological distress differences of mothers by trajectories of family structure; second, to examine the employment patterns of mothers by family structure trajectories; and, third, to assess the effect of employment and family characteristics on psychological distress. Descriptive statistics are presented as an analysis of variance (ANOVA) of all variables by family structure trajectory (single, partnered, and re-partnered). This is followed by multivariate analyses. Specifically, I present Ordinary Least Squares (OLS) regression models that measure the effects of socioeconomic characteristics, child status, and work-family demand on psychological distress, while controlling for age. Finally, a regression analysis is conducted for all employed respondents in the same manner as the aforementioned regression analysis, with the effects of work-family demand variables. Because the work-family scales were asked only of currently employed women, the final table includes only those who are currently employed.

4.1 Results

The first row of Table 4.1 shows the average age of mothers in each family structure category. We see that single mothers are significantly older (53.05 years) than partnered mothers (50.77 years) and re-partnered mothers (49.11 years), and re-partnered mothers are slightly younger than their partnered counterparts. Turning to the employment characteristics, there are no significant differences in the average percentage of time employed over the 12 year period among the three groups of mothers. In terms of current employment status, no significant differences are found.

Regarding total number of jobs held, we see that re-partnered mothers report having, on average, significantly more full-time jobs (1.74) than single mothers (1.37) and partnered mothers (1.36). However, no significant differences are found in the average number of part-time jobs held over the 12 year period among the three groups.

Table 4.1: Percentage and Mean Descriptive Statistics of Socioeconomic Status, Employment and Family Variables, and Psychological Distress by Family Structure

	Family Structure Trajectory			
	Single ¹	Partnered ²	Re-partnered ³	Total Sample ⁴
	(n)	(n)	(n)	(n)
<u>Age</u>				
Age*	53.05 ^(2,3) (147)	50.77 ^(1,3) (402)	49.11 ^(1,2) (198)	50.77 (747)
<u>Employment Measures</u>				
Duration: % time employed (SC) ⁵	78.00 (147)	83.61 (402)	80.88 (198)	81.78 (747)
% currently employed ⁷ *	73.00 (147)	82.00 (402)	83.00 (198)	81.00 (747)
Continuity: \bar{X} total full-time jobs (SC) ⁵ *	1.37 ⁽³⁾ (147)	1.36 ⁽³⁾ (400)	1.74 ^(1,2) (198)	1.47 (745)
\bar{X} Total part-time jobs (SC) ⁵	1.03 (147)	0.82 (400)	0.91 (198)	0.89 (745)
Work Status				
\bar{X} Longest job (SC) ⁵ Hollingshead *	4.18 (134)	4.44 ⁽³⁾ (385)	4.05 ⁽²⁾ (193)	4.28 (712)
<u>Socioeconomic Status (SES) Measures</u>				
Income Measures				
Low income: % duration social assistance use (SC) ⁵ *	11.68 ^(2,3) (147)	0.72 ^(1,3) (402)	7.55 ^(1,2) (198)	4.69 (747)
Low income: % social assistance main income	31.00 ⁽²⁾ (147)	3.00 ^(1,3) (402)	26.00 ⁽²⁾ (198)	15.00 (747)

source (SC) ^{5,8} *				
\bar{X} Personal income (PY) ⁶	8.7 (145)	8.9 (396)	8.8 (197)	8.8 (738)
\bar{X} Household income (PY) ⁶ *	9.3 ^(2,3) (141)	15.0 ^(1,3) (391)	13.4 ^(1,2) (188)	13.4 (720)
Education				
\bar{X} Number of years *	14.30 (147)	14.37 ⁽³⁾ (402)	13.70 ⁽²⁾ (198)	14.18 (747)
Child Status				
% time with children (SC) ⁵ *	72.89 ⁽²⁾ (147)	86.34 ^(1,3) (400)	77.55 ⁽²⁾ (198)	81.35 (745)
% presence of at least one child under age 18 ⁸ *	17.00 ^(2,3) (147)	42.00 ⁽¹⁾ (402)	32.00 ⁽¹⁾ (198)	35.00 (747)
Work-Family Demand Variables				
\bar{X} Work strain	9.70 (110)	9.77 (321)	9.90 (160)	9.79 (591)
\bar{X} Work support	12.99 (110)	13.06 (320)	12.57 (160)	12.91 (590)
Psychological Distress				
\bar{X} CES-D Depression scale	14.66 ⁽²⁾ (146)	11.34 ^(1,3) (402)	13.51 ⁽²⁾ (198)	12.57 (746)
n	147	402	198	747

¹Significantly different from single. ²Significantly different from partnered. ³Significantly different from re-partnered.

⁴n = 747

p < 0.05

*The variable is statistically significant at the 0.05 level.

⁵ Since the Calendar (SC) – approximately 12 years between the second and third waves of data.

⁶ Past Year (PY).

⁷ 0 = not employed, 1 = employed.

⁸ 0 = no, 1 = yes.

Turning to the work status variables, we see the average rating of the longest job held (using the Hollingshead scale) over the 12 year period for mothers in each family structure. We see that re-partnered mothers report having significantly lower job statuses (4.05) than partnered mothers (4.44).

Turning to the socioeconomic status variables, Table 4.1 shows that single mothers spent significantly more time on social assistance (11.68%) than partnered mothers (0.72%) and re-partnered mothers (7.55%) over the 12 year period. Re-partnered mothers spent significantly more time on social assistance (7.55%) than partnered mothers (0.72%). Moreover, significantly fewer partnered (3%) than single (31%) and re-partnered (26%) mothers relied solely on social assistance as their main income source between the second and third waves of data collection. There are no significant differences between single and re-partnered mothers.

Next, Table 4.1 presents the average annual income of mothers in each family structure category in the past year. No significant differences are found in the personal annual incomes for single, partnered, and re-partnered mothers. However, significant differences emerge in total household income. Single mothers are significantly more likely to have a lower annual household income (with a score of 9.3) than partnered mothers (15.0) and re-partnered mothers (13.4). Partnered mothers are significantly more likely to have a higher annual household income (15.0) than re-partnered mothers (13.4). With respect to education, partnered mothers have significantly more years of schooling (14.37) than re-partnered mothers (13.70). There are no significant differences between single and partnered mothers, and between single and re-partnered mothers.

The next section of Table 4.1 includes the child status characteristics. The first child status variable shows the percentage of mothers in each family structure category by the average time spent living with children over the past 12 years. First, we see that partnered mothers had significantly more time with children in the home (86.34%) than single mothers (72.89%) and re-partnered mothers (77.55%). No significant differences are found between single and re-partnered mothers. The second child status variable shows the percentage of mothers in each family structure category who report the presence of at least one child under the age of 18 within their household. First, we see

that 17 percent of single mothers have a child in the home, which is significantly fewer than partnered mothers (42%) and re-partnered mothers (32%).

Next, Table 4.1 presents the work-family demand variables. No significant differences are found in the average level of work strain or work support for single, partnered, and re-partnered mothers.

The final section of Table 4.1 shows the average level of psychological distress for mothers in each family structure category. First, we see that partnered mothers have a significantly lower level of psychological distress (11.34) than single mothers (14.66) and re-partnered mothers (13.51). There are no significant differences between single and re-partnered mothers.

Ordinary Least Squares (OLS) regression estimates of the effects of psychological distress on family structure, employment, socioeconomic status, and family indicators, controlling for age, are computed. The following variables are excluded from the regression analysis due to concerns with multicollinearity: social assistance as main income source, employment status, status of longest job held according to the Hollingshead scale, and household income. (See Appendix A for a correlation table of all Table 1 variables).

Model 1, Table 4.2 presents the family structure model. It appears that being long-term single has a significant positive effect ($B = 3.60$) on psychological distress compared to being long-term partnered, while being re-partnered has a significant positive effect ($B = 1.96$) on psychological distress compared to being long-term partnered. Overall, Model 1 explains 3.0 percent of the level of variance in psychological distress.

Table 4.2: Regression of Psychological Distress: Coefficients of Variables Measuring Socioeconomic Status, Child Status, and Work-Family Demand

Variables	Model 1 b (B)	Model 2 b (B)	Model 3 b (B)	Model 4 b (B)
<u>Family Status</u>				
Single	0.15 (3.60)*	0.14 (3.30)*	0.10 (2.27)*	0.11 (2.57)*

Re-partnered	0.09 (1.96)*	0.09 (1.93)*	0.06 (1.27)	0.07 (1.50)
<u>Employment Measures</u>				
Duration: % time employed (SC) ¹		-0.20 (-0.04)*	-0.11 (-0.02)*	-0.10 (-0.02)*
Continuity: % total full-time jobs (SC) ¹		-0.01 (-0.07)	0.00 (-0.04)	-0.01 (-0.05)
% Total part-time jobs (SC) ¹		0.07 (0.55)	0.05 (0.42)	0.05 (0.44)
<u>Socioeconomic Status (SES) Measures</u>				
Income Measures				
% Low income: duration social assistance use (SC) ¹			0.11 (0.05)*	0.11 (0.04)*
\bar{X} Personal income (PY) ²			-0.09 (-0.16)	-0.09 (-0.17)
Education				
\bar{X} Number of years			-0.10 (-0.33)*	-0.10 (-0.34)*
<u>Child Status</u>				
% Time with children (SC) ¹				0.06 (0.01)
\bar{X} Presence of at least one child under age 18 ³				0.03 (0.63)
R ²	0.03*	0.07*	0.11*	0.11*

Unstandardized coefficients are in parentheses.

Age was controlled for in all regression models.

p<0.05

*The variable is statistically significant at the 0.05 level.

Partnered is the reference category.

¹ Since the Calendar (SC) – approximately 12 years between the second and third waves of data collection.

² Past Year (PY).

³ 0 = no, 1 = yes.

In the second step of this analysis, employment measures are added. As displayed in Model 2, the following findings emerge. First, the longer period of time respondents report being employed during the past 12 years, the lower their psychological distress ($B = -0.04$). Second, the total number of full-time jobs and part-time jobs reported by respondents are not significant predictors of psychological distress. The addition of these measures of socioeconomic status (regarding employment and work status) accounts for 7.0 percent of the variance in psychological distress.

In the third step of this analysis, measures of socioeconomic status (regarding income and education) are added. As displayed in Model 3, the following findings emerge. First, the length of time respondents relied on social assistance has a significant positive effect on psychological distress ($B = 0.05$). As the length of time on social assistance increases, psychological distress increases. Second, personal income is not a significant predictor of psychological distress. Third, the number of years of educational attainment has a significant negative effect on respondents' psychological distress ($B = -0.33$). This means that the more educational attainment that respondents report, the lower their psychological distress.

Adding income and education measures to Model 2 renders re-partnered status no longer significant. This suggests that more time on social assistance and fewer years of education may explain the higher psychological distress of re-partnered women compared to partnered women.

Model 4 displays the results of the regression equation with all child status measures added. None of the family measures are significant when added into the regression model, thus indicating that they are not predictors of psychological distress.

In summary, as expected single and re-partnered women report higher levels of psychological distress than partnered women. For re-partnered women, time on social assistance, duration of time employed, and number of years of education appear to explain their higher levels of distress compared to stably partnered mothers. None of the variables in the models explain the higher psychological distress of stably single mothers compared to partnered mothers. For the total sample, duration of time employed, time on social assistance, and number of years of educational attainment, in addition to family structure, emerge as significant predictors of psychological distress.

In Table 4.3 only employed mothers are included and the effects of the full-model with the addition of the two work-family demand variables are examined. Model 1 in Table 4.3 presents the family structure model. Being single has a significant positive effect ($B = 2.64$) on psychological distress, but there is no difference in distress between re-partnered and partnered women. In other words, among the currently employed mothers, the stably single are more distressed than the stably partnered.

Table 4.3: Regression of Psychological Distress: Coefficients of Variables Measuring Socioeconomic Status, Child Status, and Work-Family Demand for Employed Respondents

Variables	Model 1 b (B)	Model 2 b (B)
<u>Family Status</u>		
Single	0.12 (2.64)*	0.05 (1.24)
Re-partnered	0.04 (0.79)	0.00 (0.05)
<u>Employment Measures</u>		
% Duration: time employed (SC) ¹		0.00 (0.00)
% Continuity: total full-time jobs (SC) ¹		0.02 (0.15)
% Total part-time jobs (SC) ¹		0.02 (0.13)
<u>Socioeconomic Status (SES) Measures</u>		
Income Measures		
% Low income: duration social assistance use (SC) ¹		0.10 (0.05)*
\bar{X} Personal income		-0.10 (-0.20)*

Fifth, none of the child status variables are significant predictors of psychological distress. Sixth, work strain has a significant positive effect on respondents' psychological distress ($B = 1.16$). As the work strain of respondents increases, psychological distress increases. Finally, work support has a significant negative effect on respondents' psychological distress ($B = -0.35$). As the work support of respondents increases, psychological distress decreases. Adding all the other measures to Model 1 renders single status no longer significant. The addition of these measures accounts for 21.0 percent of the variance in the level of psychological distress.

In summary, when we select only the mothers who are currently employed, only the stably single report higher levels of distress than the stably partnered. It would appear that higher levels of distress among the stably single may be explained by economic insecurity, low education, and work-family stress.

Chapter Five

5 Discussion and Conclusions

The purpose of this research has been to examine the relationship between family structure, employment patterns, and mental health trajectories for mothers. The following research questions have guided this research:

What are the differences in psychological distress of mothers by trajectories of family structure?

Do the employment patterns of mothers vary based on their family structure trajectories?

Do employment patterns and family characteristics explain differences in psychological distress by trajectories of family structure?

5.1 Summary of the Research Findings

With respect to the first question, this investigation reveals a significant bivariate difference in psychological distress between long-term single and partnered mothers and between long-term re-partnered and partnered mothers. In both cases, the long-term partnered mothers report lower levels of psychological distress. When only employed mothers are examined, only long-term single mothers have significantly higher levels of distress than long-term partnered mothers. This confirms the findings of studies conducted by Hope et al. (1999), Hilton and Kopera-Frye (2004), and Cunningham and Knoester (2007).

Viewed from the life course perspective, it may be that being stably single over a period of 12 to 14 years represents a process of cumulative disadvantage with negative consequences for mental health. Furthermore, being stably partnered over a period of 12 to 14 years represents a process of cumulative advantage with regard to psychological distress. This corresponds with the findings of Demo and Acock (1996), who claim that marriage provides vital social support and alleviates many of the stressors associated with motherhood due to the childrearing assistance that husbands provide. Accordingly, this results in partnered mothers having lower levels of psychological distress than single mothers (see also Cairney et al. 2003, Cooper et al. 2007, Wade et al. 2011). The re-

partnered mothers have experienced change in their family structure over the study period, with some time being spent as a single parent before becoming re-partnered. When only employed mothers are examined, re-partnered women do not differ from partnered women in terms of distress. In the total sample, however, re-partnered women report more distress than long-term partnered mothers. This leads to the second research question: do the employment patterns of mothers vary based on their family structure trajectories?

This investigation reveals some significant differences in employment patterns and characteristics by family structure trajectory. For single mothers, results suggest less participation in the labour market because single mothers had spent more time on social assistance over the recent past and are more likely currently receiving benefits. This may help explain their significantly lower household incomes, although having only one income earner is also relevant (Beaujot and Kerr 2004). The significantly higher number of single mothers who rely on social assistance and their significantly lower average household incomes highlight the higher degree of adversity, which is associated with employment patterns (Jayakody and Stauffer 2000).

In addition, the analysis shows that the employment patterns and characteristics of re-partnered mothers are worse than those of partnered mothers regarding the continuity of employment, reliance on social assistance, household income, and work status. First off, regarding continuity of employment, re-partnered mothers had significantly more full-time jobs than partnered mothers. Second, regarding reliance on social assistance, re-partnered respondents spent significantly more time on social assistance than partnered respondents. A significantly higher proportion of those who were re-partnered claimed that social assistance was their main income source. Third, re-partnered mothers reported a significantly lower household income in the past year than partnered mothers. Finally, the average ranking of the re-partnered mothers' jobs was significantly lower on the Hollingshead scale than those of partnered mothers. No significant differences were found in the employment patterns of partnered and re-partnered respondents regarding the length of labour force participation, employment status, total number of part-time jobs, personal income, and work-family stress. However, the greater reliance of re-partnered mothers on social assistance, significantly more discontinuous employment

patterns, significantly lower household incomes, and significantly lower job statuses highlight the higher degree of adversity which is associated with their employment patterns over time in comparison to those of partnered mothers.

Finally, when we compare the employment patterns and characteristics of single mothers and re-partnered mothers we see that single mothers were more reliant on social assistance and had lower household incomes. No significant differences were found in the employment patterns of single and re-partnered respondents regarding the length of labour force participation, employment status, total part-time jobs, job status, personal income, and work-family stress. Thus, even though re-partnered women were not as economically disadvantaged as long-term single mothers in terms of time on social assistance and average household income, their economic circumstances were not as advantaged as their long-term partnered counterparts.

With respect to the life course perspective, it may be that being stably single over a period of 12 to 14 years provides some cumulative disadvantage with regard to employment patterns and characteristics. This supports the findings of Ali and Avison (1997) who, in examining employment patterns over two years, operationalize cumulative disadvantage as involving more discontinuous participation in the labour force and more financial strain for stably single mothers compared to stably partnered mothers. In contrast, being stably partnered over a period of 12 to 14 years may represent a process of cumulative advantage with regard to employment patterns resulting in more continuous participation in the labour force and less financial strain for stably partnered mothers compared to stably single mothers, as reported by Avison (2010). Finally, being stably re-partnered may represent both a process of cumulative advantage and disadvantage. Results suggest that, even though the employment patterns of re-partnered women are not as advantaged as those of partnered women regarding continuity of labour force participation, job status, reliance on social assistance, and household income, their employment patterns and characteristics were not as disadvantaged as their single counterparts. In summary, the employment patterns of mothers varied based on their family structure trajectories.

The multivariate analyses address the third research question: do employment patterns and family characteristics explain family structure trajectory differences in

psychological distress? It was revealed that being single was a significant predictor of psychological distress and that none of the variables measuring the employment patterns of single mothers explained their higher levels of distress, compared to long-term partnered mothers. In contrast, the higher levels of psychological distress that re-partnered women experienced in comparison to partnered women was explained by their shorter length of employment, longer period of time spent on social assistance, and fewer years of educational attainment.

More generally, these analyses also allow me to examine the predictors of psychological distress among the total sample. In this regard, I find that duration of time employed, time on social assistance, and number of years of educational attainment emerged as significant predictors of psychological distress (in addition to family structure). It was demonstrated that psychological distress for all respondents was more likely to be mitigated if they had acquired more educational attainment and worked longer (as McLanahan 1983 revealed). Conversely, respondents were more likely to experience psychological distress if they spent a greater length of time on social assistance (as Thomson and Ensminger 1989 revealed).

When only employed mothers were selected, time on social assistance, personal income, number of years of educational attainment, work strain, and work support emerged as significant predictors of psychological distress. It was demonstrated that psychological distress for all respondents was more likely to be mitigated if they had acquired more educational attainment (McLanahan 1983), earned more income (Ali and Avison 1997), and had a higher level of work support (Harris 1996). Conversely, respondents were more likely to experience psychological distress if they spent a greater length of time on social assistance (Jayakody and Stauffer 2000) and had a higher level of work strain (Avison et al. 2007). No significant differences were found in psychological distress among respondents regarding their length of labour force participation, total number of full-time and part-time jobs, time spent with children, and presence of children.

In order to optimize the employment patterns and subsequent mental health trajectories of single mothers, it is important to reference several tenets of the life course perspective. First off, while Settersten (2003) claims that it is possible for someone who

has been disadvantaged by the economic structure of society to exercise human agency and extricate themselves from this situation, the life course perspective states that those who have been economically well off for their whole lives are more likely to have a greater degree of human agency and positively influence their lives than those who have been constantly economically disadvantaged. Given that cumulative advantage/disadvantage theory highlights the substantial socioeconomic inequality and subsequent disparity in mental health outcomes between those who experienced economically advantaged and disadvantaged circumstances early in their lives (O’Rand 2002), maximizing the educational opportunities of single mothers is imperative to optimizing their subsequent employment patterns (Haleman 2004) and mental health trajectories (Thomson and Ensminger 1989).

Given the finding that family structure exerts a significant influence on psychological distress, this thesis highlights how getting remarried (or being married in the first place) could potentially improve psychological distress among single mothers and positively impact their life course trajectories. While marriage can play a valuable role in mitigating the financial stressors and work-family conflict inherent in single parenthood (Avison and Davies 2005), it will not completely eliminate family structure differences in distress, owing to the higher rates of psychological distress among stably re-partnered mothers over a 12 to 14 year period, compared to stably partnered mothers. It is also important to be attentive of the psychological distress that can result from long-term stressful marriages (Amato 2000A). Therefore, while this thesis acknowledges that getting remarried could potentially improve the lives of women who are economically disadvantaged by family structure and socioeconomic status, it is not a definite strategy for single mothers to alleviate psychological distress.

The findings of this thesis also point to the valuable roles of educational attainment and being stably employed in mitigating psychological distress among single mothers (Avison et al. 2007), especially given that being employed decreases dependence on social assistance (Davies and McAlpine 1998). Additionally, Ali and Avison (1997) found that levels of work support are negatively associated with psychological distress and levels of work strain are positively associated with psychological distress among stably single mothers.

5.2 Methodological Issues

One methodological issue that limits the conclusions that can be drawn from this thesis is the multicollinearity among several independent variables, which meant that they could not all be included in a regression of psychological distress. (See Appendix A for a correlation table of all Table 4.1 variables). The following variables were excluded from both regression analyses (as shown in Table 4.2 and Table 4.3) due to concerns with multicollinearity: social assistance as the main income source, employment status, status of longest job held according to the Hollingshead scale, and household income.

Theoretically, all of these variables represent conceptually unique dimensions of work across the life course (Williams and Umberson 2004, Avison et al. 2007, Umberson et al. 2010), although admittedly they were also interrelated. Empirically, the statistical overlap precluded my ability to consider them together in a model. As a result, I was unable to conduct regression estimates of the effects of psychological distress on all of my measures of employment and socioeconomic status. This meant that the full impact of using employment patterns to explain family structure trajectory differences in psychological distress could not be analyzed.

A second limitation concerns my ability to measure cumulative advantage/disadvantage theory. I am only able to use this theory as a possible explanation for my findings.

In spite of these concerns, there were also several positive aspects of the Single Parent Family Study that optimized the findings of this thesis. First, the use of the Center for Epidemiologic Studies Depression Scale (CES-D) in the data set was effective in measuring psychological distress among mothers, owing to its excellent validity and reliability (Husaini et al. 1980, Roberts and Vernon 1983, Okun et al. 1996). Second, the longitudinal data collection approach allowed the construction of family structure trajectories, which contributes to the literature on psychological distress differences in mothers using cross-sectional research designs (such as Wheaton 1990, Barrett and Turner 2005, Cooper et al. 2007). Third, the family structure trajectory variable within the data set allowed me to examine the differentiated employment patterns and levels of psychological distress between long-term single, partnered, and re-partnered mothers. By

examining how remarriage represents cumulative advantage and disadvantage across the life course, this thesis compares psychological distress between three family structure trajectories, instead of just currently single and currently partnered mothers (as was previously examined by Hope et al. 1999, Wang 2004, and Cunningham and Knoester 2007). Finally, in the third wave of data collection, respondents were provided with a life history calendar covering the 12 to 14 year period between the second and third waves (Avison et al. 2008). This provided important retrospective data in a reliable manner.

5.3 Suggestions for Future Research

Previous studies have acknowledged the reciprocal relationship between physical illness and psychological distress (Turner and Noh 1988, Salovey et al. 2000, Turner et al. 2006) and the physical and mental health characteristics of mothers by family structure (Lipman et al. 1997, Perez and Beaudet 1999, Weitoft et al. 2002). In this thesis, I did not consider how employment patterns and family characteristics explain family structure trajectory differences in physical health. In choosing not to include physical health as a dependent variable, an entire range of health outcomes was not considered. It is, therefore, my recommendation that future research examine the factors that contribute to family structure trajectory differences in physical distress. In this manner, physical distress could be measured according to the 36-Item Short-Form Health Survey (McHorney et al. 1993), self-rated health (Manor 2000) or body mass index (Poulton et al. 2002). Additionally, using measures of physical health would reveal a wider range of health outcomes resulting from the family characteristics and employment patterns of mothers over the life course. Physical illness (resulting from long-term singlehood, financial hardship, discontinuous employment patterns, and psychological distress) could be studied as a process of cumulative disadvantage over the life course.

Future research into family structure trajectory differences in psychological distress will be more valuable if measures of race/ethnicity are included. Previous research has investigated how race and family structure shape the disadvantages mothers face (Edin and Lein 1997, Jayakody and Stauffer 2000), such as studies on the difficult employment patterns of black mothers (Kennelly 1999). It is, therefore, my recommendation that future research examines ethnic/racial differences in how

employment patterns and family characteristics explain family structure trajectory differences in psychological distress and also physical distress, given that physical illness is often co-morbid with depression (Stein et al. 2006). In this manner, belonging to a visible minority group could be studied as a potential process of cumulative disadvantage across the life course.

5.4 Conclusion

In conclusion, this thesis adds to the literature that examines mental health differences among mothers based on current family structure (single/partnered) by demonstrating the importance of incorporating patterns of family structure, as well as variations in family structure over time. Stability and change in family structure emerge as important predictors of distress over 12 years. Specifically, in the total sample of mothers who were employed and not employed, those who are long-term single and those who have re-partnered at some point during that time report higher levels of psychological distress than those who are stably partnered. None of the employment and family characteristics explain the higher levels of distress among the stably single, but results suggest that reliance on social assistance and education attainment may explain the elevated levels of distress among re-partnered mothers, compared to the partnered mothers. When only currently employed mothers are considered, re-partnered and partnered mothers do not differ in levels of distress. The higher levels of distress among the stably single, compared to the stably partnered, appears to be explained by lower income, greater reliance on social assistance, lower education, higher work strain, and lower work support. In summary, these results suggest that it may be the conditions surrounding family structure, rather than family structure itself, that compromise or enhance mothers' mental health.

References

- Ali, Jennifer and William Avison. 1997. "Employment Transitions and Psychological Distress: The Contrasting Experiences of Single and Married Mothers." *Journal of Health and Social Behavior* 38:345-362.
- Amato, Paul. 2000A. "Diversity Within Single Parent Families." Pp. 14-172 in *Handbook of Family Diversity*, edited by David H. Demo, Katherine R. Allen, and Mark A. Fine. New York: Oxford University Press.
- Amato, Paul. 2000B. "The Consequences of Divorce for Adults and Children." *Journal of Marriage and Family* 62:1269-1287.
- Avison, William. 1995. "Roles and Resources: The Effects of Family Structure and Employment on Women's Psychosocial Resources and Psychological Distress." *Research in Community and Mental Health* 8:233-256.
- Avison, William. 2010. "Family Structure and Women's Lives: A Life Course Perspective." Pp. 71-92 in *Advances in the Conceptualization of the Stress Process: Essays in Honor of Leonard Pearlin*, edited by William Avison, Carol Aneshensel, Scott Schieman, and Blair Wheaton. New York: Springer.
- Avison, William and Lorraine Davies. 2005. "Family Structure, Gender, and Health in the Context of the Life Course." *Journals of Gerontology* 60B: 113-116.
- Avison, William, Jennifer Ali, and David Walters. 2007. "Family Structure, Stress, and Psychological Distress: A Demonstration of Differential Exposure." *Journal of Health and Social Behavior* 48:301-317.
- Avison, William, Lorraine Davies, Andrea Willson, and Kim Shuey. 2008. "Family Structure and Mothers' Mental Health: A Life Course Perspective On Stability and Change." Pp. 233-255 in *Stress Processes Across the Life Course: Advances in Life Course Research, Vol. 13*, edited by Heather Turner and Scott Schieman. New York: Elsevier.
- Barrett, Anne and Jay Turner. 2005. "Family Structure and Mental Health: The Mediating Effects of Socioeconomic Status, Family Process, and Social Stress." *Journal of Health and Social Behavior* 46:156-169.
- Beaujot, Roderic and Don Kerr. 2004. *Population Change in Canada*. Don Mills, Ontario: Oxford University Press.

- Bellavia, Gina and Michael Frone. 2005. "Work-Family Conflict". Ch. 6 in *Handbook of Work Stress*. Thousand Oaks, California: Sage Publications Ltd.
- Bengston, Vern L. and Katherine R. Allen. 1993. "The Life Course Perspective Applied to Families Over Time." Pp. 469 – 504 in *Sourcebook of Family Theories and Methods: A Contextual Approach*, edited by P.G. Boss, W.J. Doherty, R. LaRossa, W.R. Schumm, and S.K. Steinmetz. New York: Plenum Press.
- Booth, Alan and Paul Amato. 1991. "Divorce and Psychological Stress." *Journal of Health and Social Behavior* 32:396-407.
- Burden, Dianne. 1986. "Single Parents and the Work Setting: The Impact of Multiple Job and Homelife Responsibilities" *Family Relations* 35:37-43.
- Burris, Beverly H. 1991. "Employed Mothers: The Impact of Class and Marital Status on the Prioritizing of Family and Work." *Social Science Quarterly* 72:50-66.
- Cairney, John, Michael Boyle, David Offord, and Yvonne Racine. 2003. "Stress, Social Support, and Depression in Single and Married Mothers." *Social Psychiatry and Psychiatric Epidemiology* 38:442-449.
- Cooper, Cary, Paul Bebbington, Howard Meltzer, Dinesh Bhugra, Rachel Jenkins, Michael Farrell, and Michael King. 2007. "Depression and Common Mental Disorders in Lone Parents: Results of the 2000 National Psychiatric Morbidity Survey." *Psychological Medicine* 38:335-342.
- Cox, Amy G. and Harriet B. Pressner. 2000. "Non-Standard Employment Schedules Among American Mothers: The Relevance of Marital Status." Pp. 97 – 130 in *Work & Family: Research Informing Policy*, edited by Toby Parcel and Daniel Cornfield. Thousand Oaks, California: Sage Publications.
- Cunningham, Anna-Marie and Chris Knoester. 2007. "Marital Status, Gender, and Parents' Psychological Wellbeing." *Sociological Inquiry* 77:264-287.
- Davies, Lorraine and Donna McAlpine. 1998. "The Significance of Family, Work, and Power Relations for Mothers' Mental Health". *The Canadian Journal of Sociology* 23:369-387.
- Davies, Lorraine, William Avison, and Donna McAlpine. 1997. "Significant Life Experiences and Depression Among Single and Married Mothers." *Journal of Marriage and the Family* 59:294-308.

- Demo, David and Alan Acock. 1996. "Singlehood, Marriage, and Remarriage: The Effects of Family Structure and Family Relationships on Mothers' Wellbeing." *Journal of Family Issues* 17:388-407.
- Edin, Kathryn. 1995. "The Myths of Dependence and Self-Sufficiency: Women, Welfare, and Low-Wage Work." *Focus* 17:1-9.
- Edin, Kathryn. and Laura Lein. 1997. *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work*. New York: Russell Sage Publications.
- Elder, Glen H. Jr. 1985. "Perspectives on the Life Course." Pp. 23 – 49 in *Life Course Dynamics: Trajectories and Transitions, 1968 – 1980*, edited by Glen H. Elder Jr. Ithaca, New York: Cornell University Press.
- Elder, Glen Jr. 1994. "Time, Human Agency, and Social Change: Perspectives on the Life Course." *Social Psychology Quarterly* 57:4–15.
- Elder, Glen Jr. and Monica Johnson. 2003. "The Life Course and Aging: Challenges, Lessons, and New Directions." Pp. 49 – 81 in *Invitation to the Life Course: Toward New Understandings of Later Life*, edited by Richard A. Settersten Jr. Amityville, New York: Baywood Publishing Company Inc.
- Elder, Glen H. Jr., Monica Johnson, and Robert Crosnoe. 2004. "The Emergence and Development of Life Course Theory." Ch. 1 in *Handbook of the Life Course*. New York: Springer Science and Business Media.
- Elo, Irma T. and Samuel H. Preston. 1992. "Effects of Early-Life Conditions on Adult Mortality: A Review." *Population Index* 58:186–212.
- George, Linda K. 1993. "Sociological Perspectives on Life Transitions." *Annual Review of Sociology* 19:353-373.
- George, Linda K. 2003. "What Life Course Perspectives Offer the Study of Aging and Health." Ch. 6 in *Invitation to the Life Course: Toward New Understandings of Later Life*. Amityville, New York: Baywood Publishing Company Inc.
- Giele, Janet Z. and Glen H. Elder Jr. 1998. "Life Course Research: Development of a Field." Ch. 1 in *Methods of Life Course Research: Qualitative and Quantitative Approaches*. London: Sage Publications.
- Haleman, Diana L. 2004. "Great Expectations: Single Mothers in Higher Education." *International Journal of Qualitative Studies in Education* 17:769-784.

- Harknett, Kristen. 2006. "The Relationship Between Private Safety Nets and Economic Outcomes Among Single Mothers." *Journal of Marriage and Family* 68:172-191.
- Harris, Kathleen Mullan. 1996. "Life After Welfare: Women, Work, and Repeat Dependency." *American Sociological Review* 61:407-426.
- Heinz, Walter. 2004. "From Work Trajectories to Negotiated Careers: The Contingent Work Life Course." Ch. 9 in *Handbook of the Life Course. Handbook of the Life Course*, edited by Jeylan T. Mortimer and Michael J. Shanahan. New York: Springer Publications.
- Heinz, Walter, Johannes Huinink, Christopher Swader, and Ansgar Weymann. 2009. "General Introduction." Pp. 15 – 30 in *The Life Course Reader: Individuals and Societies Across Time*, edited by Walter R. Heinz, Johannes Hunnink, Christopher S. Swader, and Ansgar Weymann. New York: Campus Verlag.
- Hershey, Alan and LaDonna Pavetti. 1997. "Turning Job Finders into Job Keepers." *The Future of Children* 7:74-86.
- Hilton, Jeanne and Karen Kopera-Frye. 2004. "Patterns of Psychological Adjustment Among Divorced Custodial Parents". *Journal of Divorce & Remarriage* 41:1-30.
- Hollingshead, August. 1957. *Two Factor Index of Social Position*. New Haven, Connecticut: Mimeo Publications.
- Hope, Steven, Chris Power, and Bryan Rodgers. 1999. "Does Financial Hardship Account for Elevated Psychological Distress in Lone Mothers?" *Social Science & Medicine* 49:1637-1649.
- Hunt, Stephen. 2005. *The Life Course: A Sociological Introduction*. New York: Palgrave Macmillan.
- Husaini, Baqar, James Neff, Jean Harrington, Michael Hughes, and Robert Stone. 1980. "Depression in Rural Communities: Validating the CES-D Scale." *Journal of Community Psychology* 8:20-27.
- Jaremchenko, Jacqueline. 2012. E-mail message to author, April 23.
- Jayakody, Rukmalie and Dawn Stauffer. 2000. "Mental Health Problems Among Single Mothers: Implications for Work and Welfare Reform." *Journal of Social Issues* 56:617-634.

- Kennelly, Ivy. 1999. "That Single Mother Element: How White Employers Typify Black Women." *Gender and Society* 13:168-192.
- Kitson, Gay and William Holmes. 1992. *Portrait of Divorce: Adjustment to Marital Breakdown*. New York: Guilford Press.
- Kuh, Diana and Rebecca Hardy. 2002. "A Life Course Approach to Women's Health: Does the Past Predict the Present?" Pp. 3 – 20 in *A Life Course Approach to Women's Health*, edited by Diana Kuh and Rebecca Hardy. Oxford: Oxford University Press.
- Lambert, Susan. 1999. "Lower-Wage Workers and the New Realities of Work and Family." *The American Academy of Political and Social Science* 562:174-190.
- Lesthaeghe, Ron. 1998. "The Second Demographic Transition in Western Countries: An Interpretation." Pp. 17 – 62 in *Gender and Family Change in Industrialized Countries*, edited by K. Oppenheim Mason and A.M. Jensen. Oxford, UK: Clarendon Press.
- Lichter, Daniel T. , Christie D. Batson, and J. Brian Brown. 2004. "Welfare Reform and Marriage Promotion: The Marital Expectations and Desires of Single Cohabiting Mothers." *Social Service Review* 78:2-25.
- Lipman, Ellen, David Offord, and Michael Boyle. 1997. "Single Mothers in Ontario: Sociodemographic, Physical, and Mental Health Characteristics." *Canadian Medical Association* 156:639-645.
- Manor, Orly, Sharon Matthews, and Chris Power. 2000. "Self-Rated Health and Limiting Longstanding Illness: Interrelationships with Morbidity in Early Adulthood." *International Journal of Epidemiology* 30:600-607.
- Maughan, Barbara. 2002. "Depression and Psychological Distress: A Life Course Perspective." Ch. 8 in *A Life Course Approach to Women's Health*. New York: Oxford University Press Inc.
- McHorney, Colleen, John Ware, and Anastasia Raczek. 1993. "The MOS 36-Item Short-Form Health Survey (SF-36): Psychometric and Clinical Tests of Validity in Measuring Physical and Mental Health Constructs." *Medical Care* 31:247-263.

- McKeever, Matthews and Nicholas Wolfinger. 2011. "Thanks for Nothing: Income and Labour Force Participation for Never Married Mothers Since 1982." *Social Science Research* 40:63-76.
- McLanahan, Sara S. 1983. "Family Structure and Stress: A Longitudinal Comparison of Two-Parent and Female-Headed Families." *Journal of Marriage and Family* 45:347-357.
- Merton, Robert. 1988. "The Matthew Effect in Science II: Cumulative Advantage and the Symbolism of Intellectual Property." *ISIS* 79:606-623.
- Mistry, Ritesh, Gregory Stevens, Harvinder Sareen, Roberto de Vogil, and Neal Halfon. 2007. "Parenting Related Stressors and Self-Reported Mental Health of Mothers with Young Children". *American Journal of Public Health* 97:1261-1268.
- Mortimer, Jeylan and Michael Shanahan. 2004. *Handbook of the Life Course*. New York: Springer Science and Business Media.
- Mortimer, Jeylan, Jeremy Staff, and Jennifer Lee. 2005. "Agency and Structure in Educational Attainment and the Transition to Adulthood." Pp. 131 – 154 in *Towards an Interdisciplinary Perspective on the Life Course*, edited by Rene Levy, Paolo Ghisletta, Jean-Marie Le Goff, Dario Spini, and Eric Widmer. London: Elsevier.
- Mueller, Charles and Toby Parcel. 1981. "Measures of Socioeconomic Status: Alternatives and Recommendations." *Child Development* 52:13-30.
- Okun, Alex, Ruth Stein, Laurie Bauman, and Ellen Silver. 1996. "Content Validity of the Psychiatric Symptom Index, CES-Depression Scale, and State-Trait Anxiety Inventory From the Perspective of DSM-IV." *Psychological Reports* 79:1059-1069.
- O'Rand, Angela M. 2002. "Cumulative Advantage Theory in Life Course Research." *Annual Review of Gerontology and Geriatrics* 22:14-30.
- Perez, Claudio and Marie Beaudet. 1999. "The Health of Lone Mothers." Pp. 21 – 32 in *Health Reports, Volume 11*, edited by Marie Beaudet. Ottawa: Statistics Canada.
- Poulton, Richie, Avshalom Caspi, Barry Milne, Murray Thomson, Alan Taylor, Malcolm Sears, and Terrie Moffitt. 2002. "Association Between Children's Experience of

- Socioeconomic Disadvantage and Adult Health: A Life Course Study.” *The Lancet* 360:1640-1645.
- Radloff, Leonore. 1977. “The CES-D Scale: A Self-Reported Depression Scale for Research in the General Population.” *Applied Psychological Measurement* 1:285-401.
- Ravanera, Zenaida R., Hwa Young Lee, Fernando Rajulton, and Byung-Yup Cho. 1999. “Should a Second Demographic Transition Follow the First? Demographic Contrasts: Canada and South Korea.” *Social Indicators Research* 47:99-118.
- Rindfuss, Ronald R., C. Gray Swicewood, and Rachel A. Rosenfeld. 1987. “Disorder in the Life Course: How Common and Does It Matter?” *American Sociological Review* 52:785-801.
- Roberts, Robert and Sally Vernon. 1983. “The Center for Epidemiological Studies Depression Scale: Its Use in a Community Sample.” *American Journal of Psychiatry* 140:41.
- Roscigno, Vincent, Randy Hodson, and Steven Lopez. 2009. “Workplace Incivilities: The Role of Interest Conflicts, Social Closure, and Organizational Chaos.” *Work, Employment, & Society* 23:747-773.
- Ross, Catherine, John Mirowsky, and Karen Goldsteen. 1990. “The Impact of the Family on Health: The Decade in Review.” *Journal of Marriage and Family* 52:1059-1078.
- Salovey, Peter, Alexander Rothman, Jerusha Detweiler, and Wayne Steward. 2000. “Emotional States and Physical Health.” *American Psychologist* 55:110-121.
- Seabrook, Jamie. 2012. *Family Structure and Children’s Socioeconomic Attainment in the Transition to Adulthood*. Doctoral dissertation, Department of Sociology, University of Western Ontario, London, Ontario.
- Settersen, Richard Jr. 1999. *Lives in Time and Place: The Problems and Promises of Developmental Science*. Amityville, New York: Baywood Publishers.
- Settersten, Richard Jr. 2003. “Propositions and Controversies in Life Course Scholarship.” Pp. 15 – 48 in *Invitation to the Life Course*, edited by Richard Settersten Jr. Amityville, New York: Baywood Publishing Company Inc.

- Shanafelt, Tait, Charles Balch, Gerald Bechamps, Thomas Russell, Lotte Dyrbye, Daniel Satele, Paul Collicott, Paul Novotny, Jeff Sloan, and Julie Freischlag. 2009. "Burnout and Career Satisfaction Among American Surgeons." *Annals of Surgery* 250:463-471.
- Sigle-Rushton, Wendy and Sara McLanahan. 2002. "The Living Arrangements of New Unmarried Mothers." *Demography* 39:415-433.
- Simons, Ronald L., Christine Johnson, and Frederick O. Lorenz. 1996. "Family Structure Differences in Stress and Behavioral Predispositions." Pp. 45 – 64 in *Understanding Differences between Divorced and Intact Families: Stress, Interaction, and Child Outcome*, edited by R.L. Simons. Thousand Oaks, California: Sage Publications.
- Shuey, Kim. 2010. *Introduction to the Life Course* [lecture notes]. London, Ontario: University of Western Ontario: Sociology of the Life Course.
- Sloan, Melissa. 2004. "The Effects of Occupational Characteristics on the Experience and Expression of Anger in the Workplace." *Work & Occupations* 31:38-72.
- Smock, Pamela, Wendy Manning, and Sanjiv Gupta. 1999. "The Effect of Marriage and Divorce on Women's Economic Wellbeing." *American Sociological Review* 64:794-812.
- Statistics Canada. 2006A. *2006 Census of Canada – Topic Based Tabulations – Labour Force Activity (8), Presence of Children by Age Groups (11), Number of Children (5), Age Groups (9), Marital Status (7) and Sex (3) for the Population 15 Years and Over Living in Private Households of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations*. Ottawa: Statistics Canada. Retrieved May 30, 2011 (<http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GID=0&GK=0&GRP=1&PID=92109&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=0&Temporal=2006&THEME=67&VID=0&VNAMEE=&VNAMEF=>).
- Statistics Canada. 2006B. *2006 Census of Canada – Topic Based Tabulations – Income Status Before Tax and Income Status After Tax (8) and Economic Family Status and Age Groups (80) for the Persons in Private Households of Canada*,

- Provinces, Census Metropolitan Areas and Census Agglomerations*. Ottawa: Statistics Canada. Retrieved September 3, 2011 (<http://www12.statcan.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=1&GC=0&GID=0&GK=0&GRP=1&PID=94206&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=815&Temporal=2006&THEME=81&VID=0&VNAMEE=&VNAMEF=>).
- Statistics Canada. 2006C. *2006 Census of Canada – Topic Based Tabulations – Census Family Status (6), Age Groups (20) and Sex (3) for the Population in Private Households of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations*. Ottawa: Statistics Canada. Retrieved September 5, 2011 (<http://www12.statcan.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=1&GC=0&GID=0&GK=0&GRP=1&PID=89024&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=0&Temporal=2006&THEME=68&VID=0&VNAMEE=&VNAMEF=>).
- Statistics Canada. 2007. *Census Families, Number and Average Size*. Ottawa: Statistics Canada. Retrieved September 4, 2011 (<http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil40-eng.htm>).
- Statistics Canada. 2008A. *Family Income, By Family Type (Couple Families)*. Retrieved September 1, 2011 (<http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil106a-eng.htm>).
- Statistics Canada. 2008B. *Family Income, By Family Type (Lone-Parent Families)*. Retrieved September 6, 2011 (<http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil106b-eng.htm>).
- Stein, Murray, Brian Cox, Tracie Afifi, Shay-Lee Belik, and Jitender Sareen. 2006. “Does Co-Morbid Depressive Illness Magnify the Impact of Chronic Illness? A Population Based Perspective.” *Psychological Medicine* 36:587-596.
- Thomas, William and Florjan Znaniecki. 1918. *The Polish Peasant in Europe and America: Monograph of an Immigrant Group*. Boston: R.G. Badger.

- Thomson, Maxine and Margaret Ensminger. 1989. "Psychological Wellbeing Among Mothers with School Age Children: Evolving Family Structures." *Social Forces* 67:715-730.
- Turner, Jay and Franco Marino. 1994. "Social Support and Social Structure: A Descriptive Epidemiology." *Journal of Health and Social Behavior* 35:193-212.
- Turner, Jay and Samuel Noh. 1988. "Physical Disability and Depression: A Longitudinal Analysis." *Journal of Health and Social Behavior* 29:23-37.
- Turner, Jay, Donald Lloyd, and John Taylor. 2006. "Physical Disability and Mental Health: An Epidemiology of Psychiatric and Substance Disorders." *Rehabilitation Psychology* 51:214-223.
- Turner, Jay, Blair Wheaton, and Donald A. Lloyd. 1995. "The Epidemiology of Social Stress." *American Sociological Review* 60:104-125.
- Umberson, Debra, Tetyana Pudrovska, and Corinne Reczek. 2010. "Parenthood, Childlessness, and Wellbeing: A Life Course Perspective." *Journal of Marriage and Family* 72:612-629.
- Urban, Julie and Pamela Olson. 2005. "A Comprehensive Employment Model for Low Income Mothers." *Journal of Family and Economic Issues* 26:101-122.
- Wade, Terrance, Scott Veldhuizen, and John Cairney. 2011. "Prevalence of Psychiatric Disorder in Lone Fathers and Mothers: Examining the Intersection of Gender and Family Structure on Mental Health." *The Canadian Journal of Psychiatry* 56:567-573.
- Wang, Jian Li. 2004. "The Difference Between Single and Married Mothers in the 12-Month Prevalence of Major Depressive Syndrome, Associated Factors and Mental Health Service Utilization." *Social Psychiatry and Psychiatric Epidemiology* 39:26-32.
- Weitof, Gunilla Reinback, Bengt Haglund, Anders Hjern, and Mans Rosen. 2002. "Mortality, Severe Morbidity and Injury Among Long-Term Lone Mothers in Sweden." *International Journal of Epidemiology* 31:573-580.
- Wheaton, Blair. 1990. "Life Transitions, Role Histories, and Mental Health." *American Sociological Review* 55:209-223.

- Wheaton, Blair. 1994. "Sampling the Stress Universe." Pp. 77-114 in *Stress and Mental Health: Contemporary Issues and Prospects for the Future*, edited by W. Avison and I. Gotlib. New York: Plenum.
- Wilk, Piotr. 2001. "Women's Employment Transitions and Changes in Psychological Distress." *Canadian Studies in Population* 28:513-533.
- Williams, Joan. 2001. *Unbending Gender: Why Family and Work Conflict and What to Do About It*. New York: Oxford University Press.
- Williams, Kristi and Debra Umberson. 2004. "Marital Status, Marital Transitions, and Health: A Gendered Life Course Perspective." *Journal of Health and Social Behavior* 45:81-98.
- Willson, Andrea, Kim Shuey, and Glen Elder Jr. 2007. "Cumulative Advantage Processes as Mechanisms of Inequality in Life Course Health." *American Journal of Sociology* 112:1886-1924.

Appendix A

Correlation Table for All Independent and Dependent Variables (All Respondents)

	Time on Social Assistance (SC)	Social Assistance Main Income Source ²	Personal Income (PY)	Total Household Income (PY) ¹	Number of Years Education	Time Employed (SC)	Employed Currently	Total Full-time Jobs	Total Part-time Jobs	Longest Job (SC) - Household	Longest Job (SC) - NOC	Time with Child	Presence of At Least One Under Age 18 ³	Work Strain	Work Support	Age
Time on Social Assistance (SC)																
Social Assistance Main Income Source ²	0.73*															
Personal Income (PY)	-0.26*	-0.28*														
Total Household Income (PY) ¹	-0.43*	-0.45*	0.56*													
Number of Years Education	-0.13*	-0.16*	0.45*	0.34*												
Time Employed (SC)	-0.28*	-0.29*	0.57*	0.36*	0.18*											
Employed Currently	-0.16*	-0.17*	0.49*	0.33*	0.15*	0.72*										
Total Full-time Jobs	-0.03	0.03	0.02*	0.05	-0.02	0.10*	0.095*									
Total Part-time Jobs	0.10*	0.14*	-0.07*	-0.05	0.055	0.06	0.055	-0.01								
Longest Job (SC) - Household	-0.16*	-0.10*	0.34*	0.23*	0.15*	0.66*	0.48*	0.10*	0.13*							
Longest Job (SC) - NOC	0.18*	0.13*	-0.38*	-0.27*	-0.17*	-0.66*	-0.48*	-0.08*	-0.12*	0.97						
Time with Child	0.02	-0.03	0.00	0.10*	0.00	0.02	0.06	0.03	-0.04	0.02	-0.02					
Presence of At Least One Child Under Age 18 ³	0.01	-0.03	0.02	0.17*	0.01	-0.02	0.09*	0.03	0.01	0.03	-0.04	0.19*				
Work Strain	0.01	0.02	0.12*	0.05	0.07	0.02	0.03	0.03	-0.06	0.07	-0.01	0.12*	0.21*			
Work Support	-0.10*	-0.10*	0.18*	0.12*	0.1*	0.01	-0.04	-0.09*	0.04	0.05	-0.06	-0.08	-0.04	0.00		
Age	-0.11*	-0.15*	-0.02	-0.09*	0.10*	-0.10*	-0.18*	-0.01	-0.09*	-0.11*	-0.12*	-0.15*	-0.49*	-0.16*	-0.11*	
CEUSD	0.23*	0.27*	-0.23*	-0.33*	-0.18*	-0.21*	-0.16*	-0.11*	0.09*	0.12*	0.11*	0.04	0.05	0.37*	-0.15*	-0.08*

*The variable is statistically significant at the 0.05 level.

- ¹ Since the Calendar (SC) – between the second and third waves of data.
- ² 0 = no, 1 = yes.
- ³ Past Year (PY)
- ⁴ 0 = not employed, 1 = employed.

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