How Does Hedonic Capital Influence the Dynamics of Subjective Well-Being of the Unemployed: Evidence From the German Socio-Economic Panel

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ABSTRACT:

We employ the German Socio-Economic Panel data to investigate how the presence of Hedonic Capital would affect the relationship between subjective well-being and displacement across Germany from 1984 to 2008. We assess how a putatively exogenous unemployment shock would affect the dynamics of subjective well-being of the married and individuals with dependent children. We find that marriage is an effective smoothing mechanism for female. The event of displacement has a negative impact on spousal happiness. Wives with working husbands show less subjective well-being decline at onset, however, husbands with working wives show significantly greater decline in subjective well-being than husbands with non-working wives. This result deviates from classical utilitarian theories whereby spousal income is seen as a smoothing mechanism for utility, suggesting that perhaps utility is not necessarily equivalent to happiness, and both entities should be dealt with separately. Middle aged workers show permanently lower life satisfactions even four years after onset of unemployment. We also find that individuals in general with dependent children show lower volatility in subjective well-being during and after the unemployment spell. But men with children show sharper falls in subjective well-being than women; having adolescent children is better than have young children and more children amplifies the unhappiness of the unemployed. Findings in subjective well-being research could have many valuable policy implications. Whether policy makers should take into account both objective and subjective well-being is debatable. However, it is indisputable that a good indicator of well-being must amalgamate components of both objective and subjective well-being.

Keywords: Unemployment; Subjective Well-Being; Hedonic Capital; Spousal happiness; Children

摘要

通过应用1984年至2008年的德国经济社会板面数据，本文研究了当考虑快乐资本时，主观幸福感与失业之间的关系是如何变化的。本文探讨了由外因引起的失业打击如何影响已婚及育子人士的主观幸福感的变化。研究证实，婚姻对女性的主观幸福感有显著的支撑作用。总的来说，失业迫使夫妻双方的幸福感降低。失业之初，对于女性来说，如果其丈夫仍有工作，那么他们的主观幸福感的下降程度较小；而对于男性来说，那些自己失业而妻子仍然工作的，其主观幸福感的下降程度要远远大于夫妻双方都失业的。该研究结果有别于经典功利主义理论：即，推崇配偶收入会提升个人效用。效用并不完全等同于幸福感，亦不能替代彼此。即使失业四年以后，中年人的幸福感仍持续偏低。研究还表明，失业对那些有成年子女的人造成的幸福感波动较小。并且，失业对父亲造成的主观幸福感落差要远大于对母亲的；青少年父母所受的冲击要小于幼儿父母的；多子女家庭的失业压力尤为突出。关于主观幸福感的研究工作对政策的制定有诸多益处。在制定政策的过程中，尽管仍无法确定是否应该考虑客观幸福感和主观幸福感，但可以肯定的是，客观和主观幸福感是衡量幸福指数有效性的重要指标。

主题词:失业; 主观幸福感; 快乐资本; 配偶幸福感; 儿童

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1.INTRODUCTION

Unemployment is the single most watched issue in First World Economies. Researchers and public policy makers tend to put considerable weight on the unemployment rate to gauge the state of the economy. Changes in the unemployment rate are also a pertinent cause of fluctuations in well-being. There is a burgeoning literature in economics that comprehensively documents the effect of unemployment on objective measures of well-being such as income (Jacobson, Lalonde & Sullivan, 1966), marital dissolution (Charles & Stephens 2004), consumption (Melvin, 2001), and spousal earnings (Cullen & Gruber, 2000). High unemployment rates tend to come with costly social and political consequences. Individuals' reported well-being reacts strongly and negatively to the unemployment rate (Tella, MacCulloch & Oswald, 2001) [1]. In order to fully capture well-being, it is quintessential to study the effect of unemployment on subjective well-being[2], because individuals' well-being is multidimensional, and it encompasses all aspects of human life (Conceição 2008)[3]. Economists and public policy makers must transcend their boundaries of their fields and incorporate methodology and findings from behavioral science and psychology to further explain human behavior. This type of research can provide interesting insights in how we can truly maximize our happiness.

[1] At the macro level, Oswald has shown that inflation and unemployment belong in the social welfare function, and happiness usually falls when unemployment and inflation rises (Di Tella, MacCulloch, and Oswald 2003; Wolfers, 2003).

[2] Since Easterlin's pioneering paper in 1974, there is an outpouring of literature on subjective well-being. Subjective well-being is defined by psychologists as the degree of how one views one's life as a whole, or some particular domain of one's life, as favorable (Powdthavee 2007).

[3] Lykken and Tellegen (1996) have found that 80 percent of the variance of subjective well being is due to inborn temperaments as opposed to temperaments such as socioeconomic status, family income, marital status, or educational attainment. This is reinforced by Argyle, (2001), which conforms to the view that temperaments such as income or health often accounts very little in subjective well being variance.

Several studies in the past have examined the relationship between unemployment and happiness, most notably Winkelmann & Winkelmann (1995, 2012), Clark, Georgellis & Sanfey (2001), and Clark, Diener & Lucas (2008). However, many past empirical studies put little emphasis in the context of 'Hedonic Capital'[4] and merely looked at the contemporaneous correlation between unemployment and subjective well-being. Hedonic Capital is the stock of psychological resources available to an individual. This includes social relationships with partners, friends and colleagues; health; self-esteem; status; meaningful work and religious faith. Hedonic Capital establishes a novel way to study the dynamics of well-being. It is widely believed that people with large social networks and have strong bonds with their peers would face lower volatility of well-being, and that it helps individuals smooth subjective well-being when experiencing a negative shock[5] in life (Graham & Oswald 2010). In this paper, we attempt to improve on the literature by looking at how displacement affects the evolution of subjective well-being using a long panel data from 1984-2008 using individual fixed effects models, and we will primarily look at two aspects of hedonic capital in the form of marriage and having dependent children. We are motivated by the fact that investing in human relationships and social networks typically generates positive well-being. Pinquart & Sorensen (2000) and Sener (2011) find that the quality of the social network is a positive predictor for subjective well-being. While McKee-Ryan, Song & Wanberg (2005) and Lazarus and Folkman (1984) shows that social resources dampens the stress and destructive consequences of negative shocks. Additionally, Winkelmann (2008) found that social capital such as attending cultural and entertainment events; doing sports; visiting friends and relatives; engaging in voluntary work and attending church services have a

[4] "**Hedonic Capital**" is defined as the stock and flow of psychological resources available to an individual. Specifically, stocks are referred to as the networks and social relationships associated with families, friends, partners, colleagues, self-esteem, intrinsic motivation and health (Grossman, 1999).
[5] Oswald and Powdthavee (2008) studied how individuals exhibit hedonic adaption after experiencing disability

positive and significant effect on subjective well-being. Helliwell and Putnam (2005) also find that social capital is strongly correlated with subjective well-being. We believe that individuals with strong social bonds and networks would hedonically adapt[6] more rapidly. We are particularly interested in the way in which subjective well-being reacts at the time of onset if the individual is married and the way which the married individuals' subjective well-being adapts in the subsequent years after the entry of unemployment.

Traditionally, marriage is presumably to provide a lot of pecuniary benefits for spouse such additional income, and possibly lower tax payments (Weiss 1997). While non-pecuniary benefits from marriage may include sense of satisfaction, emotion, and physiological support, health and perhaps better quality of life. Spousal support could be essential for an individual, as it can serve as a buffer or smoothing mechanism of subjective well-being of the opposing spouse after experiencing an unemployment shock. In Lucas, Clark, Georgellis, and Diener (2003), find that there is a quantitative large, positive and long lasting raise in happiness at the year of marriage that lasts for many years after. Clark and Oswald (1994) finds that married individuals show lower degree of mental distress. It would be intriguing to see whether married individuals' happiness would hedonically return to its initial level prior to experiencing an unemployment shock quicker than the non-married. Additionally, we are motivated to study whether the unemployment shock would affect the stability of marriage. We want to know how do wives feel when their husbands become unemployed and vice versa; does the event of unemployment lead to lower levels of spousal happiness and in turn raises the hazard for divorce? Becker et al. (1997) proposed a model that served as the foundation of all work those studies the issues and problems

[6] "**Hedonic Adaptation**" or "**Hedonic Treadmill**" describes a process that individual's well-being will revert and adapt back to baseline level after experiencing positive or negative exogenous life shock (Brickman and Campbell, 1971).

surrounding unstable marriages. Weiss and Willis (1997) studied how unanticipated changes to income and earnings would affect marital stability.

On the other hand, there is a widespread belief that children tend to bring happiness in life. Some studies have concentrated on exploring happiness and its relations with children in Europe and America. Papers released by Di Tella, MacCulloch, Powdthavee (2008), Twenge, Campbell, and Foster (2003) provides evidence that parents often report statistically significant lower level of happiness, satisfaction to marriage and mental well-being than non-parents. These evidences suggest that having children do not necessarily equate to higher level of happiness. For parents who have children reaching adult age, Glenn and McLanahan (1982) found that these parents have similar or slightly less life satisfaction than non-parents with similar socio-economic background and age groups. Although findings from econometric analysis find that parents tend to report lower levels of life satisfaction compared to non-parents, "children brings happiness" remains a universally accepted notion[7], despite that numerous studies have found that at the year of birth, parents report a spike in happiness, subsequent years following the birth of child brings parents 'misery' and significant unhappiness (Clark, Diener, Georgellis, & Lucas 2008)[8]. Findings from all studies conform to the view that money, health and family are necessary to sustain good life (Easterlin, 1974, and Powdthavee, 2009).

This paper has four aims. The first aim is to assess the effect of individuals' subjective well-being before, during and after the onset of unemployment using the most recent data of the German

[7] Daniel Gilbert (2006) used "super replicator" to describe a phenomenon whereby the anecdote evidence of 'children promotes happiness' has been passed onto future generations effortlessly and effectively.

[8] Similar happiness trajectories for positive shocks has been observed in many studies including *Kahneman, Krueger, Schkade, Schwarz, & Stone (2004)*, where individuals experience a spike in happiness for winning the national lottery, but reverts back to baseline happiness in the subsequent years. And how people revert back to initial level of happiness after "**Honeymoon Period**" *(Lucas, Clark, Georgellis, and Diener 2003, Zimmermann & Easterlin 2006)*

Socioeconomic Panel Survey (GSOEP)[9]. The second is to show the importance of hedonic capital in the form of marriage on the subjective well-being of an individual facing the daunting consequences of job loss. The third is to assess how unemployment affects spousal happiness. The last is to show that dependent children can promote and demote happiness, and how do parents happiness compare to those without children.

After studying the relationship between unemployment and subjective well-being with more recent data from Germany, we find that without the presence of Hedonic Capital, subjective well-being indeed reacts negatively, and strongly to exogenous causes of unemployment at the time of shock. Men are hurt almost twice as much as women. However, both men and women show robust and remarkable rates of hedonic adaptation, and that on average by the second year for men and first year for women, their life satisfaction exhibit complete adaptation[10]. Additionally, we find that marriage lowers the volatility of happiness for female more than male, and that women are more adversely affected by their spouses' labor market status than men. Men show great strong signs of unhappiness when their spouse is working when they are unemployed. This phenomenon begs the immediate question of how this shift in bargaining power would affect marital stability.

The rest of this paper will be organized as follows: The next section will provide comprehensive but by no means exhaustive literature review of the literature of economics of happiness, and unemployment. The third section will provide an overview of the dataset and a discussion of its limitations; and the fourth section will present the methodology for estimating changes in life

[9] Many existing empirical studies have dealt with unemployment and happiness, but little has been done with the dynamics of life satisfaction that spans from four years before and after the onset of unemployment.

[10] This contrasts with findings from Clark and Oswald (1994), where they only find partial adaptation of the long-term unemployed.

satisfaction from an unemployment shock. The fifth section will provide results and the last section will conclude this paper and discusses areas that require further research. An appendix is attached at the back to show various tables and graphs.

2. PREVIOUS LITERATURE

Our study focuses on the importance of Hedonic Capital[11] on individuals' subjective well-being[12] when facing an exogenous unemployment shock. Using the most recent data from 1984 to 2008 of the GSOEP after literature review document the changes in estimates over different periods of time. The relationship between unemployment and subjective well-being has been in the spotlight for economists in recent years. A general consensus of the literature is that unemployment has a traumatic effect on subjective well-being. Among the first to present evidence that unemployment hurts individuals' psychology goes back to as early as Dollard et al. (1939), which proposed a theory that helps explain unemployed individuals' reaction to the Great Depression in 1929[13]. He proposed that during times of severe economic deprivation, frustration derived from unemployment would lead to aggression, implying that individuals who become unemployed could be emotionally depressed or psychologically distressed (Catalano et al, 1993, Eisenberg and Lazarsfeld, 1938). Unemployment could even cause the death rate of the unemployed to rise by an average of 40-50% (Iverson et al., 1987). Additionally, according to Erikson (1959), the father of life-span developmental theory proposed that in order to have a healthy development of self-esteem and identity in society requires the successful completion of eight stages. The adolescent stage (fifth stage) is most adversely affected by unemployment, and

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[11] *Graham & Oswald (2010)* formally established the concept of Hedonic Capital by building a simple endogenous model similar to the Solow Growth Model. Where individuals have a stock of psychological coping resources that gets depleted after a negative shock, and the individual would invest and substitute towards activities that would rebuild the depleted hedonic capital.

[12] In this paper, subjective well-being; life satisfaction and happiness are used interchangeably.

[13] "First there is shock, which is followed by an active hunt for a job, during which the individual is still optimistic and unresigned; he still maintains an unbroken attitude. Second, when all efforts fail, the individual becomes pessimistic, anxious, and suffers active distress; this is the most crucial stage of all. And third, the individual becomes fatalistic and adapts himself to his new state but with a narrower scope. He now has a broken attitude."
Eisenberg and Lazarsfeld (1938) published a review article summarizing much of the pre-World War II literature on the psychological effects of unemployment. They concluded that the psychological response to unemployment can be described in terms of the above discrete stages p.378

its personal identity in society. And those individuals in the middle ages must fulfill tasks that involve career, family and society obligations to maintain their sense of worthiness in society and self-esteem.

Ontake (2012) provides a comprehensive recap of the unemployment and subjective well-being literature[14] and Feather (1990) provides a good review from the psychology literature. Other more recent work that studies unemployment and subjective well-being includes Argyle (2001) using cross sectional data, Di Tella et al (2003) using the Eurobarometer; Winkelmann & Winkelmann (1995,2012), Clark (2001), Clark, Georgellis & Sanfey (2001), Haile (2004), Lucas, Clark, Georgellis & Diener (2004), and Clark, Diener & Lucas (2008) using the GSOEP; Clark and Oswald (1994), Anderson (2009), and Powdthavee (2012) using the British Household Panel Survey (BHPS); Heading and Wearing (1989) using Australian Panel study to look at life events on SWB; Björklund and Eriksson (1998) using Swedish data; Namazie & Sanfey (2001) using 1993 household survey data for transition economy, Kyrgyzstan; Hayo (2007) using data for Eastern Europe[15].

Unemployment not only makes a person becomes jobless, it imposes numerous profound non-pecuniary costs that could deprive an individual's personal and social life, identity in society, self-esteem, and cause distress, anxiety and depression; all these factors would evidently lead to lower levels of subjective well-being. Anderson (2009) finds that farmers, small proprietors, technicians, supervisors have the greatest average decline in happiness out of all the social classes when

[14] For a more thorough summary of the literature in subjective well being, please refer to Frey (2002) or Powdthavee (2007), and Darity (1996) provides a good discussion of the literature.
[15] Graham & Pettinato (2002) and Ravallion & Lokshin (2002) examined unemployment and life satisfaction using Russian Data.

entering unemployment. Winkelmann & Winkelmann (1995) explores the effect of unemployment on happiness by distinguishing pecuniary costs and non-pecuniary costs, and by gender. They formulated a pooled regression of an Ordered Probit specification and a fixed effects panel model. The paper finds that average happiness of individuals who are out of labor force exhibit diminishing happiness. And that men are more affected by labor market events, and unemployment hurts men more than female.

In their more recent paper Winkelmann & Winkelmann (2012), the authors examined whether unemployed individuals are inherently dissatisfied; distinguished the effects of exogenous and endogenous changes in unemployment, and the effect of unemployment by different age groups. They utilized 5 variations of Logit regression for a binary satisfaction dependent variable and excluded women from the analysis. They find that both older and involuntarily unemployed experience substantial and significant reductions in satisfaction. A discernible flaw of the Winkelmann & Winkelmann papers is that like many other papers that studies unemployment and happiness (Clark, Georgellis & Sanfey (2001), Clark & Oswald (1994), Lucas, Clark Georgellis, Diener (2004),) fails to explore the dynamics and the evolution of subjective well-being in the event before and after unemployment. They merely looked at the contemporaneous correlation between unemployment and subjective well-being.

Clark, Georgellis & Sanfey (2001) reinforces the adverse effect of unemployment have on subjective well-being using the GSOEP by finding that life satisfaction is not only lower for individuals who are currently unemployed relative to the employed, but also for those with more past unemployment, implying as the frequency of unemployment rises, subjective well-being of an individual would be dragged into a downward spiral. Clark and Oswald (1994) using BHPS

and ordered probit regression found that distress from unemployment decreases as the duration of displacement rises, and that young individuals show less signs of distress. Clark et al. (2001) also presents evidence that the longer we are unemployed, the less it hurts. While as the duration of the unemployment spell rises, the average hazard rate of exit increases after accounting unobserved heterogeneity (Haile, 2004). Lucas, Clark, Georgellis & Diener (2004) finds conclusive evidence that adaptation process of the displaced is generally incomplete, that is, subjective well-being does not return to the initial level prior to the individual when he or she is employed. Incomplete adaptation is also found in other negative life events such as experiencing disability. Oswald and Powdthavee (2006) argue that disabled go on to exhibit recovery in subjective well-being, but the adaptation for the severely disabled is generally incomplete. Clark, Diener & Lucas (2008) examined whether individuals return to baseline level of subjective well-being after six major life and labor market events: unemployment, marriage, divorce, widowhood, birth of child and layoff. They find complete adaptation in five of the six events examined except of unemployment. This study contrasts with findings from Lucas (2005), where widowhood exhibit incomplete adaptation. In a more recent recent study, Powdthavee (2012)[16] examined different areas of an individual's life before and after entering unemployment using British Household Panel Survey. He finds that there is little evidence that people would eventually return to the initial level of satisfaction with he or she's finance after they experienced unemployment. Other similar findings of Britain and Germany, Björklund and Eriksson (1998) provides a description in previous studies in nordic countries (Sweden, Denmark, Finland, and Norway) on the effect of unemployment on mental well being using cross sectional and longitudinal data. Their findings reveal a common result of deteriorating mental well-being

[16] Their dependent variable variable is not the traditional life satisfaction question but rather "How dissatisfied or satisfied are you with your... (a) health; (b) finance; (c) house; (d) partner; (e) job; (f) social life; (g) amount of leisure time; (h) use of leisure time?".

among unemployed individuals, but the mental well-being of the long term unemployed are much less understood.

3. DATA

We use the 1984 to 2008 panels of the German Socio-Economic Panel (GSOEP) [17]. The GSOEP is a representative longitudinal survey of approximately 11,000 private households in the Federal Republic of Germany from 1984 to 2011, and Eastern German from 1990 to 2011. Since 1988, all individual and their demographic characteristics such as age, occupation, marital status, individual labor earnings and family income are gathered during the first interview of every new survey participant. One salient advantage of the GSOEP is that it is a survey with multiple-item questions regarding how an individual views his or her state of well-being. These questions are usually more complex, detailed and all around as compared to single-item questions. For example, questions that appear in a multiple-item survey are: "Been feeling unhappy or depressed? Been feeling reasonably happy, all things considered?" On the other hand, single-item scales like the World Values Survey (WVS) or the General Social Survey (GSS) are prone to greater random measurement errors. This is because although single item surveys have the advantage of being simple, yet respondents have greater probability of misinterpreting the question, or the question itself is biased. The results may suffer from questions being excessively brief and simple, making respondents difficult to answer them accurately. Therefore, single-item scales are considered less reliable and possibly invalid. Another advantage[18] of the GSOEP is that since it is panel data, we can analyze the changes in subjective well-being of the

[1] For more information about the GSOEP, please visit http://www.diw.de/soep

[18] Another apparent advantage of long panel data is that we are comparing an individuals' reaction before and after an event, instead of comparing the reaction between two individuals.

same individual, effectively removing the potential problem of inverse causation such as individuals becoming unemployed because they have poor health, depression or divorced (Ontake, 2012, Clark & Oswald, 1994). In other words, the GSOEP provides higher levels of confidence and more valid statistical inferences. While it is also less likely to suffer from cross sectional bias arisen from unobserved personal variables correlating with observable variables.

Our sample is limited to individuals between ages 25 to 64[19]. Since the focus of our analysis is on couples [20], couples are formed by merging the individual datasets according to their partners' identification number at a given year, only couples with no missing information regarding partner identification number would be included in the analysis. To ensure that voluntary jobless spells of students and early retirees would not affect the coefficients. The sample would only consist of Germans, since immigrants with different ethnicity, cultural background, may react differently to unemployment. Additionally, we will merely look at the first observable unemployment spell of the displaced after a minimum of four years of employment prior to onset. The unemployment spell must be exogenous in nature, that is, the individual is unemployed not because they quit the job voluntarily, but displacement is either caused by dismissal or business closed down. That way, we can effectively remove unemployment due to endogenous reasons, and that we can solve the identification problem by establishing the intended causality between unemployment and happiness, which is unhappiness is caused by negative shock of unemployment instead of innately unhappy individuals are more likely to be unemployed. Lastly, we require individuals to be present at least for 3 consecutive years in the survey. We are left with 5069 unique individuals and 215,713 person-year observations, where

[19] It is common for the literature to limit the analysis to age 25-64, as seen in Winkelmann & Winkelmann (1995), where they also limited their sample to this age restriction.
[20] The husband of the couple is defined by male and head of the family, and the wife is defined by being female and partner to the head of a given family.

12,905 person-year observations have experienced displacement and 202,808 individuals are never displaced.

Like other datasets, the GSOEP has its own shortfalls and it is not immune to all econometric problems. Most obviously, the data is only limited to Germans, and we cannot be absolutely certain that the behavior and the experience observed of the displaced Germans would be representative and could genuinely reflect the displaced behavior of individuals with different ethnic and cultural background. Another disadvantage of the GSOEP is that our dependent variable of interest namely 'Overall Life Satisfaction' is only available annually. That is, the displaced are interviewed once every year, and there is a time lag between the month of the interview and the month that the individual is displaced, in other words, their surveyed response of their subjective well-being could be overly generalized. For example, an individual who is interviewed in March could become unemployed in May, and it won't be until February in the subsequent year to be interviewed. Another possible shortcoming with subjective well-being research is that people who are innately happier may provide more favorable assessment of their state of well-being, which could potentially cause an upward biased estimation[21]. Other potential bias may come from non-sampling error, arisen from an individual's desire not to reveal their true well-being. For instance, they may overstate their happiness, and their degree of optimism may depend on their cultural background and age. Lastly, another possible cause of simultaneity is that happier people may have more incentive and higher inclination to work harder, simply because they intrinsically enjoy what they do, and their desire to produce high quality work may in turn reduce their chances of being laid off. While less happy people would just exhibit opposite results or inclination.

[21] Powthavee (2007) provides a comprehensive review of subjective well-being research and the disadvantages of various cross sectional and longitudinal datasets.

Moreover, it is sometimes difficult to retain the individual and original household in the panel for as long as we desire. Therefore, the GSOEP may suffer from the problem of sample attrition, in which survey respondents ceased to continue to participate in the survey. We will then immediately face the problem of an unbalanced panel, as well as the remaining households becoming unrepresentative of the sample population.

4. METHODOLOGY

$$LS_{it} = LS\left(\sum_{s}^{S} D_{it+s}, \sum_{v}^{V} D_{it+v}, \sum_{z}^{Z} D_{it+z}, \dots\right) \qquad (1)$$

We assume that life satisfaction of individual *i* at time *t* is a function of past, present and future employment status[22]. *s* represents years that individuals are employed, *v* represents years the individual enters unemployment and remain unemployed, and *z* represents years after the individual regain employment.

To understand the consequences of an exogenous unemployment shock on individuals' happiness, we will use the individual fixed effect estimator to investigate how happiness changes four years before and after an unemployment spell. The fixed effect model is preferred over the random effect model due to the potential problem of reverse causality, and fixed effect would help establish a stronger causation under weaker assumptions. By using the individual fixed effect model, we can fix the time invariant unobserved heterogeneity. This will solve any potential omitted variable bias and provides a consistent estimate of the coefficient. Additionally,

[22] Powthavee (2012) and Frijters et al. (2008) used a similar framework

the model assumes that the error term is uncorrelated with the observable regressors, and unobserved individual specific effect is allowed to correlate with the regressors.

$$LS_{it} = \alpha_i + X_{it}\beta + \sum_{k=1}^{K}\xi_p Region_p + \sum_{j=1}^{T}\gamma_j year_j + \sum_{q\geq -m}^{Q_k}\delta_q D_{it}^{q} + \epsilon_{it} \quad (2)$$

The dependent variable of this model is life satisfaction, LS_{it}, individual i's life satisfaction in year t. It is measured on a scale from 0 to 10, where '0' denotes '*completely dissatisfied*' and '10' denotes '*completely satisfied*'. The main coefficient of interest is δ_q, where it shows the effect of displacement on life satisfaction for an individual in q^{th} year from displacement, where q goes from -4,...,0,...,4. This means that q is permitted to take on negative values to represent years before the onset of unemployment, and positive values to represent years subsequently after the onset of unemployment. The dummies jointly represent the event of unemployment $D_{it}^{q} = -m, -(m-1), \ldots, 0, 1, 2, \ldots,$. The intercept α_i is the individual fixed effect; X_{it} are observed time-varying confounders which controls for personal and household characteristics. In this parsimonious model, we will include age, and its second order polynomial, commonly used in the literature. It has the conventional U-shape that minimizes when the individuals are in their late 30's (Oswald & Powdthavee 2007). Other regressors include log of family income, and years of education. The $year_j$ terms captures macro-level year specific effects. The $Region_p$ captures the regional differences, and lastly the standard errors for the estimated coefficient is adjusted using Huber-White standard error[23] or Robust Standard Errors to account for heteroskedasticity and correct for serial correlation.

[23] In Stata, Robust Standard Errors are obtained through the command option, **vce(robust).**

5. RESULTS

5.1 Summary Statistics

As shown in Table 1, the unemployed has the lowest average life satisfaction out of all the labor force groups. Unemployed individuals in the age 30-49 group are the unhappiest across all age and labor force groups. While individuals below 30 who are employed appear to be the happiest. Employed individuals appear on average happier than unemployed individuals.

Older individuals with age greater than 50 who are out of the labor force appears to be relatively less happy than other age groups who are out of the labor force. Summary statistics for never displaced and displaced individuals are presented on Table 2. As shown, individuals' age for never displaced is less than displaced; implying older individuals are more likely to be unemployed. Individuals who are never displaced have on average higher education attainment and average income than the displaced. While males' age for displaced is on average greater than the non-displaced, females' age for the non-displaced is on average greater than the displaced. The displaced male appears to have relatively more children than the non-displaced. Table 3 shows unemployment duration by gender. As seen, in all age groups, female workers have longer unemployment duration than their male counterpart. Individuals' age above 50 have the longest average duration of 9 months and 10 months for male and female respectively.

Older workers face a tougher time finding a new occupation, as they are older, perhaps because older workers have invested more heavily on firm-specific skills over time, therefore, when they are laid off by their companies, it becomes more challenging for them to find a job at a different company or industry. According to Frerichs & Naegele (1997), the employment prospect of older workers in Germany is stickier primarily due to age discrimination. They classify age 45 and

above as 'older workers', and they find that once workers reach 45, at that point it becomes extraordinarily hard for them to seek reemployment, and the duration of unemployment rises.

Direct age discrimination such as early retirement is prevalent in Germany, in 1992, work agreements were made to protect workers from automatic termination for female workers at 60, and male workers at 65. But in 1994, this law was abolished because employers thought this practice intervenes with the autonomy of their organization[24].

5.2 Life Satisfaction Changes by Gender

The preliminary results from equation (2) are presented on Table 4 and Table 5 for the effects of unemployment on the dynamics of life satisfaction of male and female respectively. Both tables begin with column 1 to 3 reporting reduced forms of the individual fixed effect equation for the purpose of robustness check. Column 1 merely looks at the detrimental effect of unemployment on life satisfaction with the lead and lag variables of unemployment, excluding time-varying controls[25], year dummies, and regional dummies. Column 4 is the full fledge version of equation (2). At the bottom of each column, the average post shock effects shows the permanent reduction of life satisfaction after the negative shock of unemployment. The independent variables of interest jointly represents the event of unemployment, where each coefficient reports the average negative impact of displacement on life satisfaction regardless of the duration of unemployment and when the individual becomes employed again after the year of shock.

As seen on column (4) of Table 4 and 5, life satisfaction begins dropping one year prior to the unemployment shock and drop more dramatically at the time of shock and hedonic adaptation is

[24] For more information about age discrimination in Germany, you can refer to: http://www.agediscrimination.info/international/Pages/Germany.aspx

[25] Time varying controls in this parsimonious model is limited to age, age squared, log of family income, and ten to thirteen years of education.

observed in the following years. The drop of life satisfaction at the time of shock for male is almost twice as much compared to female, -0.91 points compared to -0.53 indicating job losses on average hurt men more than women[26]. In other words, male workers life satisfaction is half a standard deviation below the mean life satisfaction of employed workers. Despite that the unemployment shock is exogenous by nature, life satisfaction begins to drop one year proceeding the negative shock. One possible explanation of the downward trend seen prior to unemployment shock at time T-1 could be explained by the time discrepancy between the time of unemployment shock and the time of the survey. For example, the individual could be unemployed at T-1, but reported back to the survey at time T or even T+1. In other words, it isn't until T that the change in subjective well-being is realized. Another possible explanation is that individuals might have received information or news regarding a future job loss, and this revised expectation would almost certainly lead to distress and lower life satisfaction. In Melvin (2001), he discussed that firms might freeze or cut wages of their workers prior to the permanent shock, and this reduced earnings could also translate into lower life satisfaction before the actual shock. Our results from one year prior to shock up to four years after displacement are remarkably robust, and are statistically significant even at the .1% level for both male and female. We can see that by T+1, men have hedonically adapted approximately 60% to its baseline and by T+3, the adaptation is complete[27]. While women also show remarkable adaptation, one year after job loss, they exhibited complete adaptation. Figure 1 shows the results of column (4) of Table 4 and Table 5 [28].

[26] This is consistent to findings of Winkelmann & Winkelmann (1995), where the average impact of unemployment on life satisfaction is greater for men than women.

[27] Contrary to previous findings (Clark et al., 2008; Lucas et al., 2004) that peoples' happiness only exhibit partial adaptation due to unemployment

[28] It is a convention in the literature that life satisfaction's natural starting point is nonzero.

5.3 Life Satisfaction Changes by Age Groups

As an auxiliary analysis, we also looked at how job loss affects individuals from different age groups. Table 6 and 7 presents the dynamics of the life satisfaction of age groups by male and female workers respectively. We define "Junior" workers as individuals with age 25-35; "Middle" aged workers with age 36-50; and "Senior" workers with age 51-64. For male workers, we find that junior workers are most adversely affected by unemployment at onset with a -1.08 point drop, followed by middle aged workers -0.85 and senior workers almost 30 percent less than with junior workers with a coefficient of -0.76. The average post shock effect is also greatest for the junior male workers, with an average post shock of -0.43. While Junior workers have one of the greatest drop in life satisfaction [29], one year after the shock, their life satisfaction has partially adapted close to 80% of their baseline, and by T+2, they have experienced complete adaptation, more clearly depicted on Figure 2. Senior workers also exhibit similar patterns and experiences rapid adaptation and by T+4, they have completely rebounded to their initial level of life satisfaction. On the other hand, middle aged group workers show much slower rate of hedonic adaptation, and that even four years after the onset of job loss, they only exhibit partial adaptation. In other words, they are 50 percent permanently less happy than they were before the negative shock. This is in line with the age discrimination trend in Germany; workers are widely endangered and getting re-employed rises extraordinarily by age 45.

Unlike male age groups, Middle aged female workers are most severely impacted by unemployment with average post shock effect of -0.28. Although we can tell right away that the magnitude of unhappiness caused by labor market fluctuations is much less severe than males. Additionally, unlike young male workers who suffer the greatest average post shock effect out of

[29] Vahatalo (1982) studied the negative effects of unemployment of young workers. They find that during the unemployment spell, young workers show signs of lower morale, increased feeling of isolation and become increasingly passive in job hunting.

all age groups, young female workers have the least negative impact in life satisfaction in the subsequent years after unemployment spell. On figure 3, we can observe that young female workers show astonishing rates of adaptation to baseline. It is interesting to note that middle aged female workers also doesn't fully completely adapt, but three years after onset, their happiness are close to complete adaptation. Additionally, senior female workers spend much longer time in the trough, one year after the shock; their average happiness drop is still close to the level when they experience job loss. Perhaps this reflects the tough labor market prospect of reemployment. When they are laid off from the company at an older age, it becomes very difficult to find a new job. Older female workers could've invested more heavily in firm specific skills, or with more experience accumulated throughout their career, they have become more expensive labor that companies are more reluctant to hire.

5.4 Marriage as Smoothing Mechanism

To understand whether marriage would smooth the happiness of the unemployed, we will first simply compare individuals who are married and non-married at the unemployment onset. The non-married includes individuals who are single, separated, divorced, and widowed. The pooled sample results for both men and women are presented on Table 8. We will quickly notice that during time of shock, married have a smaller dip in life satisfaction with an average drop of -0.6 points while the non-married decline by -0.8, indicating marriage indeed can reduce the volatility of life satisfaction. The average post shock effects for the married is -0.28 while the non-married suffers from a greater average decline of -0.33. Figure 4 shows the econometric analysis results from Table 8, and we can clearly see one year prior to the shock and three years after the shock, married individuals have permanently higher levels of subjective well-being than the non-married on average. Despite that married individuals have higher levels of life satisfaction before and after

unemployment onset, it is not immediately obvious whether the married hedonically adapt more rapidly than the non-married. There is a need to further split the married by gender.

Column (1) and (2) of Table 9 shows the effect of married and non-married male workers and column (3) and (4) separates female marital status groups. It is clear that the effect of unemployment is more severe for male than female on average regardless of marital status. Both the non-married male and female has greater magnitudes of decline in happiness compared to the married individuals. However, it is apparent that marriage doesn't benefit male workers as much as female workers. The difference in decline of happiness between the married and non-married men is almost infinitesimal, while married female appears to be the most benefited group out of all the groups which is clearly depicted on Figure 5, married females' fall in happiness is much less violent comparing to the comparison groups. This implies that marriage is a more important Hedonic Capital for female.

5.5 Spousal Happiness

An interesting question to explore is how does unemployment affects immediate family members. In other words, how do wives feel when their husbands experiences job loss. Column (1) of Table 10 depicts this situation whereby wives show a steep decline in happiness of -0.40 at the year of onset when their husbands becomes unemployed. The magnitude of decline is similar to the decline of happiness when they are unemployed themselves[30]. In Björklund and Eriksson (1998), they find that unemployment does not merely reduce the mental health of the unemployed; it also imposes a negative externality on their immediate family members. This negative sentiment is also found in husband's happiness when their wives get laid off. As shown

[30] In Gruber (1997) find that shocks to spousal earnings tend to have a negative impact on family consumption.

on Figure 6, the drop in husbands' in happiness is very small comparatively. The average post shock effect of husband's happiness as a result of their wives' unemployment is only about -0.6, as opposed to -0.25 seen for wives when their husbands become jobless. This implies that husbands could be less concerned about their wives labor market status and their wives unemployment doesn't appear to threaten the stability of their family. Another possible implication is that men who are primary earners in this analysis dominates men who are secondary earners, therefore their wives unemployment doesn't critically impact their families' income and consumption.

5.6 Working and Non-Working Couples

To fully grasp the idea of how Hedonic capital in the form of marriage could dampen or worsen the happiness of the unemployed, we examined the evolution of Husbands' happiness when they have a working and non-working wife at onset. Column (1) of Table 11 displays the effect of when both the husband and wife are unemployed, and at the year of shock, husband's happiness drop by -0.48 and an average post shock effect of -0.28. However, column (2) shows a counterintuitive result of one would not so clearly expect, If the husbands get displaced at time T and their wives are still working, their level of happiness drops on average by -1.01 points, and their average post shock effect is far greater in magnitude by -0.41. Our confidence in these results is enhanced by the fact that the coefficients for all subsequent fours years including the year of shock are robust and statistically significant. This result provides evidence that happiness is a separate function to utility. In standard utilitarian theory, having a working spouse would smooth utility of the unemployed, since the spouse would bring in a second income that would serve as a buffer that would effectively offset the drop in utility of the unemployed as a result of lowered earnings and consumption. This result provides evidence that although the extra income could smooth consumption and utility, it actually worsens the unhappiness derived from

unemployment perhaps because men's position in the family as a breadwinner is being challenged, or there is societal and peer pressure on men who stays home for housework. However, there are some potential caveats to our result. For example, husbands could perceive their unemployment a few years before the actual happening, and the unfavorable stories about the company and the bleak outlook of employment may prompt the wives to find a job, and by the time of shock, the wife would be working causing an upward bias to the estimate. Figure 7 shows the results of Table 11, and we can see that husbands' happiness drop steeply one year prior to shock. One potential explanation is that the wife is unemployed even before husband's unemployment spell coupled with the expectation of future unemployment; the bleak outlook of the household would certainly take off some life satisfaction.

Wives happiness when they have a non-working husbands during the unemployment spell have a more intuitive and expected response. We find that wives' happiness falls steeply when both husband and wife are displaced, and the average post shock effect is as high as -0.45 as shown on Table 12. On the contrary, when wives have working husbands, their average decline in happiness is only about -0.16. On Figure 8, we see that in the presence of a working husband, wives life satisfaction one year before up until four years after shock are on average higher than having a non-working husband. This reinforces previous results that marriage is an important Hedonic Capital to female, and has a far-reaching effect on their long run subjective well-being.

5.7 Parents and Non-Parents

To explore how other immediate family members affect the subjective well-being of the unemployed, it is crucial to explore how children would affect the life satisfaction of their parents.

Many studies on children find that parents tend to show lower levels of life satisfaction in the subsequent years after the birth of child. However, when an individual loses his or her job, having children at the time of unemployment spell indicates that they have average decline of -0.60, which is -.12 points lower than non-parents. Additionally, we observe unemployed parents have higher overall life satisfaction than unemployed non-parents. The results are incredibly robust one year prior to shock up until four years after the shock as shown on Figure 9. We can also observe that parents have permanently higher average levels of life satisfaction path from T-1 to T+4 than non-parents; and the rate at which hedonic adaptation takes place between T and T+1 appears to be more rapid than non-parents. One possible explanation why children is an important hedonic capital is that positive externalities of well being could be derived from children, and parents could ripe a lot of these intangible and unquantifiable benefits from children.

5.8 Parents by Gender Subgroups

To understand how children affect different displaced subgroups, we divide them according to gender, and each gender group will have their reference groups, which are individuals without children. Figure 10 and Table 14 shows the sensitivity of life satisfaction to unemployment of parents and non-parents by gender. Comparing column (1) and (2), at the year of shock male workers with children and without children have very similar and almost indiscernible difference in decline of happiness, and men with children appears to have slightly greater average post shock effect of -0.41 compared to -0.37. On the other hand, female parents show smaller decline in life satisfaction with an average of -0.44 point reduction, while non-parent females have an average -.59 point drop at the time of onset. Additionally, the rate at which female parents

hedonically adapt to baseline is twice as rapidly as non-parents. One year after the negative shock, female parents exhibit complete adaptation to baseline at a more rapid rate, whereas it takes non-parent female workers two years to return to baseline. This provides further evidence that female is a greater beneficiary of Hedonic Capital and that it could overshadow the unhappiness caused by job loss.

5.9 Parents with Different Ages of Children

Having younger or older children tends to make a difference in happiness of unemployed workers. Older children are generally more mature and have the ability to work and have a job that could contribute to the family's income. On the other hand, having dependent children might impose a greater burden for the unemployed. Table 15 and Figure 11 shows the trajectory of life satisfaction of individuals having different ages of dependent children and adult aged children. Young children in this parsimonious model is defined as from age 0 -14, adolescent children are aged 15-18, and adult aged children are 19 and above. We find that having adolescent children have the least drop in happiness at the year of shock with an average of happiness of -0.39, and an average post shock effect of -.014. While having young children have a slightly more severe drop in happiness -0.47. However, individuals without children still comparatively drop more in life satisfaction points. One potential bias of our estimates is that family with dependent children would receive more unemployment insurance [31].

[31] The Unemployment Insurance in Germany for Unemployed with dependent children works with the following scheme: DM 840 annually for the first child; DM 1560 annually for the second child; DM 2640 annually for the third child; DM 2880 annually for the fourth and subsequent child; and non-taxpayers receive an additional DM 780 per child. For more information, visit www.oecd.org/els/soc/29730499.PDF

5.10 Number of Children

Our final analysis is conducted to examine how life satisfaction of parents change with the number of children they have during the unemployment spell. Table 16 and Table 17 documents the changes in life satisfaction of parents with one child, two children and three or more children for male and female parents respectively. As seen on Column (1) of both tables, parents with one child have the least decline in life satisfaction and this decline rises with the number of children. At the year of shock, men with a child declines by -0.79 points, with two children drops by -0.91 and by -0.99 for three children. While female with a child drops by -0.44 for both one and two children, and by -0.37 for three children. This result may seem counterintuitive at first, but this could be the result of unemployment insurance. Figures 12 as well as Figure 13 depict the results of Table 16 and 17 respectively. Following the trajectory of male with one child on Figure 12, we can see that despite the decline at onset is the least severe, their rate of hedonic adaptation is slow, one year after the onset of unemployment, parents happiness only adapted 20% from its baseline happiness, and this slow adaption is also seen for parents with two children and three or more children. Referring back to Table 16, we see that non-parents hedonically adapt more rapidly and two years after unemployment, their life satisfaction exhibits complete adaptation. This result provides evidence that the least children an unemployed has, the less unhappy or burdened they feel, despite that unemployment insurance is provided as the number of children rises. Additionally, this conforms with previous literature findings that having children lowers the subjective well-being of the parents, and this result adds to the literature by providing some evidence that as the number of children rises, the more depressed the unemployed feels. One potential drawback of this analysis is that it doesn't control for the age of the children as well as whether they are currently employed.

6. CONCLUSION

This paper documents how an exogenous shock of unemployment affects an individual's subjective well-being with and without the presence of Hedonic Capital. Regardless of the presence of Hedonic Capital, unemployment appears to hurt men more than women. The event of unemployment not only affects individuals who loses they jobs, it indirectly affects their spouses' subjective well-being. The subjective well-being of married men and men with children appears to be more severely impacted by displacement than married women and women with children. Marriage is clearly demonstrated as an important insurance and Hedonic Capital for females' long term subjective well-being, and to male for an extent. Wives with working husbands clearly show relatively higher life satisfaction levels than having non-working husbands, and that rather counter intuitively, men with working wives appears to be more unhappy than having non-working wives. Further analysis is required to examine whether the unhappiness of men with working wives would lead to a shift in husbands bargaining power in the family and leads to marital stability and increases the attractiveness of outside options, and in turn raises the divorce hazard[32]. Additionally, more analysis needs to be done on when the unemployed regains unemployment, and how would these unemployed subgroups behavior and attitude changes with the duration of the unemployment spell. It would also be intriguing to explore how having pre-existing debt would affect the subjective well-being of individuals who experiences unemployment, and whether this negative event would hinder their long term subjective well-being.

[32] Jensen & Smith (1990), shows that job loss is particularly harmful to men, and that it is an influential factor behind marital dissolution.

APPENDIX: TABLES

TABLE 1: AVERAGE LIFE SATISFACTION IN GERMANY FROM 1984-2008		
	N	**Average Life Satisfaction**
Age Less than 30		
Unemployed	1,335	5.84
Employed (Full-Time)	17,742	7.30
Part-Time	2,861	7.10
Self-Employed	1,640	7.29
Out of Labor Force	2,999	7.19
Age between 30 to 49		
Unemployed	5,782	5.39
Employed (Full-Time)	86,892	7.08
Part-Time	20,200	7.11
Self-Employed	11,123	7.08
Out of Labor Force	2,999	6.97
Age 50 and over		
Unemployed	4,850	5.91
Employed (Full-Time)	37,215	7.13
Part-Time	8,668	7.12
Self-Employed	6,313	7.16
Out of Labor Force	23,085	6.89

TABLE 2: SUMMARY STATISTICS FROM 1984-2008				
	Never Displaced		**Displaced**	
	Mean	**Std.**	**Mean**	**Std.**
Individual's Age	43.92	11.09	45.11	11.10
Individual's Education	12.19	2.62	11.28	2.03
Individual HH's Average Income	37673.8	25938.9	23731.65	16705.44
N	202808		12905	
Husband's Age (Head of Family)	45.31	10.78	46.73	11.20
Husband's Education	12.39	2.73	11.16	2.11
Number of Children:	1.70	0.82	1.75	1.00
N	66229		3319	
Wife's Age	43.40	11.05	43.79	11.30
Wife's Education	11.85	2.50	11.27	2.06
Number of Children	1.69	0.81	1.69	0.85
N	74284		3043	

TABLE 3: UNEMPLOYMENT DURATION BY GENDER						
	MALE			FEMALE		
	Mean	**Std.**	**N**	**Mean**	**Std.**	**N**
Age < 30	7.57	4.07	481	7.81	3.93	421
Age 30 - 49	8.34	4.08	1060	8.98	3.72	1147
Age > 50	9.75	3.48	1064	10.33	3.15	934

Note: Unemployment duration is in months, and only the first spell of the displaced is accounted for.

TABLE 4: THE EFFECT OF UNEMPLOYMENT ON LIFE SATISFACTION BY GENDER: MALE								
	(1)		(2)		(3)		(4)	
Independent Variable	**Coeff.**	**Std. Err.[b]**	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	0.20**	(0.07)	0.08	(0.06)	0.06	(0.06)	0.05	(0.06)
Three Years Before	0.26***	(0.06)	0.14*	(0.06)	0.12+	(0.06)	0.12+	(0.06)
Two Years Before	0.11+	(0.06)	0.01	(0.06)	-0.00	(0.06)	-0.00	(0.06)
One Year Before	-0.13*	(0.06)	-0.23***	(0.06)	-0.23***	(0.06)	-0.23***	(0.06)
Year of Shock	-0.83***	(0.06)	-0.91***	(0.06)	-0.91***	(0.06)	-0.90***	(0.06)
One Year After	-0.38***	(0.05)	-0.40***	(0.05)	-0.39***	(0.05)	-0.39***	(0.05)
Two Years After	-0.27***	(0.05)	-0.26***	(0.05)	-0.25***	(0.05)	-0.25***	(0.05)
Three Years After	-0.24***	(0.06)	-0.22***	(0.06)	-0.19***	(0.06)	-0.19***	(0.06)
Four Years After	-0.26***	(0.06)	-0.23***	(0.06)	-0.20***	(0.06)	-0.20***	(0.06)
Average Post shock effects [c]	-0.39		-0.40		-0.39		-0.39	
With Other Controls [a]	No		Yes		Yes		Yes	
With Year Dummies	No		No		Yes		Yes	
With Regional Dummies	No		No		No		Yes	
Number of Observations	215713							

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Standard errors are robust standard errors using Huber (1967) and White (1980)*

[c] *Average post shock effects includes year of shock and all subsequent years*

TABLE 5: THE EFFECT OF UNEMPLOYMENT ON LIFE SATISFACTION BY GENDER: FEMALE								
	(1)		(2)		(3)		(4)	
Independent Variable	**Coeff.**	**Std. Err.** [b]	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	0.19***	(0.06)	0.01	(0.06)	0.01	(0.06)	0.04	(0.06)
Three Years Before	0.16**	(0.05)	-0.01	(0.05)	-0.01	(0.05)	0.01	(0.05)
Two Years Before	0.13**	(0.05)	-0.02	(0.05)	-0.01	(0.05)	0.01	(0.05)
One Year Before	-0.12*	(0.05)	-0.24***	(0.05)	-0.23***	(0.05)	-0.23***	(0.05)
Year of Shock	-0.43***	(0.04)	-0.53***	(0.04)	-0.53***	(0.04)	-0.53***	(0.04)
One Year After	-0.20***	(0.05)	-0.27***	(0.04)	-0.26***	(0.04)	-0.27***	(0.04)
Two Years After	-0.17***	(0.04)	-0.21***	(0.04)	-0.20***	(0.04)	-0.21***	(0.04)
Three Years After	-0.12**	(0.04)	-0.14***	(0.04)	-0.12**	(0.04)	-0.14***	(0.04)
Four Years After	-0.11**	(0.04)	-0.11**	(0.04)	-0.09*	(0.04)	-0.10*	(0.04)
Average Post shock effects [c]	-0.21		-0.25		-0.24		-0.25	
With Other Controls [a]	No		Yes		Yes		Yes	
With Year Dummies	No		No		Yes		Yes	
With Regional Dummies	No		No		No		Yes	
Number of Observations	215713							

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Standard errors are robust standard errors*

[c] *Average post shock effects includes year of shock and all subsequent years*

TABLE 6: THE EFFECT OF DISPLACEMENT ON LIFE SATISFACTION BY AGE GROUPS: MALE						
	(1) *Junior* [b]		(2) *Middle* [c]		(3) *Senior* [d]	
Independent Variable	**Coeff.**	**Std. Err.** [e]	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	-0.01	(0.14)	0.23*	(0.11)	-0.05	(0.09)
Three Years Before	-0.10	(0.12)	0.28*	(0.12)	0.10	(0.09)
Two Years Before	-0.17	(0.13)	0.22+	(0.11)	-0.18+	(0.09)
One Year Before	-0.38***	(0.11)	-0.01	(0.10)	-0.32***	(0.09)
Year of Shock	-1.08***	(0.10)	-0.85***	(0.10)	-0.76***	(0.09)
One Year After	-0.51***	(0.10)	-0.32***	(0.10)	-0.44***	(0.09)
Two Years After	-0.26**	(0.10)	-0.25**	(0.10)	-0.28**	(0.09)
Three Years After	-0.16	(0.10)	-0.26*	(0.11)	-0.28**	(0.09)
Four Years After	-0.12	(0.09)	-0.34**	(0.11)	-0.17*	(0.09)
Average Post shock effects [f]	-0.43		-0.40		-0.39	
With Other Controls [a]	Yes		Yes		Yes	
With Year Dummies	Yes		Yes		Yes	
With Regional Dummies	Yes		Yes		Yes	
Number of Observations	215,713					

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *"Junior" are individuals with age 25-35;*

[c] *"Middle" are individuals with age 36-50;*

[d] *"Senior" are individuals with age 51-64*

[e] *Standard errors are robust standard errors*

[f] *Average post shock effects includes year of shock and all subsequent years*

TABLE 7: THE EFFECT OF DISPLACEMENT ON LIFE SATISFACTION BY AGE GROUPS: FEMALE						
	(1) *Junior* [b]		(2) *Middle* [c]		(3) *Senior* [d]	
Independent Variable	**Coeff.**	**Std. Err.** [e]	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	-0.09	(0.11)	0.04	(0.09)	0.11	(0.09)
Three Years Before	0.09	(0.10)	-0.07	(0.08)	0.02	(0.08)
Two Years Before	0.06	(0.09)	-0.07	(0.08)	0.02	(0.08)
One Year Before	-0.20*	(0.09)	-0.24**	(0.08)	-0.30***	(0.08)
Year of Shock	-0.50***	(0.08)	-0.55***	(0.07)	-0.49***	(0.08)
One Year After	-0.04+	(0.08)	-0.31***	(0.07)	-0.40***	(0.08)
Two Years After	-0.05	(0.07)	-0.29***	(0.07)	-0.25***	(0.07)
Three Years After	-0.09	(0.07)	-0.17*	(0.07)	-0.11	(0.07)
Four Years After	-0.12	(0.08)	-0.10	(0.07)	-0.10	(0.07)
Average Post shock effects [f]	-0.16		-0.28		-0.27	
With Other Controls [a]	Yes		Yes		Yes	
With Year Dummies	Yes		Yes		Yes	
With Regional Dummies	Yes		Yes		Yes	
Number of Observations	215713					

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *"Junior" are individuals with age 25-35;*

[c] *"Middle" are individuals with age 36-50;*

[d] *"Senior" are individuals with age 51-64*

[e] *Standard errors are robust standard errors*

[f] *Average post shock effects includes year of shock and all subsequent years*

TABLE 8: THE EFFECT OF UNEMPLOYMENT ON LIFE SATISFACTION [a]				
	(1) Married		(2) Non-Married	
Independent Variable	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	0.05	(0.05)	0.02	(0.07)
Three Years Before	0.07	(0.04)	-0.03	(0.07)
Two Years Before	0.02	(0.04)	-0.05	(0.06)
One Year Before	-0.18***	(0.04)	-0.32***	(0.07)
Year of Shock	**-0.61*** **	(0.04)	**-0.80*** **	(0.06)
One Year After	-0.32***	(0.04)	-0.37***	(0.06)
Two Years After	-0.21***	(0.04)	-0.23***	(0.05)
Three Years After	-0.14***	(0.04)	-0.14**	(0.05)
Four Years After	-0.10**	(0.04)	-0.11*	(0.06)
Average of Post shock effects [b]	-0.28		-0.33	
Number of Observations	215713			

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001*

[a] The dependent variable is Life Satisfaction, and the regression includes Age, Age squared, years of education, and year dummies

[b] Post shock effect includes year of shocks and all years after the shock

TABLE 9: CHANGES IN LIFE SATISFACTION OF THE MARRIED & NON-MARRIED AFTER THE ONSET OF UNEMPLOYMENT BY GENDER								
	Male				*Female*			
	(1) Married		**(2) Non-Married**		**(3) Married**		**(4) Non-Married**	
Independent Variable	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	0.11	(0.08)	0.02	(0.11)	0.01	(0.07)	0.06	(0.10)
Three Years Before	0.17*	(0.08)	0.03	(0.11)	0.02	(0.06)	-0.02	(0.10)
Two Years Before	0.05	(0.08)	-0.02	(0.10)	0.03	(0.05)	-0.07	(0.09)
One Year Before	-0.17*	(0.08)	-0.25**	(0.09)	-0.17**	(0.06)	-0.39***	(0.10)
Year of Shock	**-0.87*** **	(0.07)	**-0.90*** **	(0.09)	**-0.42*** **	(0.05)	**-0.72*** **	(0.08)
One Year After	-0.38***	(0.07)	-0.40***	(0.09)	-0.26***	(0.05)	-0.33***	(0.08)
Two Years After	-0.20**	(0.07)	-0.32***	(0.09)	-0.22***	(0.05)	-0.17*	(0.07)
Three Years After	-0.27***	(0.07)	-0.09	(0.09)	-0.12*	(0.05)	-0.21**	(0.07)
Four Years After	-0.20**	(0.07)	-0.17+	(0.09)	-0.10*	(0.05)	-0.10	(0.08)
Average of Post shock effects	-0.38		-0.38		-0.22		-0.31	
Time-Varying Regressors	Yes		Yes		Yes		Yes	
Year Dummies	Yes		Yes		Yes		Yes	
Regional Dummies	Yes		Yes		Yes		Yes	
Number of Observations	215713				215713			

*Note: * p<0.05 ** p<0.01 *** p<0.001*

TABLE 10: THE EFFECT OF DISPLACEMENT ON SPOUSAL HAPPINESS				
	(1) *Wives' Happiness* [d]		(2) *Husbands' Happiness* [e]	
Independent Variable	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	0.04	(0.08)	-0.16*	(0.07)
Three Years Before	-0.09	(0.08)	-0.09	(0.07)
Two Years Before	-0.07	(0.08)	-0.14*	(0.06)
One Year Before	-0.11	(0.08)	-0.12+	(0.06)
Year of Shock [b]	-0.40***	(0.07)	-0.16**	(0.06)
One Year After	-0.24***	(0.07)	-0.11+	(0.06)
Two Years After	-0.22**	(0.07)	0.02	(0.06)
Three Years After	-0.17*	(0.07)	-0.04	(0.06)
Four Years After	-0.23**	(0.08)	-0.03	(0.07)
Average Post shock effects [c]	-0.25		-0.06	
With Other Controls [a]	Yes		Yes	
With Year Dummies	Yes		Yes	
With Regional Dummies	Yes		Yes	
Number of Observations	157463			

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Average post shock effects includes year of shock and all subsequent years*

[c] *Average post shock effects includes year of shock and all subsequent years*

[d] *This column documents the changes in wives' happiness as a result of husband's unemployment*

[e] *This column documents the changes in husbands' happiness as a result of wives' unemployment*

TABLE 11: THE EFFECT OF DISPLACEMENT ON HUSBANDS' HAPPINESS WHEN WIVES ARE WORKING AND NON-WORKING

	Husbands' Happiness			
	(1) Non-Working Wife [c]		**(2)** Working Wife [d]	
Independent Variable	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	-0.39	(0.28)	0.00	(0.12)
Three Years Before	0.02	(0.27)	-0.07	(0.12)
Two Years Before	-0.28	(0.26)	-0.23+	(0.12)
One Year Before	-0.79**	(0.28)	-0.34**	(0.11)
Year of Shock [b]	-0.48+	(0.28)	-1.01***	(0.11)
One Year After	-0.09	(0.24)	-0.31**	(0.11)
Two Years After	-0.18	(0.25)	-0.17+	(0.09)
Three Years After	-0.21	(0.24)	-0.27*	(0.11)
Four Years After	-0.45*	(0.21)	-0.30**	(0.10)
Average Post shock effects [c]	-0.28		-0.41	
With Other Controls [a]	Yes		Yes	
With Year Dummies	Yes		Yes	
With Regional Dummies	Yes		Yes	
Number of Observations	163220			

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Average post shock effects includes year of shock and all subsequent years*

[c] *Column (1) shows the effect of husbands' happiness when they have non-working wives at onset*

[d] *Column (2)shows the effect of husbands' happiness when they have working wives at onset*

TABLE 12: THE EFFECT OF DISPLACEMENT ON WIVES' HAPPINESS WHEN HUSBANDS ARE WORKING AND NON-WORKING				
	Wives' Happiness			
	(1) Non-Working Husband [c]		**(2)** Working Husband [d]	
Independent Variable	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	-0.26	(0.23)	-0.22*	(0.10)
Three Years Before	-0.15	(0.19)	-0.04	(0.08)
Two Years Before	-0.09	(0.18)	-0.12	(0.08)
One Year Before	-0.40*	(0.17)	-0.28***	(0.08)
Year of Shock [b]	-0.79***	(0.20)	-0.33***	(0.07)
One Year After	-0.42*	(0.19)	-0.16*	(0.07)
Two Years After	-0.42*	(0.21)	-0.06	(0.07)
Three Years After	-0.30	(0.19)	-0.13+	(0.08)
Four Years After	-0.33	(0.21)	-0.13+	(0.08)
Average Post shock effects [c]	-0.45		-0.16	
With Other Controls [a]	Yes		Yes	
With Year Dummies	Yes		Yes	
With Regional Dummies	Yes		Yes	
Number of Observations	163220			

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Average post shock effects includes year of shock and all subsequent years*

[c] *Column (1) shows the effect of wives' happiness when they have non-working husbands at onset*

[d] *Column (2)shows the effect of wives' happiness when they have working husbands at onset*

TABLE 13: THE EFFECT OF UNEMPLOYMENT ON LIFE SATISFACTION OF INDIVIDUALS WITH & WITHOUT CHILDREN				
	(1) *With Children*		(2) *Without Children*	
Independent Variable	**Coeff.**	**Std. Err.** [b]	**Coeff.**	**Std. Err.**
Four Years Before	0.00	(0.07)	0.04	(0.05)
Three Years Before	0.04	(0.06)	0.02	(0.05)
Two Years Before	0.03	(0.06)	-0.04	(0.04)
One Year Before	-0.11+	(0.05)	-0.28***	(0.04)
Year of Shock	-0.60***	(0.05)	-0.72***	(0.04)
One Year After	-0.25***	(0.05)	-0.41***	(0.04)
Two Years After	-0.20***	(0.05)	-0.25***	(0.04)
Three Years After	-0.12**	(0.05)	-0.16***	(0.04)
Four Years After	-0.08+	(0.05)	-0.13***	(0.04)
Average Post Shock Effects [c]	-0.25		-0.33	
With Other Controls [a]	Yes		Yes	
With Year Dummies	Yes		Yes	
Number of Observations	Yes		Yes	
Number of Observations	215713			

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Standard errors are robust standard errors using Huber (1967) and White (1980)*

[c] *Average post shock effects includes year of shock and all subsequent years*

TABLE 14: COMPARING THE CHANGES IN LIFE SATISFACTION OF MALE AND FEMALE WORKERS WITH & WITHOUT CHILDREN DURING THE ONSET OF UNEMPLOYMENT

	Male				*Female*			
	(1) With Children		**(2) Without Children**		**(3) With Children**		**(4) Without Children**	
Independent Variable	**Coeff.**	**Std. Err.** [b]	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	0.13	(0.13)	0.08	(0.07)	-0.07	(0.08)	0.06	(0.07)
Three Years Before	0.23*	(0.12)	0.08	(0.07)	-0.06	(0.07)	0.04	(0.07)
Two Years Before	0.21+	(0.12)	-0.05	(0.07)	-0.06	(0.07)	-0.02	(0.06)
One Year Before	0.01	(0.10)	-0.27***	(0.07)	-0.15*	(0.07)	-0.30***	(0.07)
Year of Shock	-0.87***	(0.10)	-0.85***	(0.07)	-0.44***	(0.06)	-0.59***	(0.06)
One Year After	-0.47***	(0.09)	-0.37***	(0.06)	-0.15*	(0.06)	-0.38***	(0.06)
Two Years After	-0.18*	(0.09)	-0.27***	(0.06)	-0.23***	(0.06)	-0.20***	(0.06)
Three Years After	-0.23*	(0.10)	-0.19**	(0.07)	-0.15*	(0.06)	-0.13*	(0.06)
Four Years After	-0.28**	(0.10)	-0.15*	(0.07)	-0.07+	(0.06)	-0.11	(0.06)
Average Post Shock Effects [c]	-0.41		-0.37		-0.21		-0.28	
With Other Controls [a]	Yes		Yes		Yes		Yes	
With Year Dummies	Yes		Yes		Yes		Yes	
Number of Observations	Yes		Yes		Yes		Yes	
Number of Observations	215713							

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Standard errors are robust standard errors*

[c] *Average post shock effects includes year of shock and all subsequent years*

TABLE 15: THE EFFECT OF UNEMPLOYMENT ON LIFE SATISFACTION OF INDIVIDUALS WITH VARIOUS AGES OF CHILDREN								
	(1) *Young* [d] ***With Children***		(2) *Adolescent* [e] ***With Children***		(3) *Adult* [f] ***With Children***		(4) ***Without Children***	
Independent Variable	**Coeff.**	**Std. Err.** [b]	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	0.05	(0.08)	-0.09	(0.12)	0.08	(0.15)	0.05	(0.05)
Three Years Before	0.08	(0.07)	-0.05	(0.11)	0.01	(0.17)	0.03	(0.05)
Two Years Before	0.06	(0.06)	0.03	(0.11)	0.03	(0.14)	-0.05	(0.04)
One Year Before	-0.04	(0.06)	-0.27*	(0.12)	0.10	(0.14)	-0.28***	(0.04)
Year of Shock [c]	-0.47***	(0.05)	-0.39***	(0.10)	-0.14	(0.12)	-0.72***	(0.04)
One Year After	-0.20***	(0.05)	-0.11	(0.10)	-0.02	(0.13)	-0.41***	(0.04)
Two Years After	-0.14**	(0.05)	-0.17+	(0.10)	0.03	(0.12)	-0.25***	(0.04)
Three Years After	-0.14**	(0.05)	0.04	(0.09)	-0.01	(0.12)	-0.16***	(0.04)
Four Years After	-0.08	(0.05)	-0.06	(0.09)	0.07	(0.11)	-0.13***	(0.04)
Average Post Shock Effects	-0.21		-0.14		-0.01		-0.33	
With Other Controls [a]	Yes		Yes		Yes		Yes	
With Year Dummies	Yes		Yes		Yes		Yes	
With Regional Dummies	Yes		Yes		Yes		Yes	
Number of Observations	215713							

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Standard errors are robust standard errors*

[c] *Average post shock effects includes year of shock and all subsequent years*

[d] *Young dependent children are defined as from age 0-14*

[e] *Adolescences are defined as from age 15-18*

[f] *Adults are defined as age 19 or above*

TABLE 16: CHANGES IN LIFE SATISFACTION OF MALE WITH CHILDREN DUE TO DISPLACEMENT								
	(1) *One Child*		(2) *Two Children*		(3) *Three or more Children*		(4) *No Children*	
Independent Variable	**Coeff.**	**Std. Err.** [b]	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	0.10	(0.16)	-0.01	(0.21)	0.33	(0.44)	0.08	(0.07)
Three Years Before	0.19	(0.16)	0.29	(0.18)	0.41	(0.48)	0.08	(0.07)
Two Years Before	0.42**	(0.14)	-0.04	(0.20)	-0.14	(0.52)	(0.04)	(0.07)
One Year Before	0.13	(0.13)	-0.01	(0.17)	-0.39	(0.36)	-0.27***	(0.07)
Year of Shock	-0.79***	(0.12)	-0.91***	(0.17)	-0.99***	(0.30)	-0.86***	(0.07)
One Year After	-0.36**	(0.12)	-0.56***	(0.15)	-0.20	(0.28)	-0.37***	(0.06)
Two Years After	-0.08	(0.12)	-0.16	(0.15)	-0.24	(0.26)	-0.27***	(0.06)
Three Years After	-0.07	(0.13)	-0.26	(0.16)	-0.44+	(0.25)	-0.18**	(0.07)
Four Years After	-0.32**	(0.12)	-0.34*	(0.17)	0.13	(0.23)	-0.15*	(0.07)
Average Post Shock Effects [c]	-0.32		-0.45		-0.35		-0.37	
With Other Controls [a]	Yes		Yes		Yes		Yes	
With Year Dummies	Yes		Yes		Yes		Yes	
With Regional Dummies	Yes		Yes		Yes		Yes	
Number of Observations	215713							

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Standard errors are robust standard errors*

[c] *Average post shock effects includes year of shock and all subsequent years*

TABLE 17: CHANGES IN LIFE SATISFACTION OF FEMALE WITH CHILDREN DUE TO DISPLACEMENT								
	(1) *One Child*		(2) *Two Children*		(3) *Three or more Children*		(4) *No Children*	
Independent Variable	**Coeff.**	**Std. Err.** [b]	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**	**Coeff.**	**Std. Err.**
Four Years Before	-0.07	(0.12)	-0.05	(0.12)	-0.20	(0.25)	0.07	(0.07)
Three Years Before	-0.04	(0.10)	-0.09	(0.13)	-0.37	(0.23)	0.04	(0.07)
Two Years Before	-0.03	(0.10)	-0.05	(0.11)	-0.05	(0.18)	-0.02	(0.06)
One Year Before	-0.23*	(0.10)	-0.15	(0.12)	0.12	(0.19)	-0.30***	(0.07)
Year of Shock	-0.44***	(0.08)	-0.44***	(0.10)	-0.37+	(0.20)	-0.58***	(0.06)
One Year After	-0.15+	(0.09)	-0.08	(0.10)	-0.22	(0.19)	-0.37***	(0.06)
Two Years After	-0.31***	(0.08)	-0.24*	(0.10)	0.17	(0.16)	-0.19***	(0.06)
Three Years After	-0.18*	(0.09)	-0.13	(0.09)	0.10	(0.18)	-0.13*	(0.06)
Four Years After	-0.13+	(0.08)	0.03	(0.10)	0.14	(0.17)	-0.11+	(0.06)
Average Post Shock Effects [c]	-0.24		-0.17		-0.04		-0.28	
With Other Controls [a]	Yes		Yes		Yes		Yes	
With Year Dummies	Yes		Yes		Yes		Yes	
With Regional Dummies	Yes		Yes		Yes		Yes	
Number of Observations	215713							

*Note: + p<0.10 * p<0.05 ** p<0.01 *** p<0.001"*

[a] *With other controls in this analysis is limited to age, age squared, years of education, and log of family income*

[b] *Standard errors are robust standard errors using Huber (1967) and White (1980)*

[c] *Average post shock effects includes year of shock and all subsequent years*

FIGURE 1 : THE CHANGE IN LIFE SATISFACTION OF MALE AND FEMALE WORKERS DUE TO DISPLACEMENT

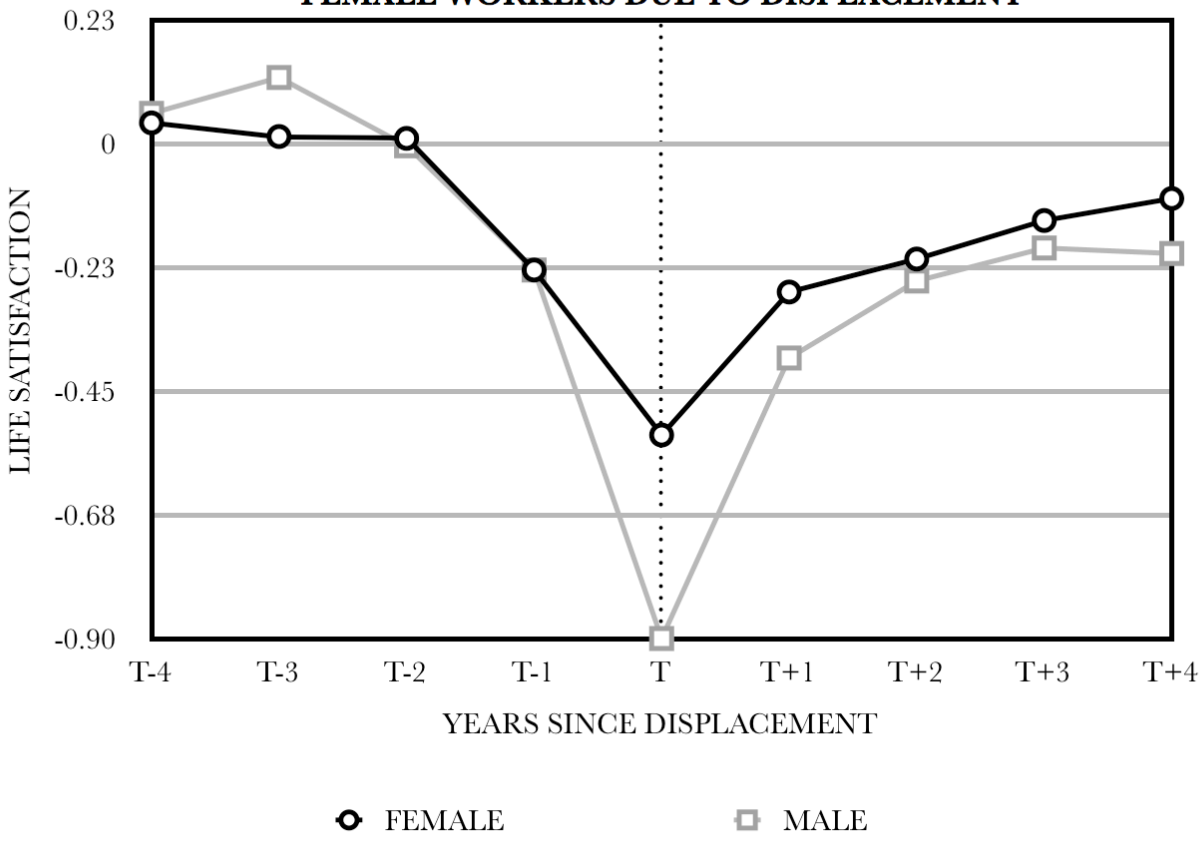


FIGURE 2 : THE EFFECT OF UNEMPLOYMENT ON LIFE SATISFACTION BY AGE GROUPS: MALE

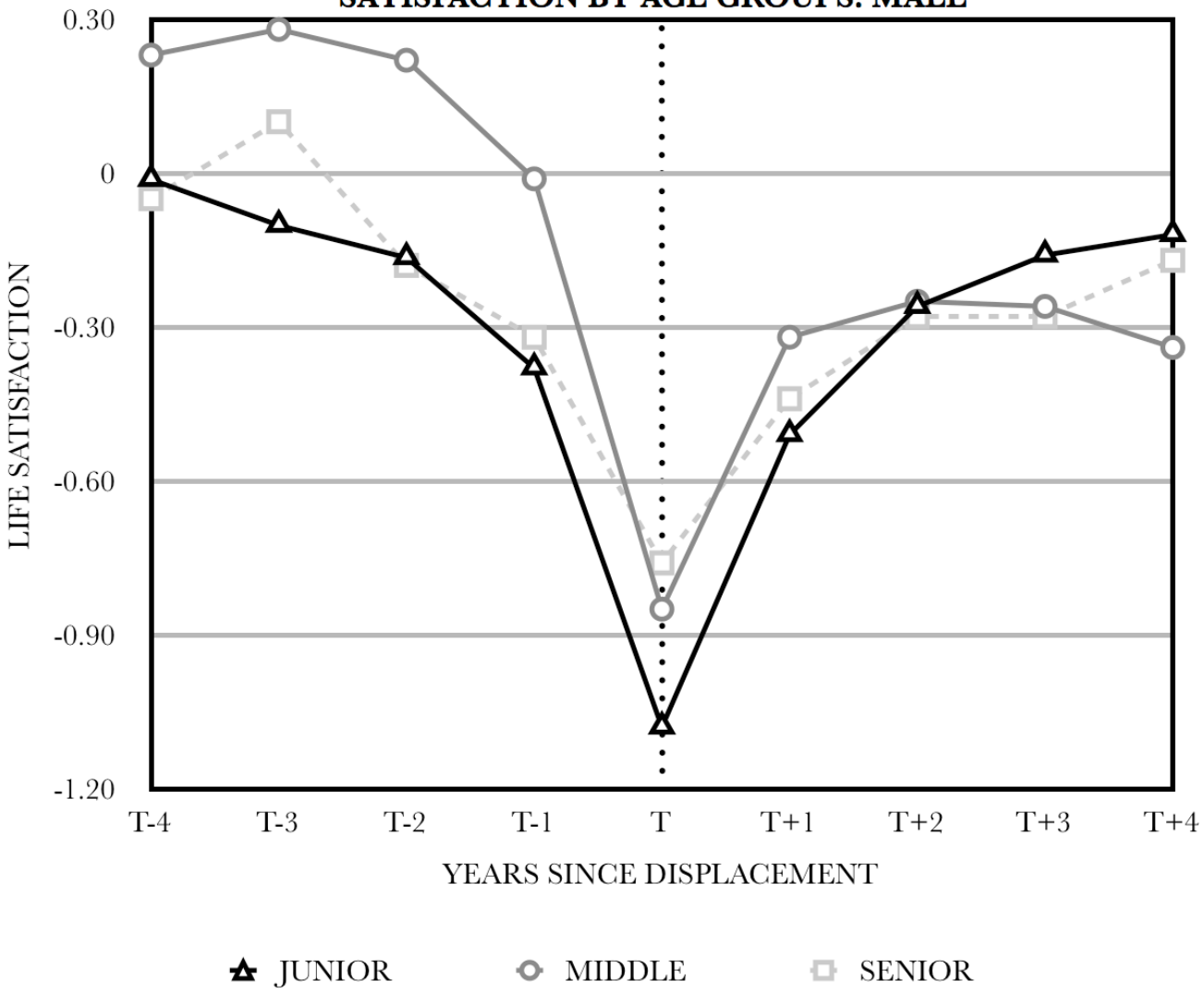


FIGURE 3 : THE EFFECT OF UNEMPLOYMENT ON LIFE SATISFACTION BY AGE GROUPS: FEMALE

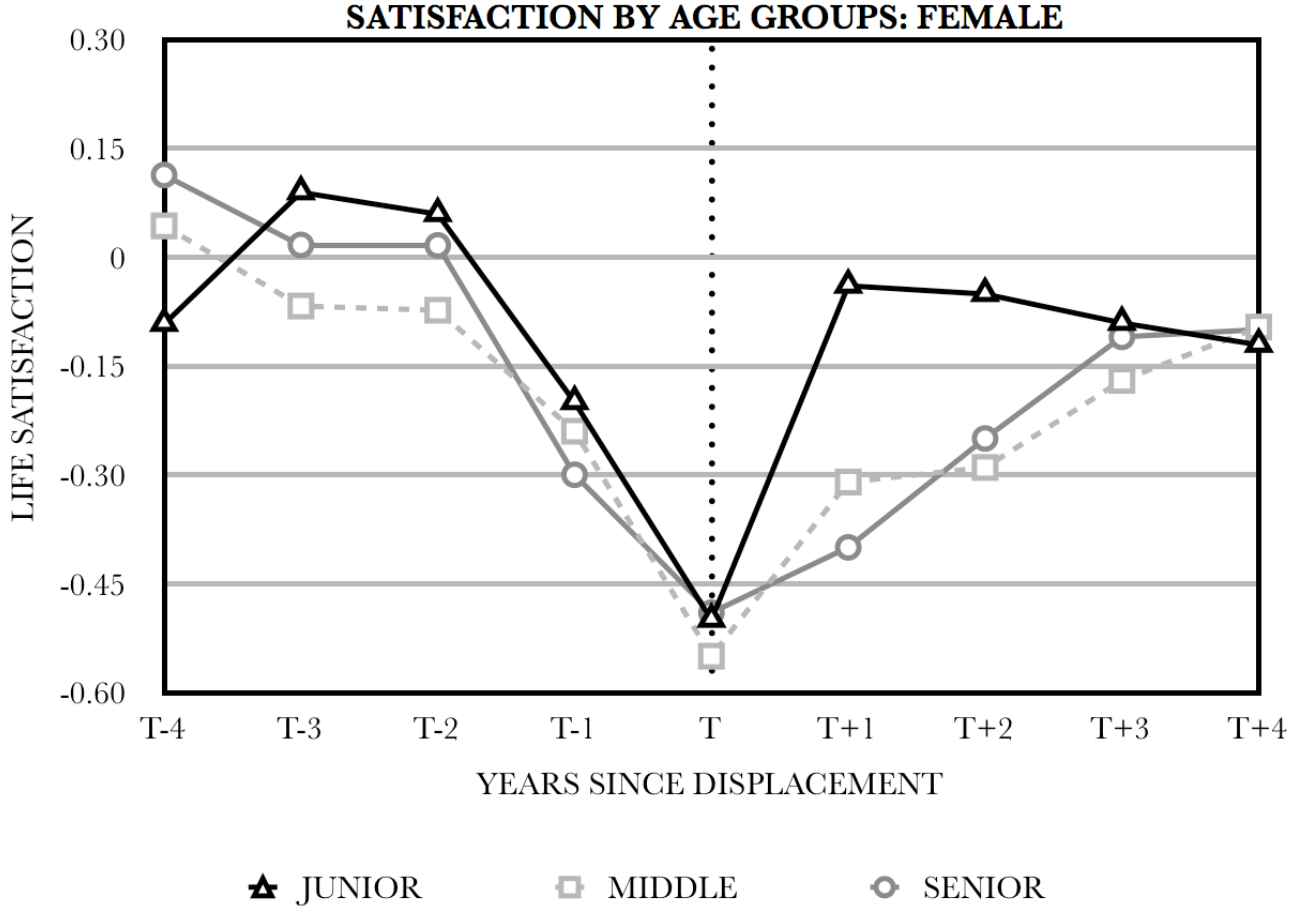


FIGURE 4: CHANGES IN LIFE SATISFACTION FOR UNEMPLOYED INDIVIDUALS: MARRIED & NON-MARRIED

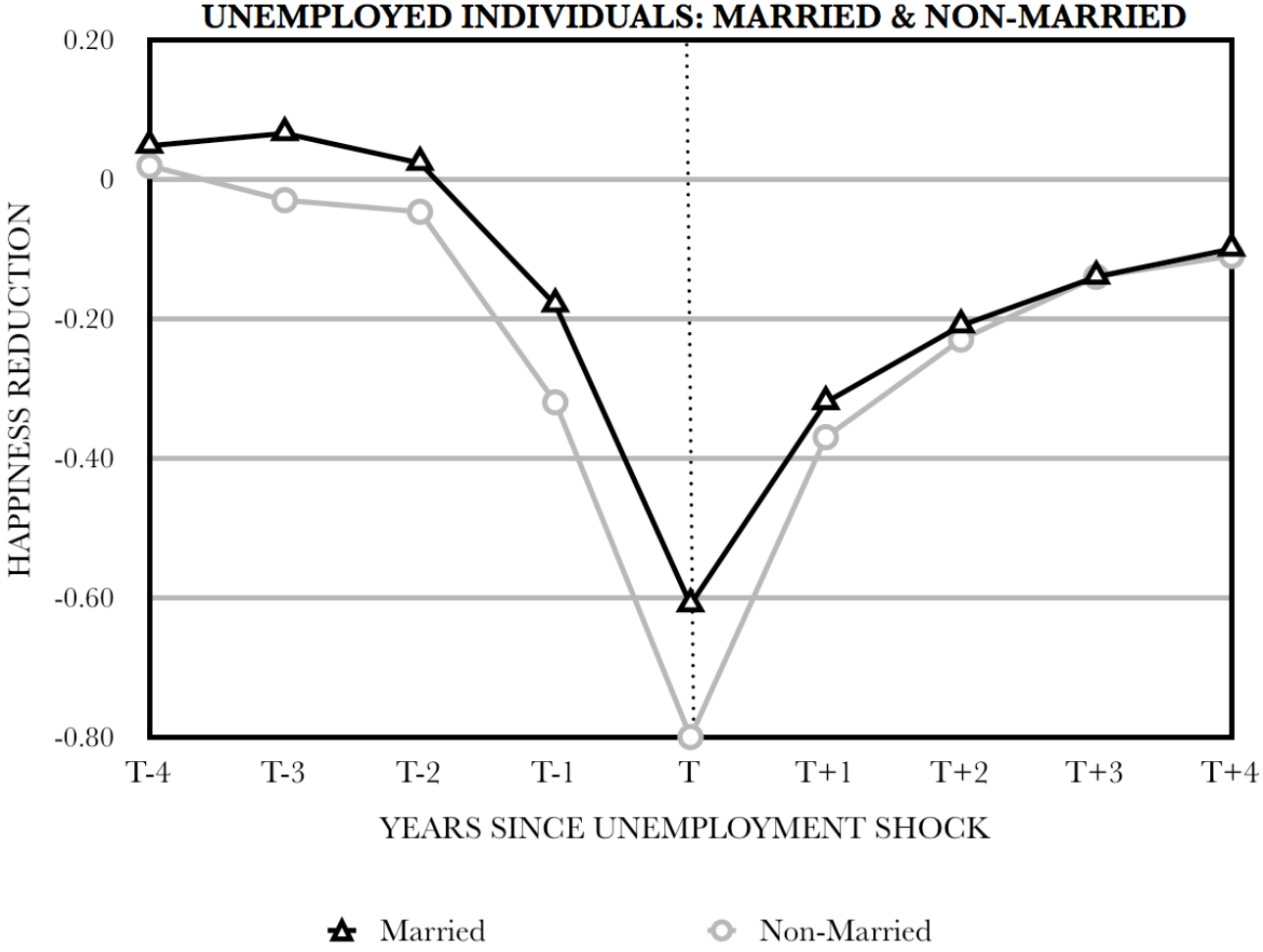


FIGURE 5: CHANGE IN LIFE SATISFACTION FOR UNEMPLOYED: MARRIAGE BY GENDER

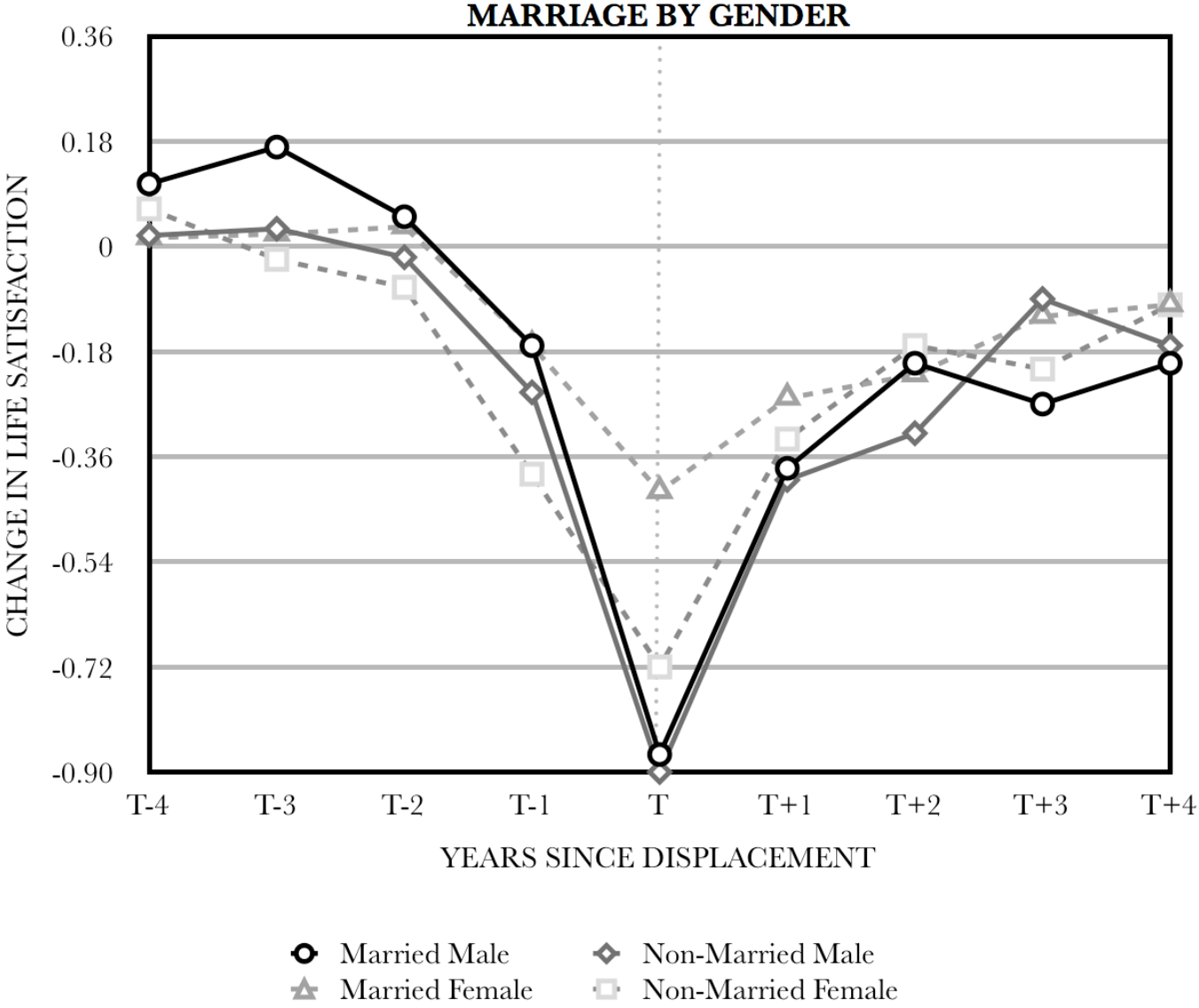


FIGURE 6: THE EFFECT OF DISPLACEMENT ON SPOUSAL HAPPINESS

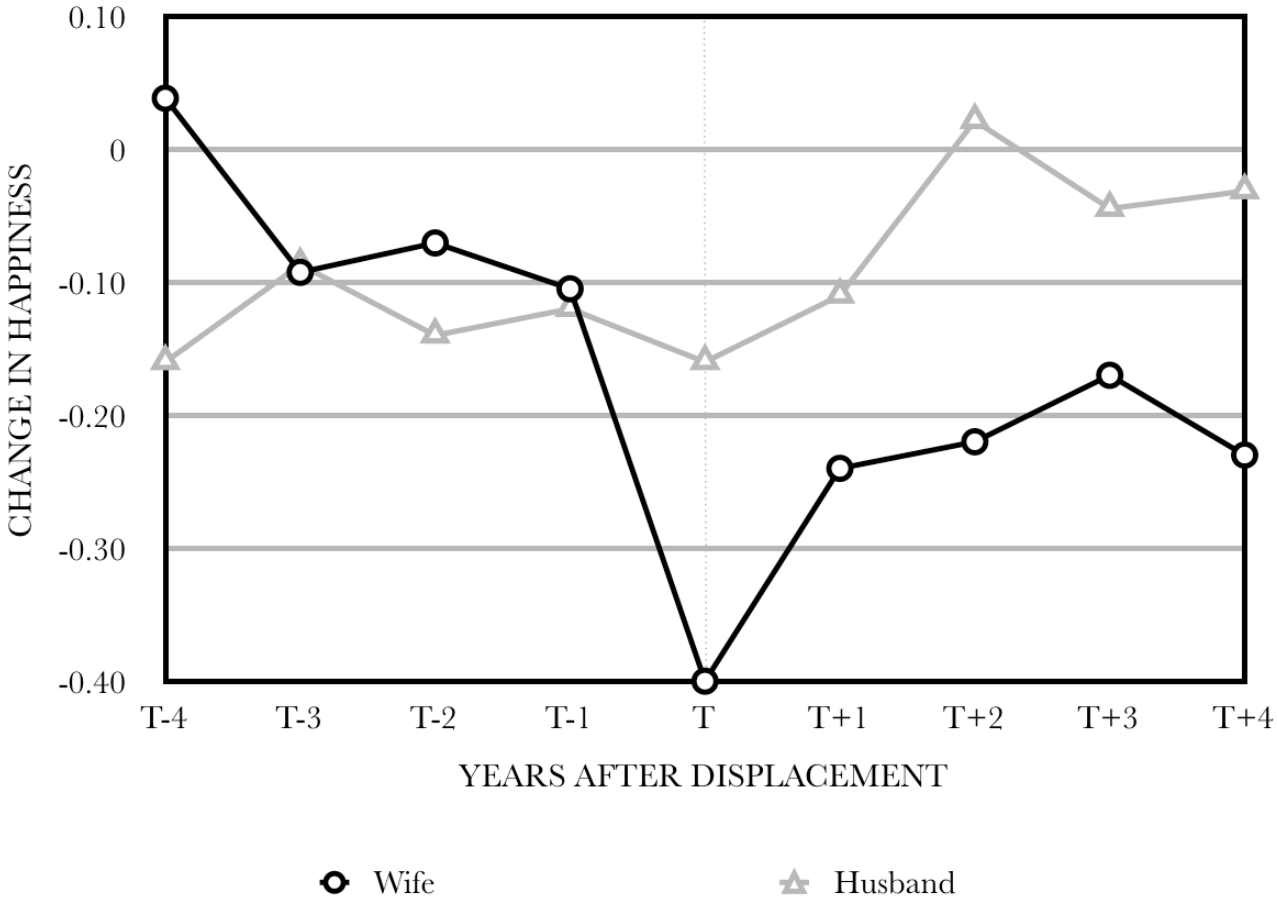


FIGURE 7: THE EFFECT OF DISPLACEMENT ON LIFE SATISFACTION OF HUSBANDS WITH WORKING & NON-WORKING WIVES

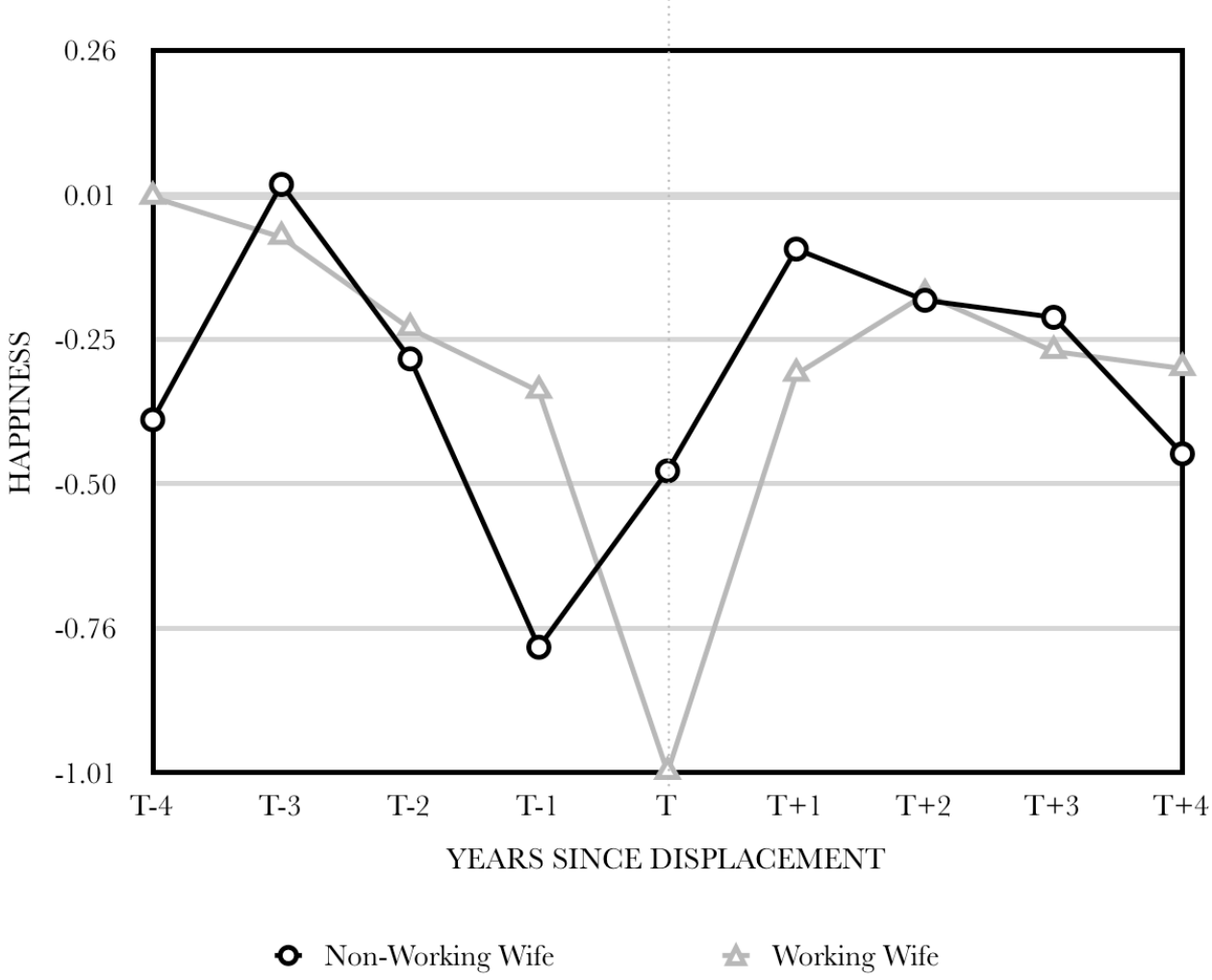


FIGURE 8: THE EFFECT OF DISPLACEMENT ON LIFE SATISFACTION OF WIVES WITH WORKING & NON-WORKING HUSBANDS

FIGURE 9: THE EFFECT OF UNEMPLOYMENT ON LIFE SATISFACTION OF INDIVIDUALS WITH & WITHOUT CHILDREN

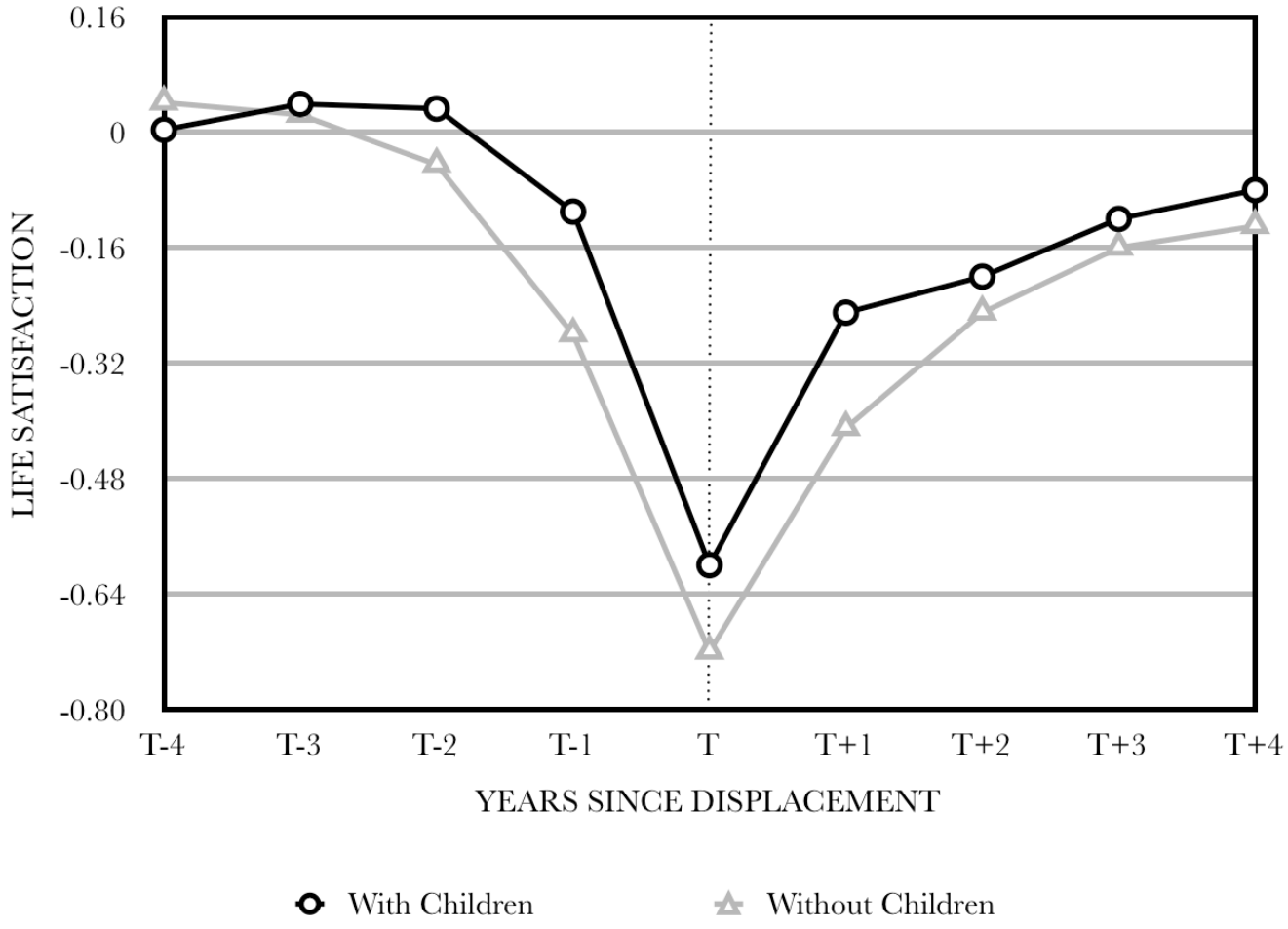


FIGURE 10: COMPARING THE CHANGES IN LIFE SATISFACTION OF MALE AND FEMALE WORKERS WITH & WITHOUT CHILDREN

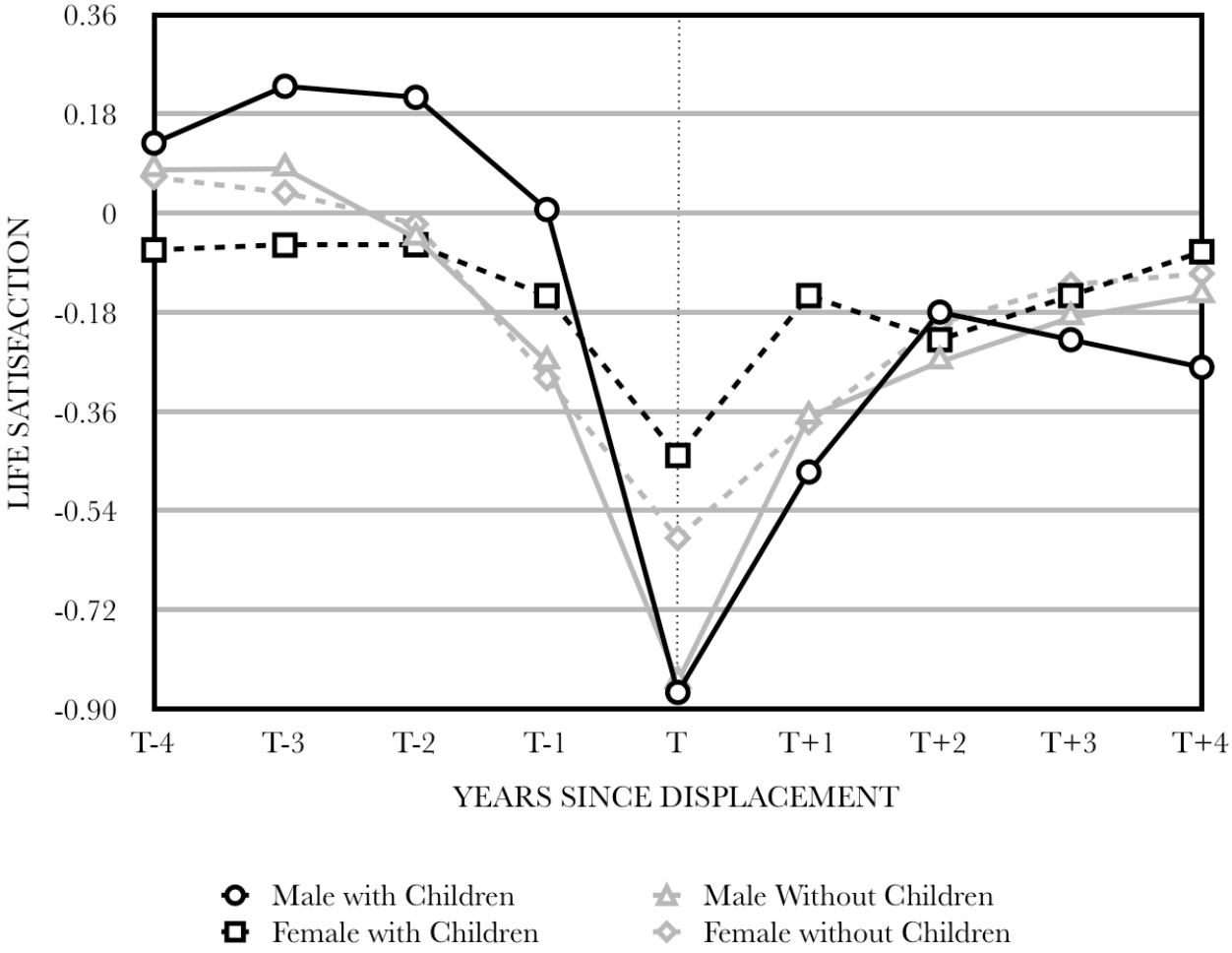


FIGURE 11: THE EFFECT OF UNEMPLOYMENT ON LIFE SATISFACTION OF INDIVIDUALS WITH VARIOUS AGES OF CHILDREN

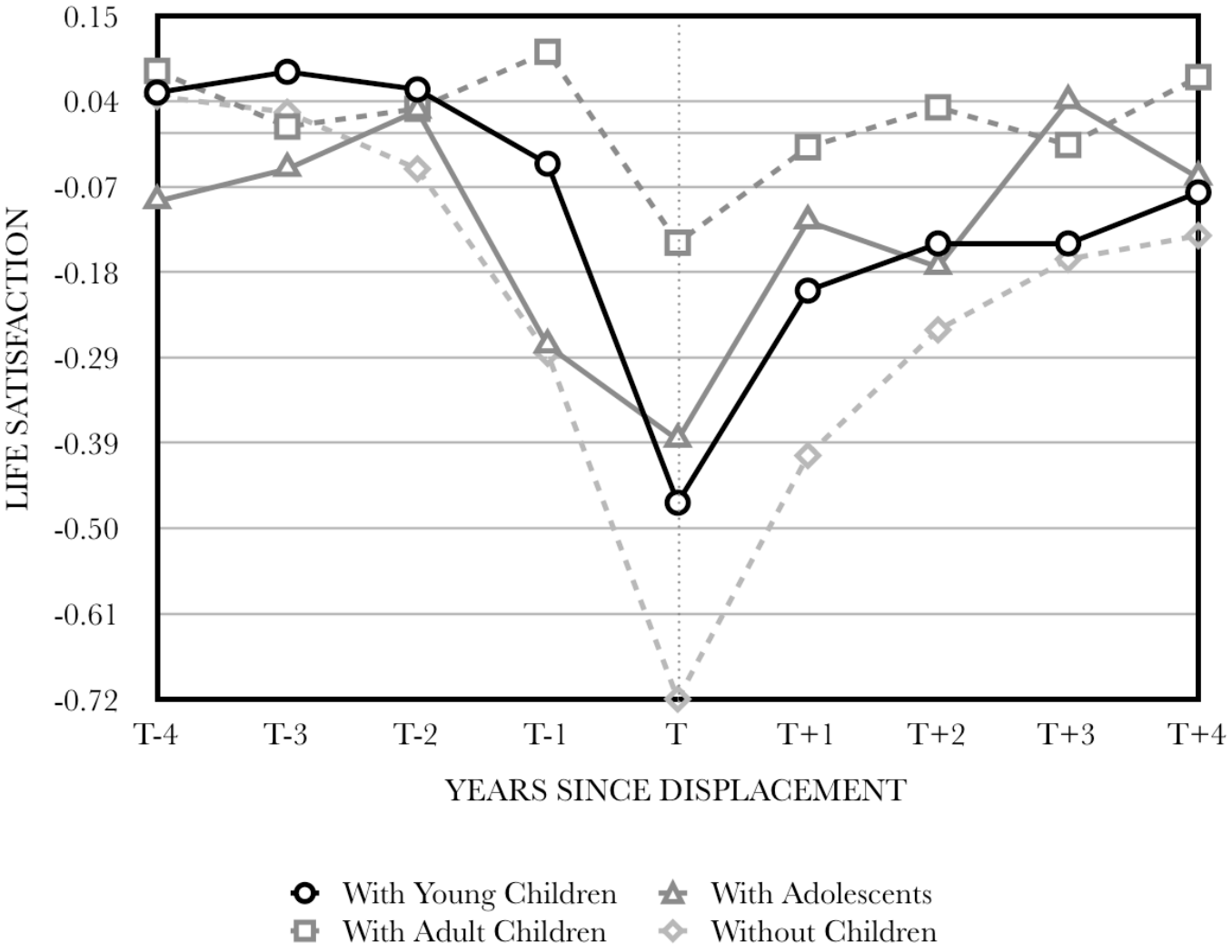


FIGURE 12: CHANGES IN LIFE SATISFACTION OF MALE WITH CHILDREN DUE TO DISPLACEMENT

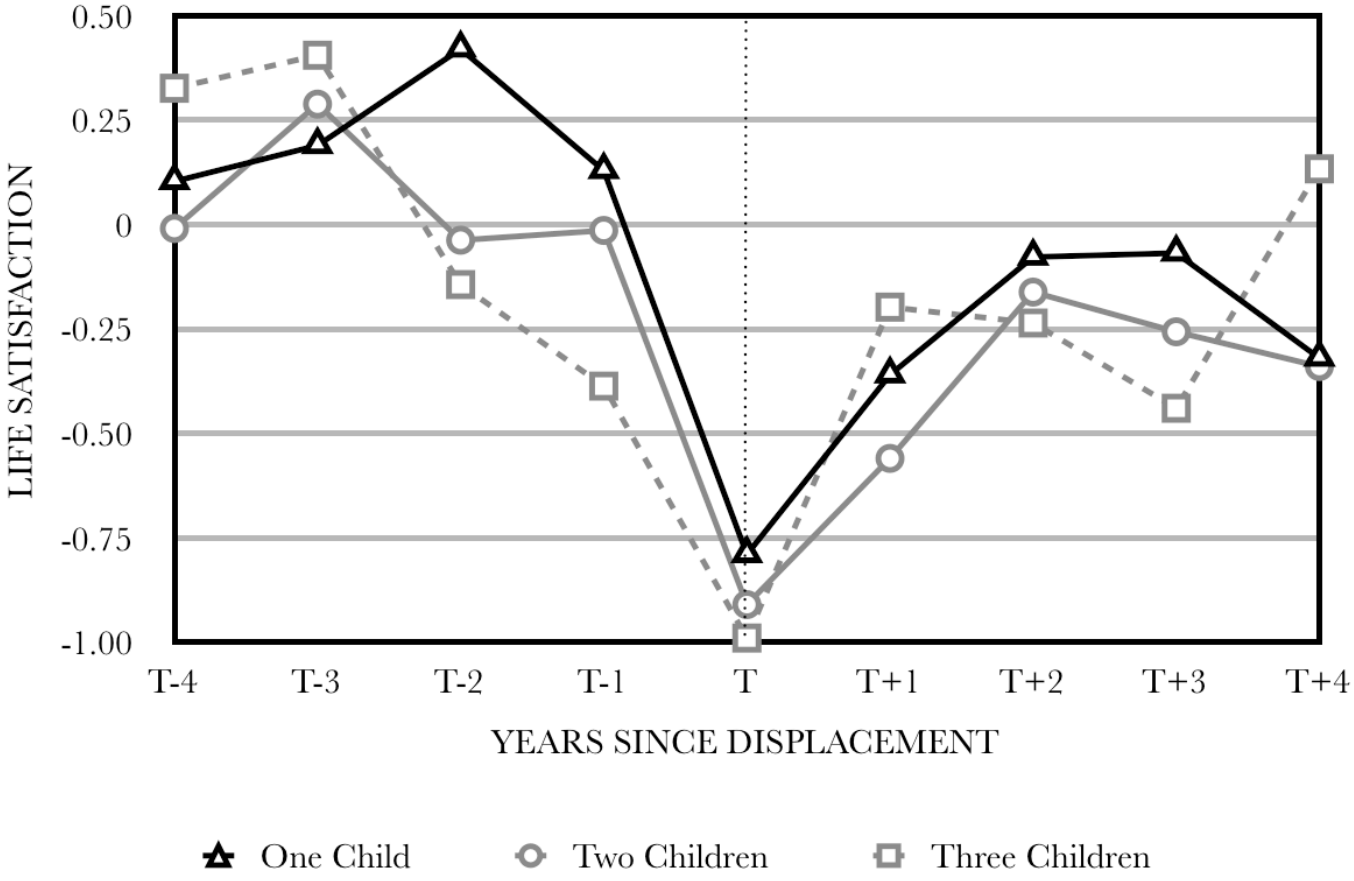
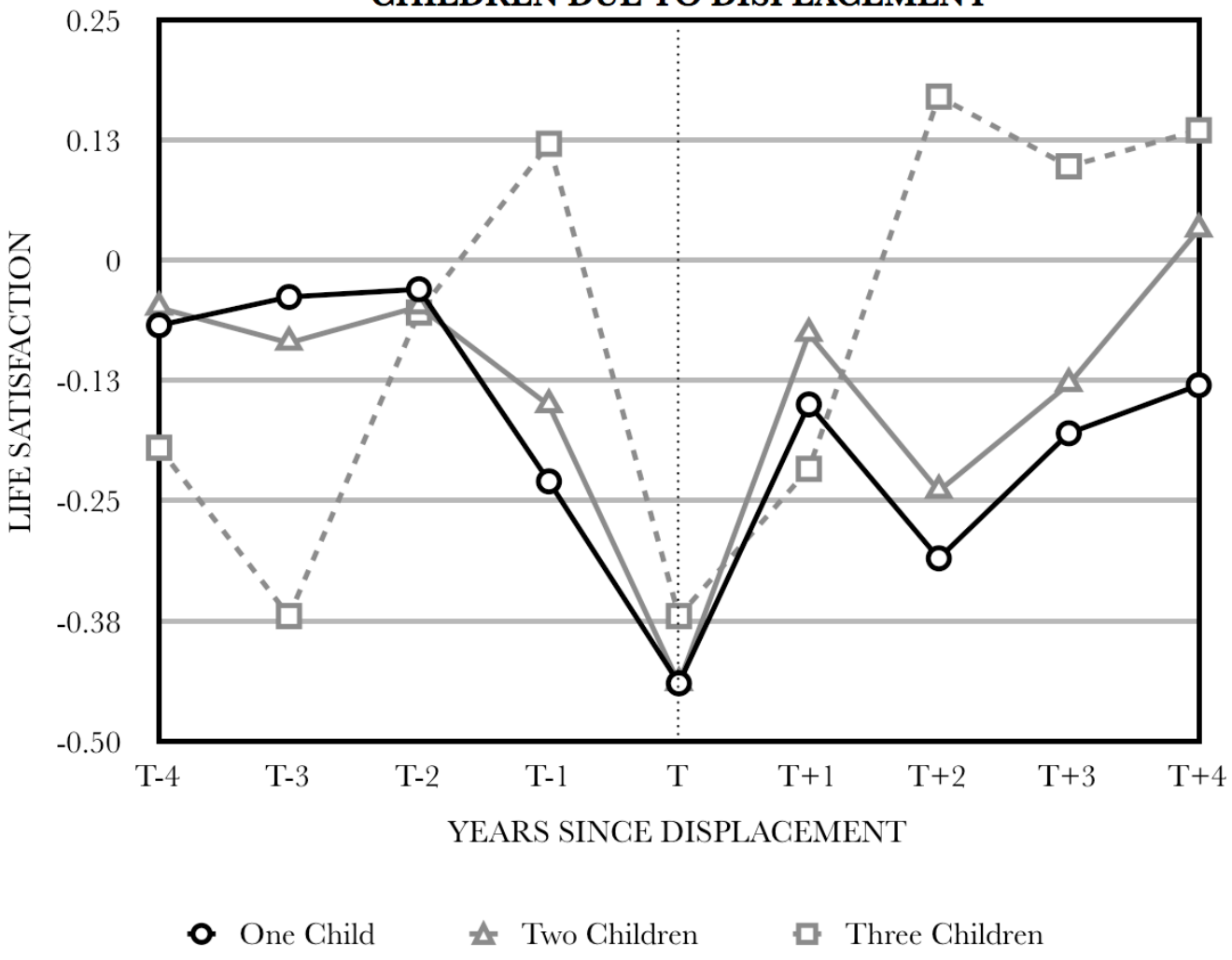


FIGURE 13: CHANGES IN LIFE SATISFACTION OF FEMALE WITH CHILDREN DUE TO DISPLACEMENT



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