

AN ABSTRACT OF THE DISSERTATION OF

Claudia Recksiedler for the degree of Doctor of Philosophy in Human Development and Family Studies presented on September 13, 2016.

Title: Young Adults' Personal Goal Appraisals over the Great Recession Years: A Case Study of Germany.

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Richard A. Settersten

In 2008, the “Great Recession” gained its momentum and quickly grew into a global crisis that led to massive gross domestic product declines and job losses in countries around the world. Relative to prior economic downturns, young adults were greatly affected by the Great Recession. This likely placed a premium on the need for adaptation and strategic goal setting in order to successfully launch into adulthood in a competitive economic climate. This dissertation is comprised of two quantitative studies that examined change and stability in German young adults’ personal goals over the Great Recession years. Both studies utilized a sample of young adults aged 18-29 in 2008, drawn from the German Socio-Economic Panel ($N = 3,292$; 52.3% women). Young adults’ personal goal appraisals at the onset of the recession in 2008 were then compared to goal appraisals during the recovery phase in 2012.

Study 1 utilized a micro-analytic lens to emphasize interdependencies of personal goals across multiple life domains such as family, work, leisure, and self-fulfillment. In light of economic strain arising from the Great Recession, young adults were expected to adjust and adapt appraisals of personal goals across life domains from the beginning of the recession to its

recovery. Using latent transition models, two profiles of personal goal adaptation were extracted, which primarily differed in the endorsement of family formation goals (low vs. high). Only a small share of individuals transitioned between the profiles over time. Females, older participants, and partnered and employed respondents were more likely to be classified into high family formation profile. Surprisingly, the results did not point toward a drastic rejection of family formation in favor of higher endorsements of self-fulfillment and work goals, or vice versa. The high degree of stability in profiles of goal appraisals indicated that: (1) holding on to family formation goals seemed to be important for emotional well-being; and (2) maintaining high aspirations on multiple goals was a protective factor in times of economic strain.

To complement the micro-analytic perspective of Study 1, the second study utilized a macro-analytic lens. It examined whether the availability of community resources—so-called local opportunity structures—buffered young adults from, or exposed them to, the effects of the recession in ways that altered their personal goals. Because men were more heavily affected by the recession than young women, as were certain geographical areas, this study focused on the effects of gender, community type (i.e., rural, urbanized, and urban), and regional indicators across federal states on change in appraisals of personal goals across life domains. Multilevel models revealed a decrease in work goals and an increase in family formation and pro-social goals. Regional indicators did not directly relate to goal appraisals, except the importance of having children, but rather amplified gender and community type differences in the rate of change in appraisals. Results suggested that (1) local opportunity structures served as intermediate institutional filters through which macro-level effects of the recession were transmitted to individuals; and, (2) reproductive goals seem particularly prone to contextual influences.

Taken together, the two studies focused on recession-related changes in young adults' personal goal appraisals and were informed by distinct but complementary analytical and theoretical traditions. Study 1 took a more holistic, group-centered approach, which leaned more heavily on theories affiliated with life span psychology. Study 2, in contrast, applied a variable-centered methodology, which drew heavily on life course sociology. Findings across both studies suggested that (1) family formation goals were highly salient despite potential influences of the recession and could be a protective factor; (2) goal appraisals may have been resistant to macro-level economic pressures because they largely followed age-normative patterns; and (3) intermediate institutional filters, such as local opportunity structures, play an important role in explaining the link between macro-level recession effects and micro-level goal adaptation.

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Young Adults' Personal Goal Appraisals over the Great Recession Years: A Case Study of
Germany

by
Claudia Recksiedler

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APPROVED:

Major Professor, representing Human Development and Family Studies

Co-Director of the School of Social and Behavioral Health Sciences

Dean of the Graduate School

I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

Claudia Recksiedler, Author

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Chapter 1: Introduction

In 2008, the “Great Recession” gained its momentum after the collapse of the U.S. subprime mortgage market a year prior and quickly grew into a global issue, which climaxed into the *Euro crisis* by 2010 (Hein, 2012). The 2008 economic downturn may have been smaller and briefer than the 1930’s *Great Depression* (Jenkins, Brandolini, Micklewright, Nolan, & Basso, 2013), but massive gross domestic product (GDP) declines and job losses were recorded in countries such as Ireland, Spain, and the U.S. (e.g., 8.8 million people in the U.S.; Goodman & Mance, 2011). Furthermore, the recession left its mark on the social fabric of societies, communities, families, and individuals within these networks (Day, 2014; Grabka & Frick, 2013; Mejía, Settersten, Odden, & Hooker, 2015). Individuals seem to have become increasingly concerned about the general economic situation rather than their own finances (Grabka & Frick, 2013), whereby higher educational attainment dampened the sense of control loss in response to financial stress (Mejía et al., 2015). How do individuals adapt to and cope with proximal and distal stressors such as financial loss and concerns about the stability of global markets?

Seminal work on individuals’ adjustment under crisis and rapid societal change has long highlighted the role of historic events as important study contexts and hidden variables shaping the life course (e.g., Elder, 1974; Conger & Elder, 1994; Diewald, Goedicke, & Mayer, 2006; Settersten, 2006). Human development is broadly characterized as a highly complex, dynamic, and individualized process that occurs across multiple levels of organization (Baltes, Lindenberger, & Staudinger, 2006; Lerner, 2006), and individuals are embedded within in larger societal and structural forces (Elder & Shanahan, 2006). Within the set parameters of given institutions and historic times, individuals are *active agents* that utilize goal-related strategies to manage resources in light of external stressors as well as developmental gains and losses (e.g., *selection, optimization, and compensation*; Baltes et al., 2006). Lastly, the time point when

historic events intersect with cohorts' and individuals' life courses further influence its impact (Elder & Shanahan, 2006). Some life stages, such as young adulthood, when many key transitions take place, may expose individuals to the impact of external stressors more than others. For instance, the Great Recession has disproportionately affected young adults as they attempted to launch and settle into the weakened labor market (Goodman & Mance, 2011; Jenkins et al., 2013).

The present dissertation brings together two studies that examined changes and stability in young adults' personal goals as an expression of agency within structures over the Great Recession years. Both studies focus on the adaptation of goal appraisals among a sample of German young adults for two reasons. First, even though the overall impact of the recession on the German economy was relatively mild compared to other nations, young adult workers were greatly exposed to spells of unemployment (Bargain, Immervoll, Peichl, & Siegloch, 2012). Second, the German educational system and labor market are rigidly regulated in terms of restricting access to jobs only to those with proper credentials and protecting established workers rather than promoting opportunities for those who transition from education to first-time employment (Bosch & Jansen, 2010; Buchholz & Kurz, 2008). The tensions created by the age-specific impact of the Great Recession and the inabilities of the German institutions to allow a flexible adjustment to economic pressure for this age group make the German case particularly interesting for the research questions posed in this dissertation.

Study 1 establishes profiles of young adults' changing personal goal appraisals and their association with life satisfaction by using a group-centered, quantitative approach (Magnusson & Stattin, 2006). Although the impact of the Great Recession is not measured explicitly in the studies, the economic downturn of 2008 provides an important study context that imprints on

young adults through assets (or the lack thereof) in local opportunity structures in which they navigate the transition to adulthood (Hank, 2002; Nauck, 1995). Study 2 therefore examines to which extent changes in personal goal appraisals over the recession years are a function of individual characteristics, regional indicators, and their cross-level interactions by applying a variable-centered, multi-level regression approach (Snijders & Bosker, 2010). Taken together, the two studies form a comprehensive picture of goal appraisals from a micro- and macro-level perspective, which is informed and fostered by the use of complementary quantitative methods.

1.1 Intersections between the Life Course and State Institutions

To shed light on what the life course constitutes and how it intersects and is shaped by social institutions, I will draw on the *life course perspective*, which refers to the study of human lives over extended time periods, the influence of historical time, and social location on individual biographies (Elder & Shanahan, 2006). One of its unique features lies in the strong emphasis on the interconnection between human lives and social structures. More specifically, the framework addresses the social organization of human lives in terms of order, timing, and interplay of social roles, states, or events in different life domains from birth to death. The life course is structured along *transitions* and *trajectories*. Transitions represent more or less abrupt changes in roles, such as entering the labor force or getting married, and they are embedded in trajectories. Trajectories may be thought of as chains of transitions in various life domains, such as work or family life, over an extended time span. The beginning and end of trajectories are marked by transitions, which may be labeled as *turning points* if they involve substantial change in the direction of development. Domain-specific trajectories are thereby intertwined and should be examined simultaneously.

Certain intertwined trajectories are further reinforced and directed by individuals' passing through social institutions such as educational tracking, the labor market, or retirement system during a specific period of life (Levy, 2013). Thus, reinforced trajectories complying with the tripartite of life, in terms of the division of the life course into three main segments: socialization and education, employment and reproduction, and leisure and retirement, become *social pathways* that are followed by large segments of the population. Social pathways therefore indicate a general structure of the life course in given societies (Elder & Shanahan, 2006). Even though individuals actively negotiate which pathways to choose and follow, their choices remain restricted by the range of opportunities and limits provided by social institutions (i.e., *agency within structure*; Settersten & Gannon, 2005). Furthermore, social pathways may be altered through changes in the broader *socio-historical contexts* in which they are embedded (e.g., wars or recessions; Elder & Shanahan, 2006), or the flow of cohorts and their fresh contact with given institutions and norms (Ryder, 1965).

Institutions that channel and guide individuals' behaviors and transition patterns have been referred to as *institutional filters*, which comprise the welfare state, the family, the labor market, and the educational system (Mills & Blossfeld, 2009). Although family, labor market, and educational systems are partly influenced by the overarching regulations and incentives of the respective welfare state, they still provide unique contributions to individuals' choices. For instance, the labor market channels individuals mainly through hiring and promotion practices (Levy, 2013). In some countries, educational tracking is closely tied to labor market entry (e.g., the German dual apprenticeship system), whereas this connection may be looser in others (e.g., the U.S.; Cook & Furstenberg, 2002). The family, on the other hand, influences individuals' choices through their interconnectedness to partners, parents, or nuclear and extended family

members (i.e., *linked lives*; Elder & Shanahan, 2006; Levy, 2013). Thus, choices are not made in isolation, but in consideration of the plans and choices of others surrounding us.

Welfare states set legal regulations and general support systems (Myles & Quadagno, 2002) and are generally classified into the (1) *social democratic*; (2) *liberal*; and (3) *conservative welfare states*, depending on the level of influence on and support for its citizens (Esping-Anderson, 1990). For instance, the availability and extent of supporting or background institutions such as the formal childcare, transportation, or public health care is weaker in liberal compared to social democratic or conservative welfare states (Buchmann & Kriesi, 2011). However, the coverage of supporting institutions may also vary across geographical units within a given welfare states (Hank, 2002). Welfare states also differ in the degree to which they uphold and reinforce implicit and explicit institutional rules that support ideologies of gendered role distributions (Levy, 2013). Conservative welfare states tend to be oriented toward traditional family patterns such as the *male-breadwinner model* and the maintenance of social status within families. Gender becomes a *master status* that implies the dominant role distribution of women to the family and men to paid work, which is fostered by the lack of federal support for childcare and parental leave (Levy, 2013; Widmer & Ritschard, 2009):

1.2 Personal Goals as Expression of Agency Within Structures

After examining life courses through the lens of institutional phasing (Levy, 2013), one may be left wondering where, specifically, expressions of individual agency come into play and how they manifest in individuals' decision-making. As individuals are channeled through and shaped by social institutions such as the welfare state, they strive to take control over their developmental pathway by balancing *gains* and *losses* in response to challenges and stressors (Baltes et al., 2006). Individuals are *active agents* who allocate and activate available resources

to either (1) achieve developmental growth by reaching higher levels of functioning; (2) maintain a given level of functioning when faced with a challenge or in recovery from a loss; or (3) to reorganize adequate functioning at lower levels as loss regulation.

Based on the broader framework of *life-span theory*, an extensive body of literature focused on goal selection, content, and appraisal with varying terminology and conceptualizations such as *personal projects* (Little, 1983), *personal action constructs* (Hooker & McAdams, 2003), *motivational and volitional state of mind* (Heckhausen, 1991; Heckhausen & Kuhl, 1985), *developmental goals* (Heckhausen, Wrosch, & Schulz, 2010), or *personal goals* (Salmela-Aro, Aunola, & Nurmi, 2007). I will use the latter term from this point forward; however, three shared characteristics bridge most of these concepts: (1) goals are future-oriented mental representations of individuals' age-graded desired outcomes in the intermediate future; (2) individuals utilize goals to take ownership of their future pathways, negotiate transitions, and optimize personal potentials; and (3) a flexible adjustment of goal appraisals by maintaining a diverse pool of options is crucial in light of challenges, constraints, or shifting opportunity structures (Heckhausen et al., 2010). Salmela-Aro and colleagues (2007) further proposed four key mechanisms *channeling*, *choice*, *co-agency*, and *compensation* to describe and explain the construction and adaptation of personal goals in their *4-C life-span model of motivation*. The first three processes channeling, choice, and co-agency align with the life course themes of institutional phasing, human agency, and linked lives (Salmela-Aro, 2009). Compensation refers again to the need to adapt and renegotiate goals in a flexible manner in light of challenges and stressors, whereby disengagement from maladaptive or unrealistic goals may be particularly essential to maintain increased levels of well-being (Heckhausen et al., 2010; Klinger, 1977; Miller & Wrosch, 2007).

Even though goal construction and adaptation is a lifelong process (Baltes et al., 2010), young adulthood may be one of the most sensitive time periods for careful planning by selecting and continuously re-appraising available options because developmental milestones in many interrelated life domains are salient during a relatively brief time span (Furstenberg, Rumbaut, & Settersten, 2005). Transitions mastered and trajectories chosen during these formative years further shape well-being and other developmental outcomes later on (e.g., Amato & Kane, 2011; Furstenberg, 2007; Schulenberg, Bryant, & O'Malley, 2004). For example, there seems to be a normative decline in the salience of friendship and educational goals along with an increase in work, family, and health-related goals over the young adulthood years (Salmela-Aro et al., 2007). The construction and adaptation of personal goals is also closely tied to individuals' transition patterns in young adulthood, whereby holding more family-related goals was associated with earlier cohabitation or marriage (Salmela-Aro, 2009), and appraisals of educational goals predicted subsequent trajectories in work and education (Nurmi & Salmela-Aro, 2002).

Because gender remains a hidden variable structuring the life courses of young men and women through gender-specific social norms, expectations, and policies (Levy, 2013; Linton, 1942; Widmer & Ritschard, 2009), it may be not surprising that men seem to be more invested in work- and women in parenting-related goals and possible selves (Hooker, Fiese, Jenkins, Morfei, & Schwagler, 1996; Nurmi & Salmela-Aro, 2002). However, maintaining a diverse pool of goals across multiple life domains could be more adaptive for young men and women in light of the economic downturn rather than complying with traditional gender roles (Heckhausen et al., 2010). The impact of the Great Recession on national economies seems to have heightened the need for strategic planning and the accumulation of key resources to launch into the competitive

labor market (Hellevik & Settersten, 2012; Vuolo, Staff, & Mortimer, 2012; Goodman & Mance, 2011). Yet only a few studies considered stability and change of young adults' personal goals in the context of the recession so far (Randa, Dietrich, & Salmela-Aro, in press), which the present dissertation aims to address.

1.3 The German Case: Overall Trends

Because this dissertation is set in Germany, country-specific trends in the transition to adulthood, its institutional underpinnings, and regional variability in both will be summarized in the following paragraphs. Parallel to trends across many Western nations over the last decades (Billari & Liefbroer, 2010; Furstenberg et al., 2005), German young adults' launch into adulthood has become more prolonged, more diverse, and less predictable (e.g., Brückner & Mayer, 2005; Huinink, 2010). It should be noted, however, that particularly the routes to family formation pluralized in terms of delayed timing of marriage and childbirth and increased rates of cohabitation with or without childbirth (Brüderl & Klein, 2002; Mayer & Schulze, 2010). The transition from school to work, on the contrary, remained relatively rigid and smooth due to the highly stratified nature of the educational system compared to other European nations (Buchmann & Kriesi, 2011).

Nevertheless, Germany's conservative welfare state regime provides unique challenges for young adults' transition into the labor market and family roles. For instance, implemented labor market regulations tend to shield established workers rather than promoting opportunities for career starters (Bosch & Jansen, 2010), which leaves them more prone to experience heightened employment instability and prolonged time spent with finding an entry-level position (Buchholz & Kurz, 2008). The growing demand for part-time and temporary jobs further eroded past promises of stability in the trades through the dual apprenticeship system that formerly

facilitated the transition from school to work for individuals in lower and intermediate school tracks (Bosch & Jansen, 2010; Cook & Furstenberg, 2002).

Concerning family policies, Germany's conservative welfare state actively promotes a male-breadwinner model, which provides incentives for traditional division of gender roles (Buchmann & Kriesi, 2011). For example, the lack of supporting institutions such as formal childcare or the joint taxation of couples may either push younger mothers out of the labor market or into part-time employment (Caliendo & Hogenacker, 2012; Mayer, 2009).

Alternatively, highly educated women may be encouraged to postpone motherhood due to the lack of supporting policies (Mills, Rindfuss, McDonald, & te Velde, 2011).

1.4 Structural Divisions and Regional Variability in Germany

There is also considerable variability in the coverage of supporting institutions such as childcare facilities and the prosperity of local labor markets along former East-West borders (e.g., Konietzka & Kreyenfeld, 2002), and beyond (Frick & Goebel, 2008; Hank, 2002). This may partly contribute to persisting differences in transition patterns across geographical regions. According to the widely used *nomenclature of territorial units for statistics* (NUTS; Eurostat, 2015), a uniform spatial classification system that divides the economic territory of the European Union into three levels, Germany consists of: (1) 16 *federal states* ranging from 3-7 million inhabitants (NUTS-1); (2) 39 *government units (Regierungsbezirke)* ranging from 800,000-3 million inhabitants (NUTS-2); and (3) about 429 *counties* with 150,000-800,000 inhabitants (NUTS-3). Those three levels are closely tied to administrative units in Germany, which is not necessarily the case in other countries (Statistisches Bundesamt, 2015a). On the NUTS-1 level, there has traditionally been a strong divide between former East and West German states regarding earlier family formation and strong support for working mothers in the East, which

was fostered by generous provision of formal childcare (Adler, 2002; Konietzka & Kreyenfeld, 2002). Fertility and marriage rates, however, declined starkly in the course of unification, which has been labeled as “demographic shock” in response to the increased uncertainty of the system break in the East (Adler, 2002).

So how did population development change or persist across federal states over the last 20 years up to the onset of the Great Recession and afterward? Based on 2008 census data (Statistisches Bundesamt, 2015b), fertility rates seem to be highest in Southern states such as Bavaria with 87.0-94.6 for 10,000 inhabitants compared to the East German state Saxony-Anhalt ranging from 69.3-77.0. In 2012, however, fertility rates increased in formerly low-fertility areas in the East such as Saxony, as well as in urban centers in the North and Northeast such as Berlin and Hamburg. Despite lower fertility rates, the percentage of children aged 3-5 in daycare remains very high in former East German states, such as Brandenburg and Thuringia with 93.9-96.6 percent and is particularly low in Northwestern states such as Schleswig-Holstein with 77.9-87.2 percent in 2008.

Net migration rates in 2008, defined as the differences between individuals moving out of regions and individuals coming in, indicate that Southern and Southwestern areas attract a substantial number of newcomers (e.g., ranging from 9.9-44.7 per in per 10,000 inhabitants in Bavaria, Baden-Württemberg, and Hessen), as do some urban centers such as Berlin. Not surprisingly, these areas also tend to be more densely populated compared to the Northeastern states (e.g., Bavaria, Hessen, Baden-Württemberg with 401.1-3,849.2 inhabitants per square km vs. Saxony-Anhalt, Thuringia, or Mecklenburg-Vorpommern with 71.8-148.6 inhabitants per square km). Eastern states such as Saxony-Anhalt, Thuringia, and Mecklenburg-Vorpommern reported the most losses ranging -77.4 to -24.6 per 10,000 inhabitants. Studies further showed

that young, highly-educated women are more likely to migrate from East to West German states, compared to young men in the East, which has led to tremendous changes in the composition of sex ratios among young adults in the East (Brückner & Trübvetter, 2007; Kröhnert & Vollmer, 2012).

1.5 The Labor Market and the Great Recession in Germany

In the post-unification years, East Germany was particularly affected by high unemployment rates and economic decline of local industries (Diewald et al., 2006; Hunt, 2000). In 2008, labor market indicators such as (un)employment rates and the amount of disposable income per inhabitant largely replicate the distribution of regional trends for population development indicators describe above with economically weaker areas in the North and Northeast and stronger areas in the South and Southwest (Statistisches Bundesamt, 2015b). Thus, one could speculate that those young adults who reside and remain in more economically disadvantaged regions may be especially vulnerable during economic downturns such as the Great Recession because existing disparities in local opportunity structures may deepen (DiPrete & Eirich, 2006). It should be noted, however, that female employment rates largely differ between former East and West German states: the majority of women of working age are actively employed in the Northeast (e.g., Thuringia, Saxony, Saxony-Anhalt, or Brandenburg with 50.1 to 51.7 percent), followed by the South (e.g., Bavaria and Baden-Wuerttemberg; 42.3 to 50.1 percent), and lowest in other Western states (e.g., North Rhine-Westphalia or parts of Lower Saxony; 40.8 to 42.3 percent; Statistisches Bundesamt, 2015b).

Whereas the U.S. and other European countries recorded substantial increases in unemployment and declines in GDP (Jenkins et al., 2013), responses on the German labor market to the financial crisis were astonishingly mild (Möller, 2010). More specifically,

Germany's GDP dropped by only 5 percent compared to 9 percent in Finland or 13 percent in Ireland (Bargain et al., 2012; Jenkins et al., 2013). Increases in unemployment rates were rather short-lived and reached the lowest level since unification in 2011 with 7 percent, which was labeled the "German job miracle" (Grabka & Frick, 2013). But how, and under which conditions, was the German job miracle possible? After all, German labor market policies were previously known as the prototype of inflexibility due to its emphasis on status maintenance of established workers rather than promoting opportunities to launch careers (Buchmann & Kurz, 2008; Möller, 2010).

Among other factors, the recession affected primarily manufacturing and export-oriented sectors situated in relatively thriving areas such as the South (Bargain et al., 2012). Those industries were formerly lacking sufficient numbers of skilled workers, which contributed to companies decision to hold on to workers by reducing working hours or the intensity of production rates rather than letting go of workers, which would lead to high recruitment and training costs once the recession passed (so-called *labor hoarding*; Möller, 2010). Thus, the positive reaction of the labor market is mainly driven by the internal flexibility of companies rather than external adjustments of the welfare state, even though more flexible labor market regulations were implemented in 2003 in reaction to the high unemployment rates of the 1990s (Rinne & Zimmermann, 2012).

Despite the relatively mild effect of the recession on the German economy, Grabka and Frick (2013) showed that a general sense of uncertainty about the economy increased, even though individuals didn't report heightened concerns about their own economic situation. This may be partly explained by the extensive and dramatic media coverage of the Great Recession, but some subpopulations also felt the impact of the financial crisis more than others (Bargain et

al., 2012; Grabka & Frick, 2013). In contrast to previous economic downturns that affected primarily women, older workers, and individuals holding part-time positions, the typical worker impaired by the Great Recession was male, working full-time, and with lower levels of educational attainment (Grabka & Frick, 2013). This trend is consistent with findings from other countries as well (Jenkins et al., 2013), but with the exception that the male-breadwinner model in Germany actively discourages women and mothers' labor force participation compared to policies in other welfare state regimes (Caliendo & Hogenacker, 2012). The mismatch between social policies and women's relatively favorable position in this economic downturn could add additional strain on women's and family's fertility choices.

Younger workers under the age of 25 were further more exposed to increased rates of unemployment and sharp declines in net income (Bargain et al., 2012). For instance, youth unemployment rates in 2008 were highest in the Northern and Eastern federal states. In 2009, however, youth unemployment rates rose in Southern and Western regions (e.g., parts of Bavaria and Rhineland-Palatinate; 12.3 to 14.3 percent) and even exceeded the East and Northeast (around 10 percent) because export-oriented sectors affected by the recession were primarily located in the South and Southwest.

1.6 The Present Studies

Germany's rapid recovery from the Great Recession has received considerable attention in the literature as "the German job miracle" and its specific mechanisms could therefore inform the recovery process in other countries or for future downturns (Rinne & Zimmermann, 2012). Even though the long-term impact and repercussion of the Great Recession is not fully understood at this point, it became clear that young adults, particularly young male workers, have been greatly affected by the economic downturn in Germany and other nations (Bargain et

al., 2012; Goodman & Mance, 2011; Jenkins et al., 2013). Strategic planning and accumulating key resources have been shown to be crucial for a successful launch into adulthood in today's competitive economy (Hellevik & Settersten, 2013; Vuolo et al., 2012), but little is known about how young adults cope with increased insecurities and the heightened risk of unemployment in terms of selecting and adjusting their personal goals. The overarching conceptual model of this dissertation is illustrated in Figure 1.1 and integrates two studies that aim to address these research gaps for the case study of Germany in the context of the Great Recession.

The core of the conceptual model consists of interconnections between age-graded personal goals across multiple life domains, such as *work*, *family*, and *leisure*, which have to be managed simultaneously. Young adults set and adjust personal goals within each of these domains, such as working toward a promotion in the domain of work, getting married in the family domain, or traveling in the domain of leisure. However, making progress on a given goal within one domain may hinder the fulfillment of personal goals within the other domains. For instance, investing heavily in work-related goals may go along with drawbacks concerning family or leisure goals and vice versa. Although both young men and women are generally anticipated to fulfill certain milestones, such as finishing education and forming a family, expectations concerning the timing, order, or the emphasis of priorities across life domains may vary by gender. For example, young women may feel more social pressure to put their career aspirations aside in favor of caretaking responsibilities for children or elderly kin compared to their male counterparts. The conceptual model therefore includes *gender* as a source of influence on young adults' goal adaptation process.

Another source of influence on macro-level is the *social geography* of a given area, which is defined as the opportunities and limitations provided by individuals' physical

environment. Environments could be more distal forces such as welfare state regimes that provide certain sets of regulations that vary across nations (e.g., parental leave regulations or labor protection laws). However, environments could also refer to conditions and characteristics of regional contexts within more fine-grained geographical areas such as counties, communities, or even neighborhoods that protect or expose individuals from proximal and distal stressors (i.e., so-called *local opportunity structures*). The 4-C process of *channeling* captures the influences of both, distal and more proximal environments, on young adults' pool of realistically achievable goals (Salmela-Aro et al., 2007). Lastly, also the socio-historic context of a given cohort, such as the *Great Recession*, further constrains and shapes young adults' opportunities (e.g., difficulties to launch a career) and the 4-C process of *compensation* illustrates young adults' ability to adjust goals in a flexible manner in light of external stressors and challenges such as economic pressure of the recession.

Based on this overarching conceptual model, two separate manuscripts were crafted within this dissertation, which focus on different parts of the model. Drawing on nationally-representative panel data, Study 1 examines stability and change in young adults' personal goal appraisals across multiple life domains from the onset of the recession in 2008 to the recovery phase in 2012. More specifically, latent profiles of personal goal appraisals, and the likelihood of transitioning from one profile to another over the study period, are extracted for this purpose (Collins & Lanza, 2010). Because Germany's conservative welfare state endorses traditional gender roles, yet men's employment stability is more starkly affected by the recession (Bargain et al., 2012), the study includes gender as a predictor of profile membership. Lastly, the relationship between profiles of goal appraisals and life satisfaction are examined because the adjustment of unrealistic or maladaptive personal goals has been linked to higher levels of well-

being (Heckhausen et al., 2010). Study 2 aims to disentangle the degree to which changes in personal goal appraisals are a function of individual-level characteristics (e.g., gender and community type) and regional indicators (e.g., fertility rate, disposable income, and net migration). Federal state-level regional indicators are conceptualized to reflect local opportunity structures, which buffer or expose young adults to effects of the recession (Frick & Goebel, 2008; Hank, 2002). Lastly, cross-level interactions between individual- and federal state-level predictors are considered to predict changes in personal goal appraisals over the recession years.

Each study uses a distinct quantitative methodological approach to examine change in personal goals, which are leveraged in their strength to complement each other. Study 1 employs a micro-analytical, group-centered lens, which, which clusters individuals according to shared or distinct characteristic patterns or configurations (von Eye & Mun, 2012). Group- or person-centered methods further allow a holistic view on individuals' functioning and developmental processes (e.g., across multiple life domains), which aligns with developmental theory's assumption of change as a multifaceted and multi-dimensional phenomenon (Lerner, 2006). Study 2, however, utilizes a macro-analytical, variable-centered approach that describes longitudinal associations between variables, which apply to the study population as a whole. Taken together, both studies advance our understanding of young adults' personal goal adaptation across multiple life domains in the context of the Great Recession, and the role of local opportunity structures in the goal adaptation processes.

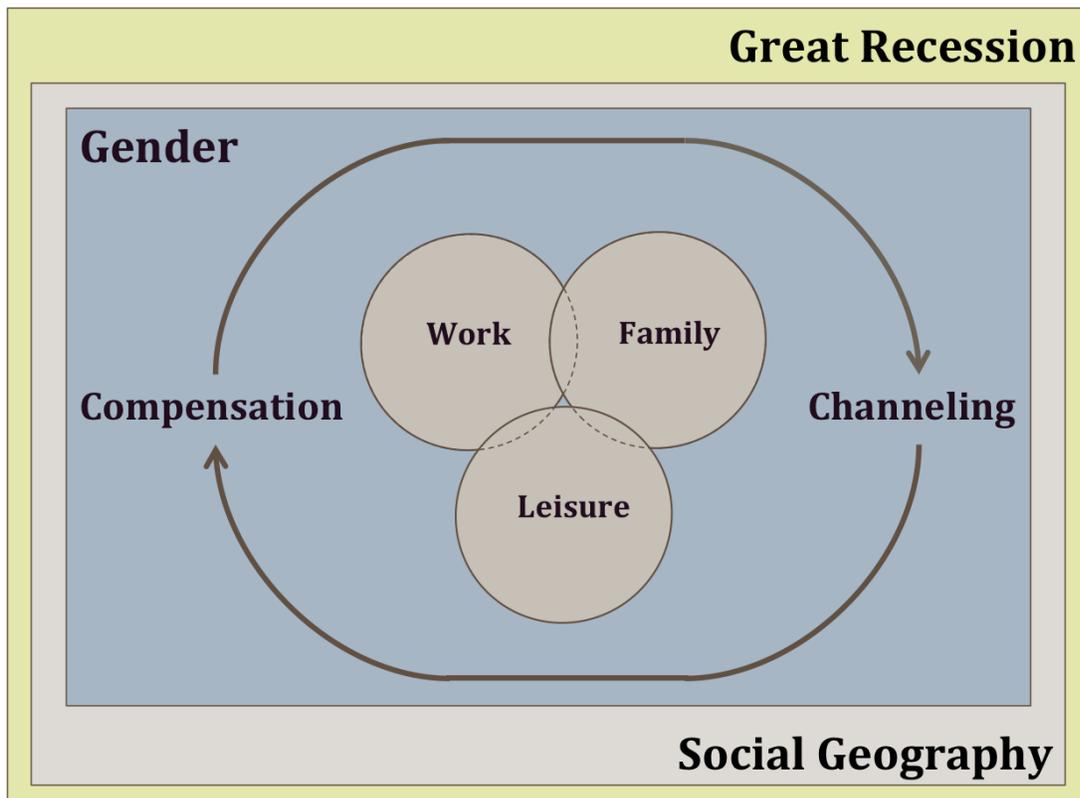


Figure 1.1. Conceptual model the present dissertation

Chapter 2: Study 1

Young Adults' Profiles of Personal Goals:

A Longitudinal Analysis over the Great Recession Years

Young Adults' Profiles of Personal Goal Appraisals:
A Longitudinal Analysis over the Great Recession Years

Young adulthood, which is roughly conceptualized to span the years of 18 to the mid-30s, represents a dense developmental period in which transitions of different life domains such as work and family are shouldered simultaneously (Schulenberg & Schoon, 2012). Decisions made and pathways chosen during this time period may have far-reaching ripple effects on individuals' subsequent life courses, and therefore represent a source of cumulative advantage or disadvantage (Settersten, 2007). Thus, strategic planning and accumulating key personal resources, such as education and social networks, are crucial for launching into adulthood in today's competitive economy (Hellevik & Settersten, 2012; Vuolo, Staff, & Mortimer, 2012). This may be particularly true for young male adults, who were disproportionately affected by the "Great Recession" that gained its momentum in 2008 (Goodman & Mance, 2011; Jenkins, Brandolini, Micklewright, Nolan, & Basso, 2013).

How young adults plan and set goals for work as well as family-related trajectories, and how they allocate resources to achieve these goals depend on individuals' appraisal of the salience and importance of life goals, which is subject to change as adaptation to macrostructural conditions such as economic downturns (Heckhausen & Chang, 2009). Nevertheless, few studies incorporate factors beyond individuals' control or the role of social change in modern societies in the study of young adults' personal goals (Heckhausen, Wrosch, & Schulz, 2010). The present study therefore integrates life course themes into the analyses of young adults' personal goals by examining change and stability in profiles of goal appraisal across multiple life domains in the context of the Great Recession. A group-centered latent transition analysis approach will be used to establish young men and women's profiles of personal goals over time (Collins & Lanza,

2010), in addition to distal variables related to profile membership (Nylund-Gibson, Grimm, Quirk, & Furlong, 2014).

2.1 Theoretical Considerations of Goal Construction and Goal Adaptation

Understanding personal goals is an essential part of research on motivation and personality because goal content and goal appraisal have direct implications for individuals' behaviors and actions, which shape their further development (Heckhausen, 1991; Nurmi & Salmela-Aro, 2006). The terminology and conceptualization of goals may vary by author and subdiscipline, such as personal projects (Little, 1983), personal action constructs (Hooker & McAdams, 2003), developmental goals (Heckhausen et al., 2010), and personal goals (Salmela-Aro, Aunola, & Nurmi, 2007), but goals are generally defined by three shared characteristics (Heckhausen et al., 2010).

First, personal goals target developmental processes such as the achievement of a certain transition, which implies that goal content is often age-graded. Widely shared developmental tasks and age norms inform individuals' representations of desired outcomes (Havighurst, 1952; Neugarten, More, & Lowe, 1965), which is reflected in the content of personal goals. For instance, young adults construct networking and career goals compared to older adults' emphasis on health- and leisure-related goals (Hooker, 1992; Heckhausen et al., 2010). The perception of age norms has been shown to shift over time (Settersten & Hagestad, 1996a; 1996b), and fluctuate across subpopulations of a given society, such as by SES (Edin & Kefalas, 2005) or gender (Billari et al., 2010). Thus, personal goal content may further vary across cohorts and between subpopulations as a function of sociohistorical constraints and differential opportunity structures (e.g., Hooker, 1999). Second, personal goals aim at desired outcomes at an intermediate level of aggregation that is located in between specific projects and broad values

(Bolkan & Hooker, 2012; Heckhausen et al., 2010). For example, young adults' personal goals concerning family formation are distinct from specific plans such as registering for online dating services or broader aims such as living happily. Third, and related to the level of aggregation, personal goals reach into the intermediate future (Heckhausen et al., 2010). In summary, personal goals can be defined as future-oriented mental representations of individuals' age-graded desired outcomes in the intermediate future (Salmela-Aro, 2009). Individuals utilize personal goals to take ownership of their future pathways, negotiate transitions in the life course, and optimize personal potentials (Baltes, Lindenberger, & Staudinger, 2006; Brandstädter, 1989; Wrosch & Freund, 2001). A flexible adjustment and reappraisal of established goals has shown to be beneficial in light of upcoming challenges, constraints, or shifting opportunity structures (Heckhausen et al., 2010).

Rooted in *life span theory* (Baltes et al., 2006), the *life-span model of motivation* proposes the four key mechanisms of *channeling*, *choice*, *co-agency*, and *compensation* to explain individuals' socialization more broadly, and the construction and adaptation of personal goals specifically (Salmela-Aro et al., 2007). In detail, the process of channeling refers to the impact of environments and changes in those environments on the range of possible developmental trajectories. Sources of influence that channel individuals into a certain developmental trajectory range from sociocultural beliefs, institutional structures, or historical markers (Elder & Shanahan, 2006; Salmela-Aro, 2009). However, individuals are not passive recipients of environmental influences, but rather make proactive choices concerning the selection into environments and trajectories (Baltes et al., 2006; Brandstädter, 1989). The degree to which agentic choices can be realized depends on existing institutional and structural constraints that individuals are embedded into (Settersten, & Gannon, 2005). The construction of

personal goals based on environmental influences serves as one potential psychological mechanism to select into respective trajectories. Choices and behavioral strategies to attain selected goals are further negotiated within social contexts and with regard to key figures linked to individuals such as family members, which is reflected in the process of co-agency. Lastly, the process of compensation describes the adjustment of goals as a reaction to success or failure on developmental outcomes and in response to challenges in goal pursuit.

Complementary to the life-span model of motivation, the *Motivational Theory of Life Span Development* (Heckhausen et al., 2010) outlines goal disengagement with respective control processes (i.e., distancing from a goal and self-protection) as adaptive response to unrealistic or maladaptive personal goals in light of emerging opportunities and constraints in more depth. For instance, it could be shown that passing biological age deadlines of fertility led to women's reappraisal of motherhood-related goals (Heckhausen, Wrosch, & Fleeson, 2001). Individuals' ability to alter personal goals in response to external stressors and shifting opportunities has further been linked to increased levels of well-being compared to rigid goal pursuit across the life span (e.g., Boerner, 2004; Klinger, 1977; Miller & Wrosch, 2007).

2.2 Goal Construction, Pursuit, and Adaptation in Young Adulthood

Young adulthood is a particularly sensitive time period for careful planning and goal construction in many interrelated life domains because the timing and sequencing of resulting life course transitions has long-lasting implications for well-being and other developmental outcomes (e.g., Amato & Kane, 2011; Bozick & Deluca, 2005; Furstenburg, 2007; Schulenberg, Bryant, & O'Malley, 2004). For instance, on-time enrollment in post-secondary education is related to a higher odds of degree completion at a four-year institution compared to delayed enrollment (Bozick & Deluca, 2005), which subsequently fosters higher economic stability and

better health outcomes (Hout, 2012; Dupre, 2007). Enrollment and completion rates of post-secondary education seem to diverge increasingly by gender, whereby women tend to outnumber men on today's college campuses (Buchmann, DiPrete, & McDaniel, 2008). The achievement of most, if not all, of five markers commonly used to conceptualize the achievement of adulthood status (i.e., leaving the parental home, finishing education, entering the workforce, getting married, and becoming a parent; Furstenberg, Rumbaut, & Settersten, 2005), and their timely completion has been associated with increased levels of well-being and psychosocial adjustment (Amato & Kane, 2011; Schulenberg et al., 2004).

Because goal content is closely tied to age-graded developmental tasks, previous studies documented that young adults most commonly identified salient personal goals related to the five transition markers (Nurmi & Salmela-Aro, 2006; Salmela-Aro, 2009). Even though biological age is only a crude measure of developmental task progression, Salmela-Aro and colleagues (2007) have shown normative declines in friendship and educational goals along with an increase in work, family, and health goals during the transition to adulthood. Individuals further optimize salient personal goals through the application of three specific heuristics (Heckhausen et al., 2010). First, personal goals should be chosen that are in congruence with the opportunities and constraints young adults are facing. Second, choice of personal goals in one life domain should also take personal goals of other domains into consideration because of their interconnected nature. For instance, early family formation may have short- and long-term consequences for transitions related to education and labor force participation (Furstenberg, 2007; Osgood, Ruth, Eccles, Jacobs, & Barber, 2005). Immediate and time-lagged costs and gratifications are weighted against each other across multiple life domains. Third, maintaining a diverse pool of personal goals facilitates young adults' goal adaptation in light of change and upcoming hurdles

to goal pursuit (Heckhausen et al., 2010; Nurmi & Salmela-Aro, 2006). Goal disengagement is therefore perceived as less costly when alternative personal goals seem available and pursuable (e.g., Wrosch, Bauer, & Scheier, 2005), and a successful adjustment of personal goals increases individuals' well-being (Salmela-Aro, 2009; Wrosch, Scheier, Miller, Schulz, & Carver, 2003).

The construction and adaptation of personal goals is closely tied to individuals' transition patterns in young adulthood (Salmela-Aro, 2009). It was shown that transitioning into marriage and parenthood predicted young adults' subsequent family-related goals (Salmela-Aro, Nurmi, Saisto, & Halmesmäki, 2000). Thus, personal goals are constantly reconstructed to match specific stages of a transition (e.g., from birth- to family-related goals in the transition to parenthood). The salience and appraisal of preceding personal goals, however, also influences the timing of subsequent transitions (Salmela-Aro, 2009). Holding more family-related goals in young adulthood was associated with earlier cohabitation or marriage (Salmela-Aro et al., 2007). The appraisal of educational goals further predicted subsequent educational and occupational trajectories (Nurmi & Salmela-Aro, 2002).

Furthermore, differences between young men and women's salience and appraisal of personal goals and transition patterns emerged in some studies (e.g., Hooker et al., 1996; Salmela-Aro et al., 2000). Work-related goals and finding a job that matches one's educational attainment continued to be more important for men than women (Nurmi & Salmela-Aro, 2002), which could highlight men's more rigid life course structure (Neugarten & Datan, 1996). Hooker (1996) showed that young mothers and fathers were equally likely to report positive hopes and visions of their future parenting roles, but women were more likely to report feared parenting selves as well, which could be attributed to their higher rate of engagement in caretaking duties. Nevertheless, previous studies often neglected the interrelated nature of trajectories in work and

family by examining domain-specific personal goals in isolation, and did not account for external factors beyond individuals' control such as institutional structures or the economic climate.

2.3 Young Adults' Personal Goals and the Great Recession

Over the last decades, extensive demographic changes have been documented for the timing and sequencing of the *five adulthood markers* leaving the parental home, finishing education, entering the labor market, getting married, having children in many Western nations (e.g., Billari & Liefbroer, 2010). Thus, becoming an adult is now less predictable and more prolonged, diverse, or even disordered as uncertainties due to the increased globalization of economies and the erosion of former life scripts (Settersten, 2007; Shanahan, 2000). According to the *life course framework* (Elder & Shanahan, 2006), historical time in general, and the intersection between the timing of historic events and individuals' or cohorts' place in the life course during historic events, provides an important context for human development. Historic events such as the Great Recession may further complicate individuals' decision-making in the transition to adulthood as young workers are particularly vulnerable for periods of unemployment and frequent job shifts in the beginning of their careers (Buchholz & Kurz, 2008; Kalleberg, 2009). Economic uncertainties have been further linked to young men and women's delayed commitment to family transitions (Mills & Blossfeld, 2009). In the case of the Great Recession, young adults, particularly young male workers, have been disproportionately affected by unemployment and income loss in Germany and other nations (Jenkins et al., 2013), which may trigger gendered responses to the crises in terms of transition patterns and personal goal adaptations.

Strategic planning and accumulating key personal resources, such as education and social networks, are crucial for launching into adulthood in today's competitive economy (Hellevik &

Settersten, 2012; Vuolo, Staff, & Mortimer, 2012). However, the impact of historic events such as the 2008 recession has rarely been considered in the study of young adults' personal goals (Heckhausen et al., 2010). Ranta, Dietrich, and Salmela-Aro (2013) examined profiles of Finnish young adults' personal goals and concerns in the domain of career and romantic relationships at age 20 and 23 over the recession years. They found that career and educational goals were most prevalent at both ages, personal goals related to romantic relationships and family formation were ranked as the third-most prominent. Furthermore, concerns about young adults' financial resources were highly prominent due to the financial climate during the study period, which could explain participants' focus on goals in the domain of work rather than family (Mills & Blossfeld, 2009). The heuristic of goal diversity, however, would suggest that nominating personal goals across multiple life domains is more adaptive (Heckhausen et al., 2010), which was not addressed in that study. Studying young adults' personal goals over a three-year period in their early 20's may further be too narrow to detect developmental changes in personal goals since family-related goals may emerge at later ages during the young adulthood years, and its salience at a certain time period in the life course may differ by gender (Brandstädter, 1989; Nurmi & Salmela-Aro, 2002).

Previous evidence suggests that flexible goal adjustment through goal disengagement and the pursuit of alternative personal goals is related to higher levels of psychosocial adjustment, particularly during unstable times (Heckhausen & Chang, 2009). However, Vuolo and colleagues (2012) found that maintaining high levels of *agentive striving* concerning work and career-related goals shielded young adults from unemployment in the beginning of the recession years. Because life domains are intertwined, personal goals from competing domains have to be integrated and investment in some domains may come at the cost of others. It is therefore unclear if maintaining

high career aspiration at the onset of the recession was accompanied by disengagement from personal goals of other life domains because agentic striving in goal pursuit was not examined across multiple domains. Additionally, young adults' ability to plan and set goals for the future may partly depend on their amount of personal resources (Hellevik & Settersten, 2012), which could perpetuate existing inequalities. Although infrequently done, systems of stratification, such as gender and community type, should therefore be considered in the study of young adults' personal goals and the impact of the recession on goals.

2.4 The Present Study

How young adults plan and set goals for work as well as family-related trajectories, and how they allocate resources to achieve personal goals depend on individuals' appraisal of the salience and importance of life goals, which may be subject to change as adaptation to macrostructural conditions such as labor market prospects (Heckhausen & Chang, 2009). Nevertheless, few studies incorporate factors beyond individuals' control or the role of social change in modern societies in the study of personal goals (Heckhausen et al., 2010).

The present study therefore seeks to integrate life course themes into the analysis of young adults' personal goals as a useful lens for examining how historic events such as the Great Recession influence change and stability in goal appraisal. Because domain-specific developmental trajectories are intertwined, personal goals will be examined in a holistic manner looking at profiles of goal appraisals from multiple life domains simultaneously over time, which has rarely been done in previous studies (e.g., Salmela-Aro et al., 2000). Moreover, previous work relied on rather homogeneous samples in terms of socioeconomic backgrounds and educational attainment. If longitudinal data were used, the nested structure of individuals' responses over time was rarely taken into account (e.g., by estimating independent models for

each time point; Ranta et al., 2013). The present study extends this line of work by drawing on nationally-representative panel data that reflect a broad age range and by applying a group-oriented methodological approach suitable for longitudinal data.

Based on this backdrop, the present study on young adults' profile of personal goal appraisals from 2008 to 2012, reflecting the onset of the recession and the transition into the recovery period for the German economy, has four main research aims. First, I examined stability and change in young adults' perceived importance of personal goals across multiple life domains such as family, work, and self-fulfillment over the study years by: (1) extracting profiles of goal appraisals, and (2) tracking individuals' movement between profiles during the recession years. Because of the exploratory nature of the present study, no specific hypotheses were formulated. However, it was anticipated that young adults would adjust their personal goals over the recession years in response to increased economic pressure. Some young adults may have disengaged from previous family formation goals in order to establish themselves economically (Mills & Blossfeld, 2009; Ranta et al., 2013). Other young adults may have reacted in an opposite way and disengaged from work-related goals and show a higher commitment to family goals (Osgood et al., 2005).

Second, I anticipated gender differences in changing profiles of goal appraisals. Young women may be more inclined to invest in family-related goals in response to the recession compared to men, as well as at younger ages than men (Hooker et al., 1996; Salmela-Aro et al., 2000). This association, however, may also differ by individuals' levels of educational attainment (i.e., women with higher levels of educational attainment may be less likely to turn to family-related goals over the recession years; Mills, Rindfuss, McDonald, & te Velde, 2011). Because young men have been disproportionately affected by the Great Recession (Jenkins et al.,

2013), they may tend to postpone family-related commitments even further (Mills & Blossfeld, 2009).

Third, a bi-directional relationship between accomplished transition statuses and goal appraisal was expected in a way that accomplished transitions increase respective goal appraisal and vice versa (e.g., Nurmi & Salmela-Aro, 2002; Salmela-Aro et al., 2007). Thus, profiles with low or high appraisals of family- or work-goals should correlate with a lower or higher prevalence of reported transition status in family or work, respectively. Fourth, the relationship between profiles of appraisals and life satisfaction is examined. I expect that latent profiles representing goal diversity and goal adjustment of unrealistic personal goals are related to higher levels of life satisfaction (Heckhausen et al., 2010; Wrosch et al., 2000).

2.5 Method

2.5.1 Data

Data were drawn from the German Socio-Economic Panel (SOEP; v29), which is the longest-running nationally-representative longitudinal study of private German households (Haisken-DeNew & Frick, 2005). SOEP was initiated in West Germany in 1984 and extended to East German territories in 1990. Every year, nearly 15,000 households, and more than 25,000 persons are sampled to measure micro-data on stability and change in persons, households, and families' living conditions. The sample consists of several subsamples such as West Germans, East Germans, Immigrants, or high-income earners. Refreshment samples are also added to the main sample periodically (e.g., in 1998, 2011, or 2012). The survey repeats a core set of questions each year and includes alternating topic modules such as health, time use, or social participation that are repeated every 5-10 years. The age range of the SOEP sample reflects the whole life span from birth to death. Within participating households, all household members

aged 16 and older were interviewed. Children born into participating SOEP households entered the study automatically as well. However, parents provided information about children until they reach the required age for independent individual interviews.

Because the present study focuses on examining young adults' changing profiles of personal goal appraisals over the recession years, I examined two waves of data: (1) individuals' assessment in 2008, which captures the onset of the economic recession; and (2) individuals' assessment in 2012, which reflects the transition into the recovery period of the economic downturn. A subsample of young adults aged 18 to 29 years in 2008 was selected ($N = 3,285$; 52.3% women; $M (SD)_{age} = 23.32 (3.51)$). Even though new participants may enter the study at any given year by moving into a participating SOEP household, study attrition may occur temporarily or permanently through refusal of participation, moving abroad, or death (Haisken-DeNew & Frick, 2005). However, young adults are at the highest risk for temporary or permanent attrition because of high residential mobility and a higher likelihood of residing in a single-person household. Strategies to compensate for sample attrition in this age group between the 2008 and 2012 survey waves are outlined in the analytic strategy.

2.5.2 Study Variables

2.5.2.1 Personal goals. In 2008 and 2012, participants were asked to rate the importance of nine personal goals in different domains of life ranging from career and economics (e.g., successful in career; homeownership, being able to afford things), family formation (e.g., happy marriage; having children), and personal fulfillment (e.g., traveling; being politically engaged). The questions were introduced in the following way: "Different things are important to different people. How important are the following things to you?" Answers for each of the nine items ranged from 0 (not important at all) to 3 (very important).

2.5.2.1 Transition statuses. In addition to participants' annual partnership and employment status, respondents were asked retrospectively if changes occurred in their family situation over the past years, and if so, when (month and year). The list of changes included for instance starting a new relationship, moving in with a partner, getting married, becoming a parent, or divorcing. For the purpose of this study, family transitions were restricted to entering marriage and parenthood (0 = no; 1 = yes). Moreover, biographical information on individuals' employment situation was collected, such as finishing education, entering employment, or switching jobs. Again, the focus was on whether individuals were in education or (at least partially) employed (0 = no; 1 = yes).

2.5.2.1 Life satisfaction. In both study years, respondents were asked to rate a single item on how satisfied they were with their life in general. Responses on both scales ranged from 0 (completely dissatisfied) to 10 (completely satisfied).

2.5.2.1 Demographic information. Information about study region (0 = East Germany; 1 = West Germany), community type (0 = rural; 1 = regions undergoing urbanization; 2 = urban), participants' age (in full years and dummy-coded as younger and older age group into 0 = 18-23 years; 1 = 24-29 years), gender (0 = female; 1 = male), educational attainment (in full years), family status (0 = single; 1 = married; 2 = separated, divorced, or widowed), employment status (0 = not employed; 1 = full-time employed; 2 = part-time or marginally employed), and net monthly household income (in Euros) was available for both years of assessment. These demographic indicators served as control variable to adjust for minor differences in the sociodemographic composition in the sample, and in some cases as distal variables (see below).

2.5.3 Analytic Strategy

To assess change and stability in the importance of young adults' personal goals across multiple life domains simultaneously, a series of *latent transition analysis* models were used. In general, latent transition analysis (LTA) belongs to the group of mixture models and is a longitudinal application of *latent class and latent profile analysis* (Collins & Lanza, 2010). This means that the grouping variable of interest to create a typology of individuals is not directly observable, but identified by a measurement model of indicator variables representing the latent construct. Rather than fitting two cross-sectional latent class or latent profile models for each panel wave, LTA enables the detection of latent group membership for subsequent waves conditional on the latent group membership at prior waves. Furthermore, LTA models also estimate the transition probabilities between latent classes from Wave 1 to Wave 2. For this study, ratings of the importance of nine personal goals assessed in 2008 and 2012 were entered into the LTA model, whereby latent group membership in 2012 was conditional on individuals' initial latent group membership in 2008. In addition to the prevalence of latent class membership in both survey years, the incidence of transitioning from one latent group to another over time were estimated as well, which makes it particularly suited to model developmental trajectories (Nylund, Muthén, Nishina, Bellmore, & Graham, in press).

Analyses were conducted in Mplus (version 7.11) following the procedure outlined by Nylund and colleagues (in press). First, cross-sectional latent profile models (LPA) were fitted for 2008 and 2012 separately in order to explore the underlying measurement model for each wave. Relative fit indices such as AIC and BIC, measures of entropy, and the interpretability of results were employed to determine the appropriate number of latent classes for nested models (only differentiated by the number of classes) in each wave (Geiser, 2013). Furthermore, a variety of different models were fitted allowing the means and/or the variances of the indicator

variables to vary freely or be constrained across profiles in order to determine the optimal latent goal appraisal profiles in 2008 and 2012 (Masyn, 2013; Pastor, Barron, Miller, & Davis, 2007). Candidate models increased in complexity, starting with the most parsimonious variance/covariance structure up to the most complex model, which allowed both the variance and covariance to vary (Masyn, 2013).

Second, a LTA model was fitted to estimate the transition probabilities over time by regressing the categorical latent class variable in 2012 on the categorical latent class variable in 2008 (derived in Step 1). Third, the distal variables¹ age at baseline and gender, educational attainment, partnership and employment status, as well as life satisfaction at each time point were entered into the established LTA model using the 3-step approach (Asparouhov & Muthén, 2013; Nylund-Gibson et al., 2014). This step tested if latent profile membership predicted sociodemographic characteristics, transition status in the domain of work and family, and life satisfaction at both time points.

2.5.4 Missing Data

Attrition due to individuals' temporary or permanent refusal of participation is a ubiquitous problem in panel research. However, ignoring missing data patterns or simply using information from the remaining cases with complete information can lead to biased results and may significantly reduce statistical power and bias parameter estimates (Acock, 2012). In order to detect systematic bias due to missing data, missing data were identified and then used to predict attrition against key descriptive variables, such as gender and educational attainment, using logistic regression.

¹ Note that distal variables are referred to as “distal” because they are not part of the estimation process that is deriving the latent profiles. Instead, distal variables are used to describe and compare individuals who are classified into different latent profiles on specific characteristics (e.g., men are more likely to be classified into a certain latent profile).

Of the 3,285 participants who met the age criteria, 1,682 completed both the 2008 and the 2012 assessment. 1,350 respondents completed only the 2008 assessment and 253 individuals the 2012 wave only. Lower levels of education and being from West Germany was significantly associated with nonresponse in 2012 ($\text{Exp}(B) = 0.93, p < .01$, and $\text{Exp}(B) = 1.45, p < .001$, respectively). Respondents who only answered the 2012 wave were more likely to be partnered ($\text{Exp}(B) = 5.22, p < .001$), which could be a reflection of the fact that those individuals joined the study through moving into a participating SOEP household.

Because more than half of the respondents in the final sample in this study have complete data on the key study variables in both waves, a full information maximum likelihood approach following the assumption of missing at random was used (MAR; Acock, 2012). This approach does not impute missing values as in multiple imputation models, but rather uses all available information in its maximum likelihood estimation. Thus, cases with missing data will be included in the maximum likelihood computations in contrast to traditional listwise or pairwise deletion approaches in handling missing data (Acock, 2012; Little, Jorgensen, Lang, & Moore, 2013).

2.6 Results

2.6.1 Descriptive Profile of Personal Goals and Life Satisfaction

Table 1 summarizes the sociodemographic sample characteristics over the study years. It can be seen that the sample composition was fairly similar for both waves with regard to the share of male participants (about 48%), those from West Germany (about 74%), as well as from rural (22-24%), urban (45-46%), and regions undergoing urbanization (31-32%). Participants' mean years enrolled in secondary education increased from 2008 to 2012 as the sample aged and a larger share of respondents transitioned from schooling and training to part- or full-time

employment (from about 46% to 68%). Likewise, there seemed to be a normative decline in the percentage of single individuals (from about 88% to 75%) and an increase in those who were married (11% to 23%).

A descriptive profile of respondents' personal goals and overall life satisfaction over the study years is presented in Table 2. Respondents' mean rating of the importance of individual personal goals was relatively stable from 2008 to 2012, particularly for *traveling* and *fulfilling one's potential*. Family-related goals such as *happy marriage* and *having children* increased slightly over the study period and older participants endorsed those items more at both time points. This finding indicated an age-related increase in the salience of family formation goals and developmental tasks over the study years.

Furthermore, women's ratings of family goals were higher than those of their male counterparts in both study years, particularly for *having children* and pro-social engagement such as *helping others* (see Appendix 2.A). Ratings for finance-related goals such as *afford something* and *success in job* seemed to decrease from 2008 and 2012. Life satisfaction seemed to increase somewhat from 2008 to 2012 for the sample overall, whereby women's ratings rose at a higher rate than males.

Table 3 further summarizes the correlation matrix of personal goals in 2008 and 2012. It can be seen that the direction and size of the correlation coefficients are fairly similar across the study years. There were weak to moderate positive associations between personal goals related to financial and occupational success such as being able to afford something and success in job or being able to afford something and owning a house ($r_{08} = .28$, and $r_{12} = .22$, respectively). Relatedly, there was a moderate positive association between happy marriage and having children in both study years ($r_{08} = .48$, and $r_{12} = .46$). Fulfilling one's potential was further

moderately correlated with success in job, but to a lesser degree with travels, happy marriage, and interestingly, not at all with having children.

2.6.2 Cross-sectional Latent Profile Analyses Results

2.6.2.1 Model selection. For Aim 1, a series of nested LPA models for each time point was fitted separately by increasing the number of latent profiles starting with one up to seven latent profiles. The variance and covariance configurations of those models ranging from most parsimonious (i.e., variances are constrained to be equal across profiles and covariances fixed to 0) to most complex (i.e., variances and covariances vary freely across profiles) variance/covariance structure were further alternated in order to determine the optimal latent goal appraisal profiles in 2008 and 2012. Latent profile solutions and model fit indices such as AIC, BIC, sample-size adjusted BIC, Entropy, Vuong-Lo-Mendell-Rubin and Lo-Mendell-Rubin likelihood ratio test were recorded and compared for all models.

With regard to the alternating variance/covariance structures, the derived LPA profile solutions of the candidate models across four the different variance/covariance parameterizations were astonishingly similar (results not shown). The most parsimonious parameterization with a class-invariant, diagonal variance/covariance structure was chosen and the following results are based on this configuration. The goodness of fit statistics for the cross-sectional LPA models for 2008 and 2012 are summarized in Table 4. It can be seen that AIC, BIC, sample-size adjusted BIC continued to drop across the solutions with one up to seven latent profiles. Those fit indices therefore did not point toward a distinctly superior model. Based on high entropy values indicating a better separation between classes and significant Vuong-Lo-Mendell-Rubin and Lo-Mendell-Rubin likelihood ratio test values for LPA solutions with two and six profiles for both study years, which were subsequently examined more closely.

More specifically, significant values of the likelihood ratio test for the 2 and 6-latent profile solutions suggested that the estimated models fit significantly better than solutions with one profile less (e.g., the five-profile solution, which was then rejected). Considering the interpretability of the target models, the solution with six latent profiles was rejected in favor of the more parsimonious two-profile solution for both time points as final LPA models. Furthermore, the class counts for certain profiles of the six-profile solution were quite small (e.g., 6 percent and 5 percent of the sample for the smallest latent profile in 2008 and 2012, respectively), which is associated with greater uncertainty and classification error compared to profiles with larger proportions of the sample (Masyn, 2013). Although the BIC dropped considerably from the five to the six latent profile solution and seemed to level off subsequently, the two-latent profile solution for both study years were selected as final cross-sectional LPA models.

2.6.2.2 Description of cross-sectional LPA profiles. Table 5 shows the means and standard deviations of the indicator items for both latent profiles in 2008 and 2012. The profiles for both study years are further visualized Figure 2.1. In both study years, Profile 1 represented a smaller group consisting of about 37 and 31 percent of the sample (in 2008 and 2012, respectively). Profile 2 consisted of 63 and 69 percent (in 2008 and 2012, respectively) and therefore captured the majority of the sample. The two latent profiles seemed fairly similar concerning the means of most indicator items, although means were consistently lower in Profile 1 compared to Profile 2, except the means of the family formation goals (see Table 5 and Figure 2.1). More specifically, Profile 1 is characterized primarily by low ratings on the family formation goals having a happy marriage and having children and was therefore labeled *low family formation endorser*. Profile 2 was labeled *high family formation endorser* because of the

relatively high item means on having a happy marriage and having children. The means of the indicator items helping others and owning a home or car were also higher in Profile 2 compared to Profile 1. Lastly, both profiles looked remarkably similar across the study years, even though means and standard deviations of the indicator items differ slightly between 2008 and 2012.

2.6.3 Longitudinal Latent Transition Analyses Results

2.6.3.1 Latent transition probabilities. In order to model change in latent profile membership over time, a multinomial logistic regression of the categorical latent class variable in 2012 on the categorical latent class variable in 2008 was estimated in the cross-sectional LPA models. The resulting transition probabilities of the combined LTA model represent conditional probabilities of profile membership in 2012 given the profile membership in 2008 (Nylund et al., in press). For the model specifications, the means of the indicator variables were allowed to differ for the profiles at both time points (i.e., the means within the latent profiles were not constrained to be equal across time points).

The bottom of Table 5 shows the derived transition probabilities indicating the patterns of change of participants from the low family formation endorser profile to the high family formation endorser profile over time and vice versa. It can be seen that the majority of respondents did not transition from one latent profile to another over the study period. More specifically, the proportion of the sample that either belonged to the low or high family formation endorser latent profile in 2008 and 2012 comprised about 85 percent. Among participants with stable latent profile membership, participants in the high family formation endorser profile at both time points were the majority ($N = 1,904$; 58%), followed by participants in the low endorser profile at both time points ($N = 870$; 27%).

Results further indicated that participants in the high family formation endorser group had a .19 probability of transitioning into the low family formation endorser profile over the study period. The group who transitioned from high to low endorsement profiles consisted of 217 participants (7% of the sample). On the contrary, participants in the high family formation endorser profile in 2008 had a .81 probability of remaining in that profile in 2012 as well. Participants in the low family formation endorser profile in 2008 had a .48 probability to transitioning into the high family formation endorser profile by 2012 ($N = 288$; 9% of the sample).

2.6.3.2 Regression results of the final LTA model. Lastly, the time-invariant variables age and gender, as well as the time-varying variables life satisfaction, partnership and employment status at each wave were included in the final LTA model using the 3-step approach (Asparouhov & Muthén, 2013). These indicators were treated as distal variables that did not influence the estimation process of the latent profiles, but help to explain group differences among individuals that are classified into different latent profiles (Nylund-Gibson et al., 2014). Each variable was entered into the model separately by regressing the most-likely profile membership variables on the distal variables. Error rates of the most likely class membership variables were prefixed to account for measurement error of the classification and the low family formation endorser group was used as reference group in the regression models.

Results of the models regressing most likely class membership on the distal variables (each entered separately) in the final LTA model are displayed in Table 6. Three out of four distal variables yielded significant effects. More specifically, older participants were more likely to be in the high family formation endorser profile in 2008, but not in 2012 ($B (SE) = 0.09 (0.01)$, $p < .001$, and $B (SE) = 0.03 (0.01)$, *ns*, respectively). Females were more likely to be in the high

family formation endorser profile in 2008 and 2012 compared to their male counterparts ($B (SE) = -0.80 (0.001), p < .001$, and $B (SE) = -0.55 (0.01), p < .001$, respectively). Individuals with lower levels of education were more likely to be in the high family formation endorser profile compared to those with higher levels of education, but again only in 2008 ($B (SE) = -0.10 (0.031), p < .001$, and $B (SE) = -0.01 (0.02), ns$, respectively). Compared to the low family formation endorser profile, respondents grouped into the high family formation profile reported significantly higher levels of life satisfaction in 2008 and 2012 ($B (SE) = 0.12 (0.03), p < .001$, and $B (SE) = 0.12 (0.03), p < .01$, respectively). Partnered ($B (SE) = 1.29 (0.12), p < .001$, and $B (SE) = 1.68 (0.13), p < .001$, respectively) as well as employed individuals ($B (SE) = 0.30 (0.10), p < .01$, and $B (SE) = 0.40 (0.12), p < .01$, respectively) were further more likely to be in the high family formation endorser profile.

2.7 Discussion

The Great Recession has affected young adults, particularly young male workers, greatly in Germany and other nations in terms of their exposure to unemployment and its ripple effects on uncertainty in other life domains (e.g., Jenkins et al., 2013; Mills & Blossfeld, 2009). Because finding a stable job and establishing economic independence from the parental home is an essential step in the launch to adulthood, careful planning in the acquisition and allocation of resources has become a key strategy in dealing with economic pressure (Hellevik & Settersten, 2012; Vuolo et al., 2012). Careful planning in the transition to adulthood can be understood and conceptualized as realistic goal setting, goal pursuit, as well as the flexible adjustment of goals in light of substantial challenges and external stressors (Heckhausen et al., 2010; Salmela-Aro, 2012). More specifically, individuals' appraisal of personal goals is determining the allocation or

withdrawal of resources toward specific desired outcomes of a developmental period such as the transition into employment or parenthood (Nurmi & Salmela-Aro, 2006).

This study examined change and stability in German young adults' personal goal appraisals over the Great Recession years. The group-based analyses took a holistic approach by forming profiles of goal appraisals across multiple life domains because developmental trajectories in different domains are intertwined and should not be studied in isolation (Elder & Shanahan, 2006). Life domains comprised family, work, leisure, and self-fulfillment, which are closely linked to commonly used adulthood markers (e.g., Furstenberg et al., 2005). Using latent transition analysis (Collins & Lanza, 2010), two latent profiles of goal appraisal at each wave of data collection were found, which were remarkably stable over time. It was surprising that the cross-sectional profiles differed mainly in the endorsement of family formation (high vs. low family formation endorser) and that transitions between latent profiles over time were less common, particularly for respondents in the high endorser profile. Although the findings mirror normative trends in personal goal appraisals over the young adulthood years (e.g., Nurmi & Salmela-Aro, 2006), the following paragraphs will discuss the lack of goal adaptation in light of the economic pressure.

2.7.1 Normative Trends in Personal Goal Appraisals and the Recession

Previous research established age-graded trends in the salience of different personal goals over the life course, which is closely linked to developmental task progression (Havighurst, 1952; Heckhausen et al., 2010). Over the young adulthood years, the importance of health-, work- and family-related goals has shown to increase, along with decreasing appraisals of personal goals regarding friendship and education (Salmela-Aro et al., 2007). Our results are in line with these findings because the derived profiles of goal appraisals highlight the salience of

family formation, a milestone of reaching adulthood, as a point of divergence between the profiles. Because personal goals in the domain of work and self-fulfillment were appraised similarly high in both profiles, although slightly lower in the low family formation endorser profile, it could be the case that the salience of those goals was heightened for all participants due to the economic pressure (Ranta et al., 2013). Particularly in Germany, individuals entering the labor market are disproportionately at risk for spells of unemployment or unstable work because labor market regulations protect experienced workers rather than promoting new opportunities (Buchholz & Kurz, 2008). New hires were further put on hold during the Great Recession (Möller, 2010). Thus, goal appraisals for work and self-fulfillment did not uniquely differentiate the profiles because strategic investments related to work may have been required for all young adults in these cohorts (Vuolo et al., 2012).

Older participants were more likely to be in the high family formation endorser profile, which supports the notion that the salience of those goals rises during the transition to adulthood (Salmela-Aro et al., 2007). Furthermore, over the study period, individuals were more likely to transition from the low family formation endorser profile to the high family formation endorser profile rather than the other way around. This indicates that as the sample ages, family formation goals gain in importance. The rising salience of family formation in the “later half” of the young adulthood years is also reflected in realized transition patterns (Buchmann & Kriesi, 2011). For example, the average ages at entering marriage (33.5 years for males and 30.7 years for females in 2012) and parenthood (29.5 years for females in 2014) among German young adults both circle around the late 20’s and early 30’s (Statistisches Bundesamt, 2016). Nevertheless, a substantial proportion of our sample remained in the low family formation endorser profile over the study period (27%), which could be related to inter-individual differences in educational

attainment and socio-economic status because particularly highly educated individuals seem to enter family commitments later (e.g., Mayer & Schulze, 2013).

However, it has been suggested that economic pressure is leading to difficulties in finding or maintaining stable employment, which may cause hesitation to commit to family-related transitions (Mills & Blossfeld, 2009; Sobotka, Skirbekk, & Philipov, 2011). From a theoretical perspective, postponed family commitments can be seen as a coping strategy that frees resources from the domain of family life to invest those into work-related goals when facing external stressors (e.g., Heckhausen & Chang, 2009), which was in line with the expectations. Ranta and colleagues (2013) showed that Finish young adults (aged 19-23 years) appraised work and educational goals more highly than goals related to family formation over the Great Recession. Yet, the majority of the sample in this study was classified into the high family formation profile at both time points and that respondents were likely to either remain in this profile (58%) or transition from the low family formation endorser profile to the high profile (9% of the sample). This discrepancy could be related to the narrow age range of the Finish sample compared to the sample of this study (aged 19-29 years), in addition to the more severe and long-term effect of the Recession on Finish youth compared to Germany (Jenkins et al., 2013).

2.7.2 Goal Adaptation and Transition Patterns

According multiple theoretical frameworks on motivation over the life span (Baltes et al., 2010; Heckhausen, 1991; Heckhausen et al., 2010; Salmela-Aro et al., 2007), a flexible adjustment of goal appraisals is expected to be most beneficial in light of challenges, shifting opportunity structures, and external constraints such as the economic pressure of the recession. Several studies documented changes in personal goal appraisals over the life course ranging from adolescence to old age in response to developmental growth, decline, or external stressors (e.g.,

Heckhausen, 2001; Miller & Wrosch, 2007; Saajanaho et al., 2014). In our findings, however, this study demonstrated a remarkable amount of stability in individuals' latent profile membership over the study period. Given the theoretical and empirical evidence for the usefulness of flexible goal adaptation, how can the lack of movements between goal adaptation profiles be explained?

One possible explanation could be derived from the heuristic of goal diversity, which states that maintaining high appraisals of personal goals across multiple life domains is more adaptive (Heckhausen et al., 2010). For example, our high family formation endorser profile was characterized by consistently higher goal appraisals of all nine personal goals compared to the low family formation endorser profile and was associated with higher life satisfaction at both time points. Remaining in the high family formation endorser profile could also be seen as an indication of agentic striving in terms of maintaining high aspirations in multiple domains, which was a protective factor against unemployment in the transition from school to work during the recession (Vuolo et al., 2012). Relatedly, this study found that (at least partially) employed individuals were more likely to be classified into the high family formation endorser profile at both time points.

The strong stability in the classification into the high family formation endorser profile could be further explained by individuals' strong need and desire to build meaningful relationships and ties to others (Kahn & Antonucci, 1980). Forming meaningful and trustful bonds with others represents one of the most important developmental tasks across the lifespan (Havighurst, 1952), and has been shown to be a core protective system of resilience (Masten & Wright, 2009). The increase the salience of family-related goals that fulfill young adults' emotional needs could therefore represent a coping strategy to maintain well-being in light of

economic pressure and uncertainties. This notion is supported by the finding that being classified into the high family formation endorser profile was related to higher levels of life satisfaction. Partnered individuals were more likely to be classified in this profile at both time points as well, which is in line with previous studies on the close link between goals and transition patterns (Salmela-Aro et al., 2000).

2.7.3 Gendered Goal Appraisals and the Welfare State

Personal goal appraisal has been shown to differ for males and females because women tend to endorse goals related to close relationships and the family more highly (Holahan & Chapman, 2002; Hooker, 1996). Men, on the contrary, evaluate work and career goals as more important (Cinamon, & Rich, 2002; Nurmi & Salmela-Aro, 2002). The present study found that women were more likely to be classified into the high family formation endorser profile compared to their male counterparts. This trend is not surprising given that women still tend to be more heavily involved in the domain of family life by shoulder the majority of caretaking duties for offspring and aging kin, which is often related to severe cut-backs in their professional lives (Bianchi & Milkie, 2010; Mandel, 2011). Although men have become more involved in parenting, they tend to be less likely to take parental leave compared to females in dual-earner couples (Peterson & Gerson, 1992). If fathers take time off to parent, the time span tends to be shorter compared to the duration of mother's parental leave (e.g., Ray, Gornick, & Schmitt, 2010). For example, about 50 percent of German mother's plan to take parental leave of more than 24 months whereas 61 percent of German father's stayed home for one to two months in 2008 (Bundesministerium für Familie, Senioren, Frauen und Jugend, 2008).

In the transition to adulthood, there is some evidence that family formation organizes the life courses of young men and women alike (Spéder, Murinkó, & Settersten, 2014), which

indicates that gendered pathways have converged to a considerable degree in many European countries (Winkler-Dworak & Toulemon, 2007). The degree to which young men and women's transition patterns and underlying goal appraisals vary may depend on the supporting institutions of the respective welfare that individuals' are embedded in. Particularly Germany's *conservative welfare state*, which enforces the male-breadwinner model upholding the ideology of gendered role distributions (Levy, 2013). More specifically, women's traditional role as caretakers and homemakers, even though the economic reality of families often requires dual incomes, are rewarded and sustained by the lack of formal childcare (particularly in West Germany) and joint taxation of couples. Those policies are likely to push young mothers out of the job market or into part-time employment (e.g., Mayer, 2009), which makes them more vulnerable to economic pressures in case of separation or divorce. The conservative welfare state actively promotes gender as *master status* (Levy, 2013), which imprints on young adults' goal setting and maintains existing differences between young men and women in Germany. Profiles of goal appraisals and respective gender differences in those may therefore look very different in countries being governed by different welfare regimes (e.g., Esping-Anderson, 1990).

2.7.4 Limitations

This study has several limitations. First and foremost, our results are based on a sample of German young adults and may therefore not be generalizable to young adults in other nations in Europe or the U.S. without precaution. Although the Great Recession affected national economies worldwide, with a heightened the risk of unemployment for young workers under the age of 25 particularly, the economic downturn in Germany was relatively mild and rather short-felt compared to other nations (Jenkins et al., 2013). Thus, profiles of goal appraisals from other national samples could differ vastly from our derived groups depending on the severity of the

recession as well as the supporting institutions such as the welfare state in the respective countries.

Second, although this study utilized longitudinal data assessed annually, our data lacked a baseline measure of individuals' personal goal appraisals before the onset of the recession in 2008. The personal goals items were not part of the annual core module of questions, but rather part of a specific topic module, which is repeated every five to ten years (i.e., the assessment schedule was 1995, 2004, 2008, and 2012). Expectations of the composition and change in profiles over the recession years were therefore based on previous theoretical and empirical work on age-normative goal setting and adaptation, contextual influences, and transition patterns (e.g., Buchmann & Kriesi, 2011; Heckhausen et al., 2010). Nevertheless, the latent profile solutions were replicated in an independent sample of 18-29 year-olds drawn from the 2004 SOEP assessment (see Appendix 2.B-2.D).

Third and relatedly, because the assessment of the personal goal items was on a fixed interview schedule in 2008 and 2012 only, this study could not capture individuals' immediate and short-term adaptation of personal goals in response to the recession because the recovery period was already in full swing in Germany by 2012 (Möller, 2010). One could speculate that one would see more movement between the latent profiles, or even a different grouping, if the data were collected one or two years earlier.

Fourth, the impact of the Great Recession was incorporated implicitly as study context during data collection, which was expected to imprint on individuals' goal setting and decision-making (Salmela-Aro, 2009). Although items on participants' personal finances were included in the study parameterization, other sociodemographic covariates such as educational attainment, income, or living arrangements may have been helpful to inform the profile extraction and

interpretation. Due to the limited scope of this study, an emphasis was placed on gender differences because the recession had an aggravated impact on males (Grabka & Frick, 2013).

Fifth, the conceptualization of personal goals in this study differed from the assessment in previous studies where participants are asked to generate a list of personal goals and rate them subsequently (e.g., Little, 1983; Ranta et al., 2013; Saajanaho et al., 2014). SOEP respondents were asked to rate the importance of a fixed list of nine goals from multiple life domains, which were in line with major milestones and developmental tasks of young adulthood (Havighurst, 1953; Furstenberg et al., 2005). There might have been other goals such as “softer transitions” to family formation (e.g., moving in a with a partner) and work (e.g., finishing or improving a degree or qualification), which were not covered. Furthermore, the wording of one item changed over the study period (from “owning my own house” in 2008 to “owning my own car” in 2012), whereby the rate of home ownership among young adults is fairly low in Germany compared to other OECD countries (Andrews, Sánchez, & Johansson, 2011).

Lastly, mixture models assume that each latent subgroup has a distinct component distribution and the overall distribution of the model is therefore a composite of a finite number of those components (Masyn, 2013). Due to skewed data, however, it may be the case that our high and low family formation endorser profiles describe distinct parts of one common one distribution rather than two distinct component distributions. Future studies using mixture modeling will need to confirm or revise our derived latent profiles, particularly because the nature of this study was rather exploratory.

2.7.5 Conclusion and Future Directions

Building on prior research on young adults’ goal setting and goal adaptation (e.g., Heckhausen et al., 2010; Hooker, 1996; Salmela-Aro, 2012), the present study contributes to the

literature on goal adaptation across multiple life domains. Furthermore, the role of an historic event on individuals' agentic goal adaptation was considered by comparing data collected at the beginning of the Great Recession and its recovery period. Evidence for a classification of young adults' goal appraisals was presented that predominantly differed in the low or high endorsement of family formation. Because the being classified into the high family formation endorser profile was related to higher levels of well-being in the beginning of the recession and in its recovery period, it was concluded that maintaining high aspirations on a diverse set of goals as well as holding on to goals that bring comfort is a protective factor in times of economic strain.

Although age-related trends and trends due to the recession were unable to be disentangled, the overall findings do not point toward a general rejection of family formation goals in favor of goals related to work or self-fulfillment because of the competitive economic climate (Kurz, Steinhage, & Golsch, 2005; Mills & Blossfeld, 2009). Goals concerning close relationships and family ties rather seem to be crucial source of emotional well-being and resiliency for the majority of respondents, particularly young women (Kahn & Antonucci, 1980; Masten & Wright, 2009).

Future studies should enrich the understanding of cross-national differences in profiles of goal appraisals and their adaptation to economic pressure (for Finland see Ranta et al., 2013). It would be particularly interesting to compare countries based on severity and length of the impact of the economic downturn because the so-called "German job miracle" was a unique response to the Great Recession (Frick & Grabka, 2013). Furthermore, structural components such as the setup of welfare states should be taken into considerations because they may buffer or expose young adults to the impact of the recession (Mills & Blossfeld, 2009; Settersten & Gannon, 2005). Second, the regional distributions of goal appraisal profiles may vary considerable

depending on regional opportunity structures in terms of available resources and infrastructure (Gerstorff, Ram, Goebel, Schupp, Lindenberger & Wagner, 2010). For instance, high family formation endorsers may be more likely to be clustered in East Germany due to the higher coverage of childcare facilities (Hank, 2002). Lastly, couples' joint responses in goal adaptations to economic pressures should be considered because particularly fertility choices are not made in social isolation (Elder & Shanahan, 2006).

Table 2.1

Sample Characteristics over the Study Years (N = 3,292)

Indicator	2008	2012
Age, <i>M (SD)</i>	23.31 (3.53)	27.42 (3.55)
Male, <i>n (%)</i>	1,452 (47.9)	925 (47.8)
West Germany, <i>n (%)</i>	2,284 (74.5)	1,474 (73.7)
Community type, <i>n (%)</i>		
Urban	1,387 (45.0)	1,097 (46.0)
Urbanized	962 (31.2)	761 (31.9)
Rural	733 (23.8)	528 (22.1)
School attainment, <i>M (SD)</i>	11.97 (2.25)	13.01 (2.64)
Employed, <i>n (%)</i>		
Not employed	1,625 (53.6)	632 (32.6)
Part-time employed	415 (13.7)	316 (16.3)
Full-time employed	994 (32.8)	988 (51.3)
Monthly net income, <i>M (SD)</i>	2,780.18 (1,943.88)	2,943.52 (1,943.30)
Family status, <i>n (%)</i>		
Single	2,677 (88.2)	1,448 (74.8)
Married	332 (10.9)	453 (23.4)
Separated	25 (0.8)	34 (1.8)

Note. School attainment is presented in full years enrolled in primary and secondary education. The category “not employed” includes respondents who are still in (post-secondary) training, military, or community service. Net income refers to household rather than individual income.

Table 2.2

Descriptive Statistics of Personal Goals and Life Satisfaction (N = 3,034)

Indicator	2008	2012
<i>Personal Goals, M (SD)</i>		
Afford something	2.17 (0.59)	2.11 (0.62)
Help others	2.31 (0.58)	2.37 (0.58)
Fulfill one's potential	2.20 (0.66)	2.19 (0.67)
Success in job	2.29 (0.65)	2.15 (0.67)
Happy marriage	2.55 (0.65)	2.62 (0.62)
Have children	1.92 (0.91)	2.03 (0.91)
Own a home / car	1.49 (0.87)	1.54 (0.92)
Being socially active	0.91 (0.73)	1.10 (0.74)
Traveling	1.60 (0.84)	1.61 (0.83)
<i>Life Satisfaction, M (SD)</i>		
Overall life satisfaction	7.23 (1.61)	7.30 (1.53)

Note. In 2008, respondents were asked to rate the importance of “owning a home”. For the 2012 assessment, however, participants were asked to rate the importance of “owning a car”.

Table 2.3

Correlation Matrix of Personal Goals in 2008 and 2012 (N = 3,034)

2008	1.	2.	3.	4.	5.	6.	7.	8.
1. Afford something	--							
2. Help others	.06**	--						
3. Fulfill one's potential	.24***	.22***	--					
4. Success in job	.28***	.11***	.40***	--				
5. Happy marriage	.09***	.26***	.14***	.15***	--			
6. Have children	.01	.21***	.02	.03	.48***	--		
7. Own a home	.22***	.10***	.14***	.21***	.27***	.29***	--	
8. Being socially active	-.04*	.17***	.15***	.09***	.11***	.12***	.12***	--
9. Travel	.21***	.11***	.28***	.18***	.11***	.04*	.11***	.20***
2012	1.	2.	3.	4.	5.	6.	7.	8.
1. Afford something	--							
2. Help one's others	.14***	--						
3. Fulfill potential	.19***	.20***	--					
4. Success in job	.27***	.12***	.44***	--				
5. Happy marriage	.03	.22***	.07**	.06*	--			
6. Have children	-.02	.17***	.00	-.00	.46***	--		
7. Own a car	.19***	.06**	.08***	.17***	.26***	.31***	--	
8. Being socially active	-.07**	.12***	.19***	.12***	.08***	.10***	.06**	--
9. Travel	.19***	.14***	.27***	.17***	.05*	-.05*	.04*	.22***

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

Table 2.4

Goodness of Fit Statistics for Cross-sectional LPA Models in 2008 and 2012 (N = 3,034)

Classes	-LL	npar	AIC	BIC	SABIC	Entropy	VLM-Rubin	LM-Rubin
<i>2008</i>								
1	-29326.38	18	58688.76	58797.08	58739.88	-	-	-
2	-28190.46	28	56436.93	56605.42	56516.45	.98	< .001	< .001
3	-25259.58	38	50595.15	50823.82	50703.08	1.00	.09	.10
4	-24895.23	48	49886.45	50175.30	50022.79	.85	< .001	< .001
5	-24766.14	58	49648.29	49997.31	49813.02	.83	< .001	< .001
6	-22869.29	68	45874.57	46283.77	46067.71	.92	< .01	< .01
7	-22703.12	78	45562.25	46031.62	45783.79	.87	.24	.24
<i>2012</i>								
1	-18925.93	18	37887.86	37988.09	37930.90	-	-	-
2	-18163.46	28	36382.91	36538.83	36449.87	.99	< .01	< .01
3	-15740.85	38	31557.70	31769.30	31648.57	1.00	.65	.65
4	-15602.77	48	31301.54	31568.82	31416.33	.90	< .01	< .01
5	-15435.64	58	30987.28	31310.25	31125.98	.82	< .05	< .05
6	-15162.73	68	30461.46	30840.11	30624.08	.92	< .01	< .01
7	-15045.80	78	30247.60	30681.94	30434.13	.94	.47	.47

Note. - LL = log likelihood; npar = number of free parameters; AIC = Akaike information criterion; BIC = Bayesian information criterion; SABIC = sample-size adjusted Bayesian information criterion; VLM-Rubin = Vuong-Lo-Mendell-Rubin likelihood ratio test; LM-Rubin = Lo-Mendell-Rubin likelihood ratio test. Dash indicates criterion was not applicable to the model. Bold type indicates selected models.

Table 2.5

Means and Standard Errors of Personal Goals for the Two-Class LPA Solutions

2008 (N = 3,034)	Low FF	High FF
Afford something	2.11 (0.02)	2.21 (0.01)
Help others	2.11 (0.02)	2.43 (0.01)
Fulfill one's potential	2.07 (0.02)	2.27 (0.01)
Success in job	2.16 (0.02)	2.37 (0.01)
Happy marriage	1.79 (0.01)	3.00 (0.00)
Have children	1.40 (0.02)	2.23 (0.02)
Own a home	1.20 (0.02)	1.66 (0.02)
Being socially active	0.82 (0.02)	0.96 (0.02)
Travel	1.48 (0.03)	1.67 (0.02)
N (%)	1,126 (.37)	1,908 (0.63)
2012 (N = 1,936)	Low FF	High FF
Afford something	2.09 (0.02)	2.12 (0.02)
Help others	2.18 (0.02)	2.46 (0.01)
Fulfill one's potential	2.12 (0.03)	2.21 (0.02)
Success in job	2.10 (0.03)	2.18 (0.02)
Happy marriage	1.78 (0.02)	3.00 (0.00)
Have children	1.47 (0.03)	2.28 (0.02)
Own a car	1.21 (0.03)	1.70 (0.03)
Being socially active	1.03 (0.03)	1.13 (0.02)
Travel	1.53 (0.03)	1.65 (0.02)
N (%)	602 (.31)	1,334 (0.69)
<i>Transition probabilities from 2008 (rows) to 2012 (columns)</i>		
Low FF	.52	.48
High FF	.19	.81

Note. Low FF = low family formation endorser profile; High FF = high family formation endorser profile. Entries in bold indicate membership in the same latent profile at both time points (i.e., stability).

Table 2.6

Regression Results for Distal Variables Entering into the Final LTA Model (N = 3,034)

Distal variables	2008	2012
Age	1.10 ^{***}	1.03
Male	0.45 ^{***}	0.58 ^{***}
School attainment	0.90 ^{***}	0.99
Life satisfaction	1.13 ^{***}	1.12 ^{**}
Partnered	3.65 ^{***}	5.38 ^{***}
Employed	1.34 ^{**}	1.49 ^{**}

Note. Cells show odds ratios. School attainment is presented in full years enrolled in primary and secondary education. Reference category is low family formation endorser profile.

^{**} $p < .01$. ^{***} $p < .001$.

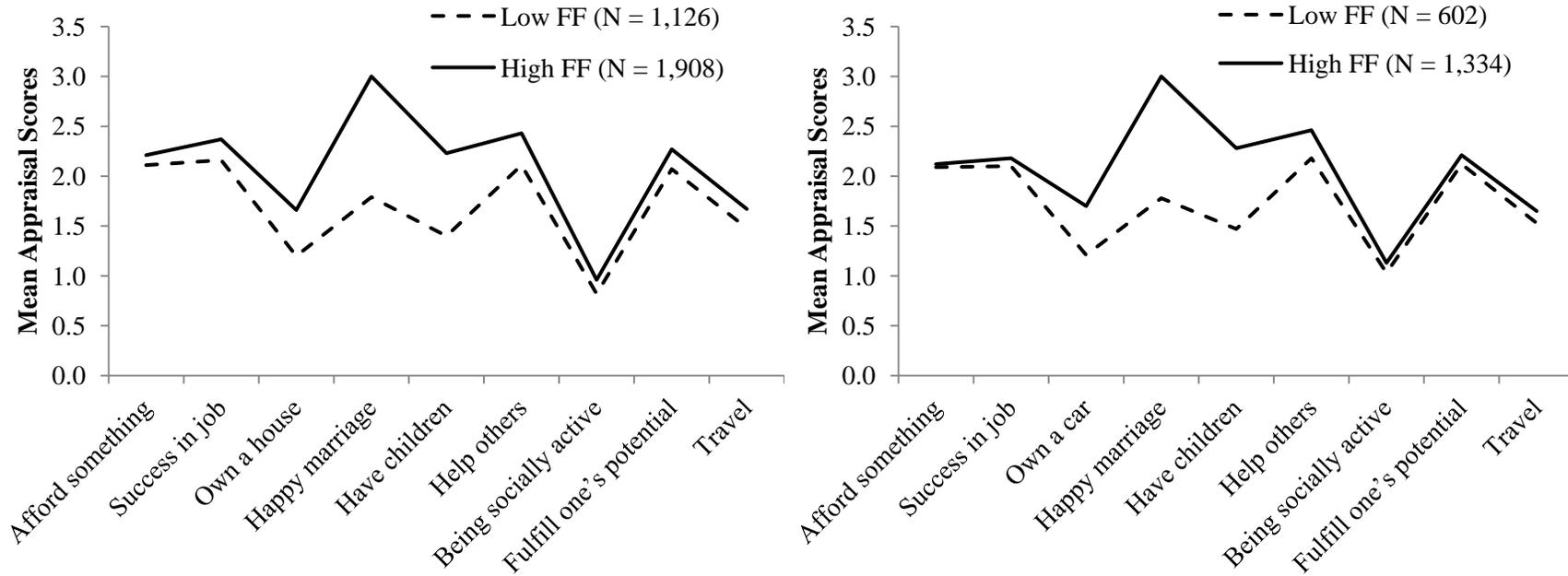


Figure 2.1. Latent profiles of personal goals for the two-class solution in 2008 (left) and 2012 (right). Low FF = low family formation endorser profile; High FF = high family formation endorser.

Chapter 3: Study 2

Young Adults' Personal Goals over the Great Recession:
Examining Individual Characteristics and Local Opportunity Structures

Young Adults' Personal Goal Appraisals over the Great Recession:
Examining Individual Characteristics and Local Opportunity Structures

The salience and importance of personal goals follow normative fluctuations over the life course (e.g., Heckhausen, Wrosch, & Schulz, 2010), whereby young adulthood may represent a unique developmental period because many competing goals from multiple life domains have to be mastered simultaneously over a relatively short time span. The salience of friendship and educational goals declines while the importance of personal goals related to work, family formation, and health increases during the transition to adulthood (Salmela-Aro, Aunola, & Nurmi, 2007). Because the “Great Recession” of 2008 added considerable pressure on national economies and welfare states, strategic planning and accumulating key resources seem to be more important than ever for a successful launch into adulthood (Hellevik & Settersten, 2013; Vuolo, Staff, & Mortimer, 2012). It is therefore crucial to understand young adults' motivation and drive in terms of personal goal setting and goal adjustment in the context of the “Great Recession,” which had implications for individuals' transition patterns as well as their psychosocial adjustment (Salmela-Aro, 2012).

Although studies focused on challenges and demands related to the coming of age during the current economic climate in selected countries (e.g., Vuolo et al., 2012 for the U.S.; Ranta, Dietrich, & Salmela-Aro, 2013 for Finland), the effect of local opportunity structures on young adults' goal setting and goal adjustment is often neglected. For instance, youth unemployment rates differ substantially across countries (e.g., 20% in Finland vs. 8% in Germany in 2012; Eurostat, 2012). However, the variability within countries may be substantial, such as the availability of local opportunity structures (or the lack thereof) within geographical regions that could protect or expose young adults' in their launch to adulthood (cf. Gerstorf et al., 2010 for

older populations). To close this research gap, the present study uses a multilevel approach (Snijders & Bosker, 2012) to examine the extent that changes in German young adults' personal goal appraisals over the Great Recession years are a function of individual characteristics, regional opportunity structures, and their cross-level interactions. This research therefore extends prior work on regional differences along former East-West borders by examining more fine-grained variations across 16 federal states (e.g., Konietzka & Kreyenfeld, 2002).

3.1 Theoretical Considerations on Contextual Influences

According to the *4C life span model of motivation* (Salmela-Aro et al., 2007), *channeling* is one of four processes in the construction and adaptation of young adults' personal goals. Channeling refers to the influence of environments on developmental trajectories by either promoting or limiting opportunities and constraints. Individuals are thereby embedded in a nested set of environments at various levels (cf. Bronfenbrenner & Morris, 2006). On an institutional level, individuals are tied to legal regulations and support systems of the welfare state (Mayer & Müller, 1986; Myles & Quadagno, 2002), which are commonly differentiated into (1) social democratic, (2) liberal, and (3) conservative welfare states (Esping-Andersen, 1990). Social democratic (e.g., Scandinavian countries) and liberal welfare states (e.g., Anglo-Saxon countries such as the UK and the U.S.) tend to encourage individuals' autonomous behavior, but they differ starkly in the level of state support and state intervention, which is weaker in the latter (Buchmann & Kriesi, 2011). Conservative welfare regimes (e.g. Germany, France, and Italy) tend to be oriented toward traditional family patterns and the maintenance of social status within families.

To illustrate the influence of the welfare state on individual transitions, it was shown that the lack of supportive family policies was related to an increase in age at childbirth for highly

educated women in particular (Mills, Rindfuss, McDonald, & te Velde, 2011). However, the welfare state is only one of many *institutional filters* that impact individual's decisions (Mills & Blossfeld, 2009). The structure and nature of employment relations, educational tracking, family systems and social networks, and social norms influence their plans and trajectories (Elder & Shanahan, 2006; Settersten, 2007). Mills and Blossfeld (2009) further theorized that institutional filters serve as intermediate buffers between globalization-related changes that increase pressure on national economies and biographical uncertainties due to economic fluctuations on the individual level. Thus, individuals are exposed to, or protected from, economic pressure depending on the structure of institutional filters, and may cope with increased uncertainties by adjusting their personal plans and pathways into adulthood. Individuals are not passive recipients of environmental influence, but rather are active agents that shape and modify their developmental trajectories within given structural constraints (Elder & Shanahan, 2006; Settersten & Gannon, 2005).

A substantial body of literature documented how the varying form and strength of institutional filters varies across countries in comparative analyses of welfare states' effects on individual trajectories (e.g., Anxo, Bosch, & Rubery, 2010; Buchmann & Kriesi, 2011; Mills & Blossfeld, 2009). However, the make-up of institutional filters such as labor market conditions, the provision of childcare, or the pool of potential romantic partners also differ starkly across geographical units within a given country (Hank, 2002; Lichter, LeClere, & McLaughlin, 1991; Lloyd & South, 1996; Nauck, 1995). Nauck (1995) highlights the importance of capturing the characteristics of regional contexts that shape individuals' goal-setting and subsequent behaviors through *local opportunity structures* and *social control*. Whereas social control through culturally normative milieus that force individuals to conform to the behavioral expectations of

others operates at relatively small-scale spatial levels, local opportunity structures could comprise larger geographical areas that share common characteristics (e.g., divide between rural and urban areas). However, there is also an element of selective migration into regional contexts because individuals select into environments that align with their values and preferences (Carr & Kefalas, 2009; Fuchs- Schündeln & Schündeln, 2009). Those young adults who remain in more disadvantaged regions with few job prospects and high unemployment rates may be particularly vulnerable during economic downturns such as the Great Recession because existing disparities in local opportunity structures could be further aggravated (DiPrete & Eirich, 2006).

3.2 Coming of Age in Germany

Similar to trends across many Western nations over recent decades (Billari & Liefbroer, 2010; Furstenberg, Rumbaut, & Settersten, 2005), the transition to adulthood in Germany has become more diverse, prolonged, and requires more autonomous and agentic individual action (e.g., Huinink, 2010). Evidence points toward an increase in the age at first marriage and parenthood for East and West Germany birth cohorts, particularly since the 1970's (Huinink, 2010; Mayer & Schulze, 2010). For instance, Mayer and Schulze (2010) estimated that for West German female birth cohorts, the age at childbirth reached its lowest point at 24 years in 1970 and rose subsequently beyond the age of 29. Commonly cited reasons for this development are the expansion of post-secondary educational, increased rates of female labor market participation, and rising biographical uncertainties because of economic and labor market instabilities (e.g., Kurz, Steinhage, & Golsch, 2005; Mayer & Schulze, 2010).

Additionally, Germany operates under a conservative welfare state that promotes social policies that uphold a traditional male-breadwinner model (Buchmann & Kriesi, 2011). Thus, the lack of policies that facilitate women's employment and labor force participation represent

severe disincentives for women's decision to become mothers, especially for highly educated women (Mills et al., 2011). Nevertheless, family formation patterns pluralized with childbirth out of wedlock are becoming strong new patterns because cohabitation serves as a "test trial for marriage" or replaces marriage altogether (Brüderl & Klein, 2002). Although Huinink (2010) proposed a re-standardization hypothesis of the life course after a period of de-standardization, no new dominant pattern of family formation seemed established yet and the degree of pluralized living arrangements seems to vary by educational attainment (Buchmann & Kriesi, 2011; Mayer, 2009). There seems to be a u-shaped relationship rather than a linear increase of the degree of pluralized living arrangements within families and the level of education in Germany (Mayer, 2009), whereas the decoupling of marriage and childbirth is more pronounced in low-income populations primarily in the U.S. (Cherlin, 2010).

The transition from education to work, on the contrary, continues to be relatively smooth compared to other European nations because the German educational tracking and the dual apprenticeship system are rather rigid and strongly regulated (Bosch & Jansen, 2010; Buchmann & Kriesi, 2011). However, there is evidence for a certain degree of de-standardization concerning young adults' experiences in vocational training (Huinink, 2010). Young cohorts are more likely to have started more than one apprenticeship compared to previous cohorts, which can be attributed to a heightened need for flexibility and exploration during the launch to adulthood (Settersten, 2007). Global developments in the labor market toward part-time and temporary jobs have further eroded past promises of job stability in trades for large proportions of young adults in lower and intermediate school tracks (Bosch & Jansen, 2010). The skillsets and qualifications acquired in vocational training seem no longer applicable for the increased share of service-oriented jobs (Cook & Furstenberg, 2002). This skill gap leaves less educated

individuals particularly exposed to downswings in the labor market (Buchholz & Kurz, 2008). In general, labor market policies of the conservative welfare state tend to shield established workers rather than creating new opportunities for career starters. Current young adults therefore are more likely to experience heightened employment instability in terms of prolonged time spend with the job search and periods of temporary unemployment as they enter the workforce (Buchholz & Kurz, 2008).

3.3 Regional Variability: Moving beyond East-West Differences

Comparisons of regional variability in transitions to adulthood in East and West Germany have a long tradition since the fall of the Berlin Wall in 1989 (e.g., Adler, 2002; Konietzka & Kreyenfeld, 2002; Mayer & Schulze, 2010; Silbereisen, 2005). Prior to unification, family formation occurred significantly earlier and at higher rates of non-marital unions in the East because favorable social policies supported single and cohabiting mothers in the former German Democratic Republic (GDR; Konietzka & Kreyenfeld, 2002). Over the course of unification, the timing of many transitions, such as leaving the parental home and marriage, adapted to Western timetables because East German institutions were replaced with their West German counterparts (Silbereisen, 2005). However, former East-West differences did not converge completely. Young adults in East Germany continue to enter parenthood at younger ages, and rates of non-marital childbirth had skyrocketed to more than 50 percent of all births by 2000 (Konietzka & Kreyenfeld, 2002).

This trend seemed to be fueled by three factors. First, East German women continue to carry forward a strong dual orientation toward work and family, which was previously fostered by the socialist rule (Alder, 2002). Mothers may also work for pragmatic reasons, because less favorable work conditions for East German men may require women to compensate for income

loss within families instead of fulfilling homemaker roles (Mayer & Schulze, 2010). Second, the provision of childcare remains relatively high in the East and continues to be sparse in the West, which facilitates the balance of family and work (Hank, 2002). Third, there is a higher rate of acceptance for non-marital births and cohabitation among East Germans compared to their West German counterparts (Konietzka & Kreyenfeld, 2002).

In addition to persistent East-West differences, there seem to be increased gender disparities in young adults' responses to tight local opportunity structures. Since unification, a steady stream of East Germany's population migrated to the West in the hope of finding more prosperous labor market conditions and to escape high unemployment rates (Hunt, 2000). Studies documented especially high migration rates of highly skilled and educated, primarily female, young adults from East to West Germany (Brückner & Trübswetter, 2007; Kröhnert & Vollmer, 2012). Diverging migration rates for males and females can be partially explained by gender differences in the effect of East Germany's weakened economy and the structural changes in the aftermath of the unification. In contrast to men, East German women were more likely to invest in higher education as responses to economic insecurities, which serves as a protective factor in coping with social change (Kröhnert & Vollmer, 2012; Tomasik & Silbereisen, 2009). Persisting income gaps between East and West Germany, as well as greater career opportunities in the West, may represent further pull-factors that continue to fuel the migration of highly qualified women (Brückner & Trübswetter, 2007; Frick & Goebel, 2008).

In East Germany, sex-specific migration has led to tremendous changes in the composition of sex ratios for young adults aged 18-29 (Kröhnert & Vollmer, 2012). Sex ratios seem to be even more skewed in rural East German regions, with as much as 25 percent more male than female inhabitants in 2009 (Kühntopf & Stedtfeld, 2012). Some studies suggest that a

proportion of migrants either return for work in East Germany or subsequently commute to the workplace in the West (Fuchs-Schündeln, & Schündeln, 2009). Yet if they do, young women may be attracted by the few urban centers, instead of settling into depopulated rural areas, which may further accelerate population aging and the lack of highly specialized professionals in rural spaces (Günther, Kürstein, Riedel- Heller, & König, 2010). Brüderl and Klein (2002) further found considerable regional variability in the degree of pluralized living arrangements and family forms in West Germany. Individuals in rural West German regions tend to maintain more traditional goals and behavioral patterns of family formation at a higher rate and the onset of more pluralized living arrangements was time-lagged compared to urban spaces. Lastly, local opportunity structures could also vary across a North-South axis, which has been documented concerning transition patterns in Europe (e.g., cohabitation and ages at leaving the parental home; Buchmann & Kriesi, 2011). Interestingly, Hank (2002) reports higher levels of fertility primarily in northwestern and southern parts of West Germany. Southern regions also tend to endorse more conservative political parties (Statistische Ämter des Bundes und der Länder, 2014) and hold a somewhat more favorable position concerning disposable income compared to the North (Frick & Goebel, 2008).

3.4 The Great Recession in Germany

Whereas the U.S. and other European countries recorded substantial increases in unemployment and drops in national GDP's (Jenkins, Brandolini, Micklewright, Nolan, & Basso, 2013), responses of the German labor market to the financial crisis were astonishingly mild (Möller, 2010). Declines in employment rates were rather short-lived and reached the lowest level since unification with 7 percent in 2011, which was labeled the "German job miracle" (Grabka & Frick, 2013). Conditions that contributed to the German job miracle were

that (1) the recession affected primarily manufacturing and export-oriented sectors situated in relatively thriving areas such as the South (Bargain, Immervoll, Peichl, & Siegloch, 2012); and (2) those industries formerly lacked a sufficient number of skilled workers, which prompted companies to hold on to workers by reducing working hours or the intensity of production rates rather than letting go of workers in order to avoid high recruitment and training costs after the recession (so-called *labor hoarding*; Möller, 2010).

Despite the relatively mild effect of the recession on the German economy, its impact was felt more strongly by certain subpopulations (Bargain et al., 2012; Grabka & Frick, 2013). In contrast to previous economic downturns that affected primarily women, older workers, and individuals holding part-time positions, the typical worker impaired by the Great Recession was male, working full-time, and with lower levels of educational attainment (Grabka & Frick, 2013). Because the German male-breadwinner model actively discourages women and mothers' labor force participation compared to policies in other welfare state regimes (Caliendo & Hogenacker, 2012), there seems to be a mismatch between current social policies and women's relatively favorable position in this economic downturn that may add additional strain to young adults' family formation and career plans. Furthermore, existing disparities between individuals with higher and lower levels of education could be fostered by the differential impact of the recession; individuals only seem to be able to overcome this impact through goal setting that is carefully calibrated to their current status and pool of resources (Heckhausen & Chang, 2009).

3.5 The Present Study

In times of economic pressure, agentic choices and psychological capacities such as strategic planning and goal setting are crucial for a successful launch into adulthood (Hellevik & Settersten, 2013; Vuolo et al., 2012). Furthermore, individuals' choices and plans are embedded

in and shaped by institutional filters such as the welfare state and labor market conditions (Mills & Blossfeld, 2009), which may vary between and within countries. Despite frequent calls for the contextualization of findings, only few studies have linked demographic indicators of regions to young adults' decision-making processes (e.g., Frick & Goebel, 2008; Hank, 2002; Lichter et al., 1991). To my knowledge, no prior study had linked regional indicators to young adults' personal goals, although it has been theorized that local opportunity structures channel individuals' goals setting and adjustment (e.g., Salmela-Aro et al., 2007). The present study addresses this research gap by disentangling the influence of individual characteristics and regional opportunity structures on German young adults' personal goal appraisals over the recession years. More specifically, the aim of this study is to examine the extent that changes in personal goal appraisals are explained by individual-level characteristics (i.e., gender and community type), regional opportunity structures at the federal state level (i.e., provision of child care and unemployment rates), and their cross-level interactions.

The present study has three main research questions. First, how are individual characteristics related to changes in personal goal appraisals over the recession years? This focuses particularly on the effect of gender and community type (i.e., rural, urbanized, and urban areas) on changes in personal goal appraisals because the Great Recession has affected young men and some geographical areas more severely (Grabka & Frick, 2012). The expectation, guided by previously cited research, is that the most apparent changes in personal goal appraisals for young men and individuals in rural areas.

Second, how are regional characteristics in terms of local opportunity structures (or the lack thereof) related to changes in personal goal appraisals over the recession years? This relies on the analysis of more fine-grained geographic areas that go beyond traditional East-West

comparisons (e.g., differences along the North-South axis; Frick & Goebel, 2008). Local opportunity structures that seem particularly relevant for the transition to adulthood include, but are not limited to, labor market conditions, youth unemployment rates, female labor force participation, and the availability of childcare (Hank, 2002). Changes in personal goals should be more apparent in less affluent areas that have been more severely affected by the recession due to strained labor market conditions and lower rates of disposable income (Frick & Goebel, 2008).

Finally, are associations between changes in personal goal appraisals and local opportunity structures moderated by the individual-level characteristics? Given previously cited work on gender and rural and urban differences, the effect of local opportunity structures on changes in personal goals may vary between men and women and community types.

3.6 Method

3.6.1 Data

Data were drawn from the German Socio-Economic Panel (SOEP; v29), which is the longest-running nationally-representative longitudinal study of private German households (Haisken-DeNew & Frick, 2005). SOEP was initiated in West Germany in 1984 and extended to East German territories in 1990. Every year, nearly 15,000 households, and more than 25,000 persons are sampled to measure micro-data on stability and change in persons, households, and families living conditions. The sample consists of several subsamples such as West Germans, East Germans, Immigrants, or high-income earners, and includes periodical refreshment samples. The survey repeats a core set of questions each year but also includes special topic modules such as health, time use, or social participation. The age range of the SOEP sample reflects the whole life span from birth to death. Furthermore, the SOEP micro-level data can be linked to detailed information on respondent's place of residence in any given study year on various levels. Based

on the *nomenclature of territorial units for statistics* (NUTS; Eurostat, 2015), a uniform spatial classification system that divides the economic territory of the European Union into three levels, SOEP micro-level data can be linked census statistics on the federal state-level (NUTS-1; $N = 16$) to the county-level (NUTS-3; about $N = 400$), or even postal codes (see Statistisches Bundesamt, 2015a).

Because the present study focuses on changes in young adults' personal goal appraisals over the recession years, two waves of data were drawn: (1) individuals' assessment in 2008, representing the onset of the economic recession; and (2) individuals' assessment in 2012, which reflects the transition into the recovery period of the economic downturn. The target sample consisted of young adults aged 18 to 29 years in 2008 ($N = 3,285$; 52.3% women). For the purpose of this study, individuals' responses were linked with geocodes at the federal states level ($N = 16$) because the federal state governments share concurrent powers and shape legislations in the certain domains of social policies such as public welfare, public service regulations, and regional planning.

3.6.2 Study Variables

Personal goals. In 2008 and 2012, participants were asked to rate the importance of nine personal goals in different domains of life ranging from career and economics (e.g., successful in career; homeownership, being able to afford things), family formation (e.g., happy marriage; having children), and personal fulfillment (e.g., traveling; being politically engaged). The questions were introduced in the following way: "Different things are important to different people. How important are the following things to you?" Answers ranged from 0 (not important at all) to 3 (very important).

Demographic information. Information about study region (0 = East Germany; 1 = West Germany), community type (0 = rural; 1 = regions undergoing urbanization; 2 = urban), participants' age (in full years and dummy-coded as younger and older age group into 0 = 18-23 years; 1 = 24-29 years), gender (0 = female; 1 = male), educational attainment (in full years), family status (0 = single; 1 = married; 2 = separated, divorced, or widowed), employment status (0 = not employed; 1 = full-time employed; 2 = part-time or marginally employed) was available for both years of assessment. These demographic indicators served as control variable to adjust for minor differences in the sociodemographic composition in the sample.

Regional indicators. In addition to the individual-level data, a variety of yearly regional indicators of the economic climate for each federal state represented in the 2008 and 2012 sample were merged into the dataset based on German Census Data (Statistisches Bundesamt, 2015c). Those indicators serve as measures of regional opportunity structures or the lack thereof. We identified the following regional indicators as most relevant to the transition to adulthood (i.e., economic indicators influencing their job or training prospects and family formation): (1) *fertility rate* (per 1,000 inhabitants), (2) *youth unemployment rate* (aged 15-24; in percent); (3) *provision of childcare facilities* (number of children aged 3-5 in formal care; in percent ²); (4) *net migration within Germany* represents the differences of the number of people moving into a region and those moving away (per 1,000 inhabitants), and (5) *disposable income of private households* (in 1,000 Euro).

3.6.3 Analytic Strategy

All analyses were performed in *Stata* (version 13.1) in the following steps. First, selected regional characteristics from census statistics were merged into the SOEP micro-level dataset

² Note that for the onset of the recession, only 2009 data were available rather than 2008 for this indicator.

based on the federal states geocodes (for further information on geocodes in SOEP see Knies & Spiess, 2007). Second, a series of multilevel models was employed using person-level characteristics and federal state-level indicators as dependent variables predicting personal goal appraisals (Bickel, 2007; Snijders & Bosker, 2012). More specifically, the models focused on clustering of repeated measures (Level 1) of individuals (Level 2) within federal states (Level 3).

For each personal goal, four nested models were fitted. First, a variance-component model was fitted with the outcome variable as only variable in the model and *intra class correlations* (ICC) were calculated subsequently to assess the proportion of variance of change in personal goals located at the individual- and state-level.

Second, a model with a random intercept for federal state and individual as well as a random slope for time in study (coded 0 = 2008; 4 = 2012) was fitted including the main effects for the individual-level characteristics gender, employment status, partnership status, age, educational attainment, community type (i.e., urban, urbanized, or rural), and time in study, as well as the state-level indicators fertility rate, unemployment rate, percent of children in formal care, disposable income, and net migration. For model parsimony, individual- and state-level characteristic at baseline (i.e., the beginning of the recession in 2008) were used to predict change in personal goals in all analyses.

Third, interactions between time in study and the individual-level characteristics gender and community type were formed to assess if the rate of change in personal goals varies along these subgroups.

Fourth, three-way cross-level interactions between time in study, individual-level characteristics (gender and community type), and regional indicators were added to the model to test if the effect of regional indicators on the rate of change in personal goals is varies by

individual-level characteristics. Significant interactions were further probed by testing simple effects for each personal goal (Aiken & West, 1991).

3.6.4 Missing Data

In order to detect systematic bias due to missing data, missing data were identified and then used to predict attrition against key descriptive variables, such as gender and educational attainment, using logistic regression. Missingness was accounted for using a full information maximum likelihood approach following the assumption of missing at random (MAR; Acock, 2012). This approach does not impute missing values as in multiple imputation models, but rather uses all available variances and covariances in its maximum likelihood estimation.

Of the 3,285 participants who met the age criteria, 1,682 completed both the 2008 and the 2012 assessments. 1,350 respondents completed only the 2008 assessment and 253 individuals completed the 2012 assessment only. Lower levels of education and being from West Germany were significantly associated with nonresponse in 2012 ($OR = 0.93, p < .01$, and $OR = 1.45, p < .001$, respectively). Respondents who only answered the 2012 wave were more likely to be partnered ($OR = 5.22, p < .001$), which could be a reflection of the fact that those individuals joined the study through moving into a participating SOEP household.

3.7 Results

3.7.1 Descriptive Profile of Personal Goals and Regional Indicators

Table 3.1 summarizes the sociodemographic sample characteristics at the individual- and state-level over the study years. It can be seen that the sample composition was fairly similar for both waves with regard to the share of male participants (about 48%), those from West Germany (about 74%), as well as from rural (22-24%), urban (45-46%), and regions undergoing urbanization (31-32%). Participants' mean years enrolled in secondary education increased from

2008 to 2012 as the sample aged and a larger share of respondents transitioned from schooling and training to part- or full-time employment (from about 46% to 68%). Likewise, there seemed to be a normative decline in the percentage of single individuals (from about 88% to 75%) and an increase in those who were married (11% to 23%).

Respondents' mean rating of the importance of individual personal goals was relatively stable from 2008 to 2012, particularly for *traveling* and *fulfilling one's potential*. Family-related goals such as *happy marriage* and *having children* increased slightly over the study period, and older participants endorsed those items more at both time points. This finding indicated an age-related increase in the salience of family formation goals and developmental tasks over the study years.

With regard to the state-level regional indicators, the overall means of most indicators were either stable or tended to increase across the study years (see Table 1). One exception was the youth unemployment rate, which decreased slightly from 2008 (about 10.5%) to 2012 (about 9.5%; see Appendix 3.A and 3.B). The percent of children aged 3-5 in formal care, and females employment rate, rose over the study years (by approximately 7 and 5 percent points, respectively). Across federal states, the fertility rate per 1,000 inhabitants was highest in Hamburg (9.46) and lowest in the more conservative Saarland (6.93) for 2008. The percent of children in formal care further varied widely across federal states with the lowest rate in the West German state Baden-Wuerttemberg (11.6%) and the highest rate in the Eastern state Thuringia (86.1%) in 2008 (16.1% vs. 87.4% in 2012). Similar trends between East and West German federal states were observed for net migration rates within Germany and disposable household income in 2008 and 2012.

Table 3.2 further summarizes the correlation matrix of personal goals and regional indicators in 2008. Personal goals and regional indicators were strongly correlated among each other. As expected, there was a weak to moderate positive association between personal goals related to financial and occupational success, such as being able to afford something and success in job or being able to afford something and owning a house ($r = .28$). Relatedly, there was a moderate positive association between happy marriage and having children in both study years ($r = .48$). Among the state-level indicators, disposable household income was highly correlated with the rates of children in care ($r = -.79$), and the net migration rate ($r = .68$). Net migration was further highly correlated with fertility rate ($r = .77$). Yet there were only a few, weaker significant correlations between personal goals and state-level indicators. For instance, the importance of having a happy marriage and traveling were correlated with all regional indicators, even though the directions and size of correlations varied.

3.7.2 Variance-Component Models for Personal Goals

As a first step, a three-level variance component model was fitted for each personal goal, which only included the outcome variable and no explanatory predictors. Consistently across all personal goals, the three-level variance components with no explanatory predictors revealed that there was very little variability between states and most variance between individuals (see Appendix 3.C). Likewise, the state-level ICC's, which is the correlation of the respective personal goal between study years in the same federal state, was very small across personal goals (e.g., ICC = .003 for being able to afford something, or ICC = .001 for having a stable job). The level-2 ICC at the person-within-state-level, however, which is the correlation of personal goals across study years within individuals and states, were more sizeable (e.g., ICC = .39 for being able to afford something, or ICC = .37 for having a stable job). In other words, 39% of the

variance in the importance of being able to afford something was within-person in the same federal state rather than within-states. Thus, the random intercept for federal state was dropped for all subsequent models to keep analyses parsimonious. Note that state-level predictors remained in the model for the purpose of forming cross-level interactions. The two-level model did have a significantly better fit than an ordinary, linear regression model for all personal goals (see Table 3.3 for likelihood ratio tests), which justifies the multilevel approach.

3.7.3 Multilevel Models Predicting Change in Personal Goals

Table 3.3 summarizes the main effects for models with a random intercept for person and a random slope for time in study including the person- and federal state-level predictors for each personal goal. Person- and federal state-level fixed effects represent average goal endorsement for the respective predictor and the time in study coefficient indicates the average rate of change for each personal goal.

On average, males reported lower appraisals for all personal goals, except the importance of being socially and politically active. No gender differences emerged for the importance of having a stable job. Age was negatively related to all personal goal appraisals, except the importance of having children. Educational attainment was positively related to the importance of helping others, fulfilling one's potential, having a stable job, having a happy marriage, being socially and politically active, and traveling. Employed individuals reported higher appraisals of the importance to afford something and having a stable job compared to unemployed individuals or those enrolled in post-secondary training. Interestingly, partnered individuals tended to endorse the importance of having a happy marriage and children higher compared to singles, yet participants with children only endorsed having children higher compared to those without children. Community type was not associated with average goal appraisals, except for the

importance of traveling that tended to be higher for individuals in urban and urbanized areas compared to those in rural regions. No significant main effects emerged for the regional indicators.

For six out of eight personal goals, appraisals changed significantly over the study period (Table 3.3). The appraisals of personal goals related to work and finances decreased significantly (i.e., $B (SE) = -0.01 (0.00)$, $p < .05$ for being able to afford something, and $B (SE) = -0.03 (0.00)$, $p < .05$ for having a stable job). Appraisals of personal goals related to family formation and pro-social behaviors increased over the study period (e.g., $B (SE) = 0.03 (0.00)$, $p < .05$ for having children, and $B (SE) = 0.04 (0.00)$, $p < .05$ for being socially and politically active). No significant change in goal appraisals was found for the importance of fulfilling one's potential and traveling.

Table 3.4 shows the results for models including significant time in study by person-level characteristic interactions. The respective interaction terms indicate how the yearly rate of change varies by gender or community type. A significant time in study by gender interaction emerged for the importance to help others and suggested that men's endorsement of helping others increased at a higher rate compared to females ($B (SE) = 0.02 (0.01)$, $p < .05$). In urbanized regions, appraisals of the importance to help others increased at a higher rate as well compared to rural regions ($B (SE) = 0.03 (0.01)$, $p < .05$). Lastly, a significant time in study by community type interaction suggested that the importance of having a happy marriage decreased among individuals from urban regions compared to those from rural areas ($B (SE) = -0.03 (0.01)$, $p < .05$).

Lastly, a significant time by regional indicator interaction for the importance of having children emerged (Table 3.5). It can be seen that the yearly rate of change in the importance of

having children was positively associated with the rate of child care and net migration ($B (SE) = 0.01 (0.00)$, $p < .05$, and $B (SE) = 0.01 (0.00)$, $p < .05$, respectively). There was a negative association between the yearly rate of change in goal appraisals and fertility rate ($B (SE) = -0.06 (0.02)$, $p < .05$), which indicated that the importance of having children increased in areas with lower fertility rates.

3.7.4 Cross-level Interactions between Time, Person-level, and State-level Indicators

In a final step, three-way interaction terms between time in study, personal-level characteristics, and regional indicators were added into the regression model for each personal goal to examine whether the effect of a given regional indicator on the rate of change in goal appraisals varies by gender and community type. For four out of eight personal goals, significant cross-level interactions between either time in study, gender, and regional indicators (see Table 3.6) or between time in study, community type, and regional indicators emerged (see Table 3.7).

For the importance of having a stable job, a significant time in study by gender by net migration interaction emerged ($B (SE) = -0.02 (0.01)$, $p < .05$). To illustrate this interaction, Table 3.8 shows simple slopes for males and females living in areas with low net migration (i.e., one standard deviation below the mean) and areas with high net migration (i.e., one standard deviation below the mean; see Appendix 3.D). It can be seen that the importance of having a stable job decreased for both men and women in areas with high and low net migration. Although the difference between simple slopes for men and women within areas with high and low net migration were not significant, the differences in simple slopes between male and female was significantly larger in high net migration areas compared to low net migration areas ($B (SE) = -0.10 (0.04)$, $p < .05$). In other words, gender differences in the decrease of appraisals for the importance of having stable job were more pronounced in areas with high net migration rates.

A time in study by gender by unemployment rate interaction was found for the importance of traveling as well ($B (SE) = 0.05 (0.02), p < .05$). Simple slopes suggested that appraisals of the importance to travel increased for both men and women in areas low and high youth unemployment rates (see Table 3.8 and Appendix 3.E). The gender differences within areas with low and high youth unemployment rates were not significant, yet the interaction was driven by the significantly more pronounced gender differences in goal appraisals in areas with high unemployment rates ($B (SE) = 0.07 (0.03), p < .05$).

For the importance of fulfilling one's potential, a time in study by urban areas by unemployment rate interaction and a time in study by urbanized areas by unemployment rate interaction were significant ($B (SE) = -0.07 (0.03), p < .05$, and $B (SE) = -0.08 (0.03), p < .05$, respectively). Simple slopes by community type in areas with low and high youth unemployment rates indicated that appraisals of the importance to fulfill one's potential decreased in rural areas with low and high unemployment rates, yet appraisals rose in urbanized and urban areas with low and high unemployment rates (Table 3.8 and Appendix 3.F). The differences in goal appraisals between rural and urban as well as rural and urbanized communities were significant in areas with low and high unemployment rates. However, the community type differences (urban vs. rural and urbanized vs. rural) in goal appraisals were more pronounced in areas with a low youth unemployment rate ($B (SE) = -0.10 (0.04), p < .05$, and $B (SE) = -0.10 (0.04), p < .05$, respectively).

Lastly, three interactions emerged for the importance of having children: between time in study, urbanized areas, and fertility rate ($B (SE) = -0.18 (0.09), p < .05$), between time in study, urban areas, and unemployment rate ($B (SE) = 0.09 (0.03), p < .05$), and between time in study, urban areas, and disposable household income ($B (SE) = 0.04 (0.02), p < .05$). It can be seen that

for each regional indicator, the direction and magnitude of the simple slopes for change in the importance of having children were largely similar in “low” and “high” areas (Table 3.8 and Appendix 3.G). Thus, the three-way interactions seemed mainly driven by differences between communities types that were more pronounced in less prosperous regions. For example, the difference between individuals in rural and urban communities was significant in regions with both low and high fertility rates ($B (SE) = -1.77 (0.60), p < .01$, and $B (SE) = -1.83 (0.62), p < .01$, respectively). Yet the difference in the rate of change in the importance of having children between urbanized and rural communities was more pronounced in regions with low fertility rates ($B (SE) = -0.16 (0.08), p < .05$).

3.8 Discussion

The Great Recession of 2008 has affected young adults in Germany and other Western nations greatly, and has increased their need for strategic planning in order to achieve key developmental milestones associated with the transition into adulthood (e.g., entering stable employment; Hellevik & Settersten, 2013). Key resources for a successful launch into adulthood roles can be accumulated through careful goal setting, goal adjustment, and the implementation of personal goals (Heckhausen & Chang, 2009). Yet individual goal setting and adaptation processes are shaped and influenced by contextual factors, which may vary widely between and within countries (Bronfenbrenner & Morris, 2006; Nauck, 1995). Because contextual influences seemed to have been neglected in the study of personal goals, the present study examined the role of individual characteristics, local opportunity structures, and their interactions in changing goal appraisals among German young adults over the recession years. The appraisals of most personal goals across multiple life domains changed over the study period, and except for the importance of having children, only person-level characteristics were directly related to those

changes. The regional indicators reflecting the make-up of local opportunity structures, however, amplified differences in the rate of change in goal appraisals attributed to individual characteristics such as gender.

3.8.1 Change in Personal Goals over the Great Recession

Examining factors that shape the selection and adaptation of personal goals is an essential part of understanding the motivation of human behaviors because goal content and goal appraisals have direct implications for individuals' action and transitions patterns (Heckhausen et al., 2010; Salmela-Aro et al., 2007). Personal goals that are valued and endorsed highly are more likely to be translated into actions in light of competing goals and external obstacles to goal implementation (Heckhausen & Kuhl, 1985). Previous research on personal goals established age-normative trajectories of goal appraisals that indicate an increase in work, family, and health related goals during the transition to adulthood (Ranta, Dietrich, & Salmela-Aro, 2013; Salmela-Aro et al., 2007). These findings mirrored the rising importance of family formation goals, yet an average decline in the salience of work and financial goals over the recession years became apparent as well. What do we make out of these differences?

First and foremost, appraisals related to family formation goals seemed to be resistant to the impact of the recession because family transitions uniquely signal the transition to adulthood and organize the life course for both sexes across welfare state boundaries (Spéder, Murinkó, & Settersten, 2014). It could even be the case that individuals place more emphasis on family or pro-social goals in light of economic strain, rather than being less willing to commit to long-term unions and responsibilities for others, because investment in those goals may fulfill emotional needs (Kahn & Antonucci, 1980; Masten & Wright, 2009). Heightened appraisals may not be immediately translated into realized family transitions in uncertain times (Mills & Blossfeld,

2009), but the importance of family life seems to be upheld. Declining appraisals in work and financial goals, on the contrary, were in line with the strategy of goal disengagement in response to substantial external stressors, which is linked to higher level of well-being (Heckhausen et al., 2010).

Alternatively, the salience of work and financial goals may have declined over the recession years because the impact of the recession was only short-lived in Germany compared to other Western nations (Jenkins et al., 2013). If German young adults had felt recession-related economic strain more severely and over longer time periods, appraisals of work-related goals could have remained highly salient (cf. Ranta et al., 2013 for a Finnish sample). Despite potential influences of the Great Recession, maturation processes may partly explain the increase in appraisals in family goals. Because the sample aged four years during the study period and a larger share of respondents entered their late 20's to early 30's, family formation may have become a more and more salient, age-normative developmental task, which is reflected in realized transitions patterns of these age groups as well (Buchmann & Kriesi, 2011). Disentangling recession- and maturation processes, however, would require a pre-recession measure of personal goal appraisals, which was not available due to restrictions in the assessment schedule of the target items (i.e., earliest pre-recession assessment of personal goals was conducted in 2004).

3.8.2 Social Forces Shaping Goal Appraisals

This study focused on two strands of influences on personal goals, which are by no means expected to cover the wide range of forces driving human motivation and behavior. One established strand of influence on goal setting and goal adjustment are person-level variables such as gender and age (e.g., Hooker, Fiese, Jenkins, Morfei, & Schwagler, 1996; Nurmi &

Salmela-Aro, 2002). The impact of gender on goal setting and adaptation, however, can also be seen as a societal system of stratification that assigns young men and women different social roles and expectations that they internalize (Levy, 2013; Linton, 1942).

Through the lens of gendered social policies within the German conservative welfare state and the gendered impact of the recession (Buchholz & Kurz, 2008; Grabka & Frick, 2103), we expected to see more pronounced gender differences in changing goal appraisals in the domain of work and family particularly. It was therefore surprising that the only difference between young men and women emerged for the importance to help others, for which men reported a larger increase compared to females over the study period. Because men's average endorsement of helping others was lower compared to women, it stands to reason that as men aged and matured over the course of the study, they may tend to catch up to their female counterparts and recognize the joy of giving back to others and civic engagement (Sherrod & Lauckhardt, 2009). The emergence of recession-related protest movements such as "Occupy Wall Street," which received media coverage worldwide, could have further underscored the salience of pro-social goals – particularly for young men who were severely affected by the recession.

Another strand of influences on personal goals, which has rarely been considered in previous studies, are characteristics of the *social geography* and daily environments that individuals are embedded in. The makeup of regions can be summarized as local opportunity structures that serve as intermediate institutional filters between the impact of the recession on a macro-level and individuals' decision-making processes on the micro-level (Mills & Blossfeld, 2009; Nauck, 1995). Although community types (i.e., rural, urbanized, and urban) in this study were categorized as person-level characteristic due to the structure of the data, this also captures

existing disparities in the access to resources and amenities between rural regions and urban centers (e.g., Günther et al., 2010; Kröhnert & Vollmer, 2012).

Decreased importance of marriage in urban compared rural areas highlighted the rural-urban divide with regard to the prevalence and acceptance of the decoupling of marriage and parenthood and the diversification of family forms (Brüderl & Klein, 2002; Huinink, 2010). The lack of community type- and gender differences in the changing importance of having children could once again indicate that the transition into parenthood is a particularly unique and universal organizer of the life course for both men and women and across community type boundaries (Spéder et al., 2014). However, young adults in more progressive areas may put marriage on hold in light of economic pressure because less traditional families receive little incentives to follow traditional role distributions of the male-breadwinner model (Buchmann & Kriesi, 2011). Additionally, lower levels of social cohesion and control in urban centers may put less pressure on young parents to marry compared to close-knit rural communities.

3.8.3 Regional Channeling of Personal Goal Adaptation

The life span model of motivation proposes that goal construction and adjustment are shaped by either promoting or limiting opportunities and constraints in individuals' environments (i.e., the process of channeling; Salmela-Aro et al., 2012). This study conceptualized local opportunity structures, or the lack thereof, as regional indicators on the federal state-level that are particularly relevant for young adults in their attempt to launch career and family trajectories (e.g., youth unemployment rates or the availability of child care). Because disparities between local opportunity structures are cemented by differences in regional spending and government investments in Germany (Arnold, Freier, Geissler, & Schrauth, 2015), the rate of change in goal appraisals was expected to be moderated by regional indicators.

Surprisingly, significant differences in the rate of change emerged for three regional indicators only for the importance having children. First, the provision of child care and net migration were related to an increase in appraisals of having children, which indicated that individuals in more prosperous regions with supporting institutions, parenthood-related goals are more salient. This could, in turn, also increase the likelihood of young adults entering parenthood subsequently (Mills et al., 2011; Salmela-Aro, 2009). Second, higher fertility rates were associated with a decrease in the importance of having children. One could speculate that the salience of having children is lower in high-fertility areas because the transition into parenthood is considered “the default,” whereas it might require more planning and investment in low-fertility areas (Edin & Kefalas, 2005). The dynamic interplay between multiple regional indicators could offer further insights and explanations into change in parenthood-related goals.

For the other personal goals, no direct links between change in goals and regional indicators emerged. Although disappointing, the lack of direct effects of regional indicators on psychological variables such as well-being is in line with previous research that documented moderating effects of regional variables (e.g., Gerstorf et al., 2010). Cross-level interaction between time in study, person-level characteristics, and regional indicators emerged for four out of eight personal goals, which indicated that regional indicators amplified the rate of change in goals attributed to individual characteristics. In sum, these findings for change in the importance of traveling, and having children, suggested that group differences (i.e., between men and women or community types) were more pronounced in areas with low vs. high resources. Thus, local opportunity structures, which are prone to the influence of economic downturns such as youth unemployment and net migration rates, imprint on young adults’ goal adaptation by

amplifying group differences (cf. Chetty et al., 2016; Kauppinen, Kortteinen, & Vaattovaara, 2010).

For change in career-oriented goals such as having a stable job and fulfilling one's potential, however, more accentuated gender and community type-differences appeared for higher resource areas. This could be a sign of privileged young adults' self-selection into more affluent geographical areas (Brückner & Trübswetter, 2007; Carr & Kefalas, 2011). For example, the more pronounced gender difference in the decrease in the importance of having a stable job in areas with higher net migration rates (i.e., more people moving to vs. leaving an area) could be explained from two competing angles. First, men's goal appraisals may decrease more strongly because higher self-selection into affluent areas increases the competition on the job market, which could lead them to disengage from the respective goal (Heckhausen et al., 2010; Salmela-Aro et al., 2007). Second, the respective goal is no longer as salient because the transition into stable employment was mastered successfully in more affluent areas (Heckhausen & Kuhl, 1985), especially for young men who were affected more severely by the recession.

3.8.4 Limitations

This study has several limitations. First, the number of federal states representing the sample size of the highest level of nesting in initial analyses was rather small for multilevel modeling ($N = 16$). Because there was too little variance on the state-level, analyses were simplified to two-level models and kept the state-level predictors for the purpose of examining cross-level interactions. It would have been preferable to focus on smaller geographical units such as 39 *government units (Regierungsbezirke)* ranging from 800,000-3 million inhabitants (NUTS-2; $N = 39$), and *counties* with 150,000-800,000 inhabitants (NUTS-3; $N = 429$). However, definitions of government units are not consistent across federal states because some

East German states did not introduce or removed government units after the unification in 1990 (e.g., Thuringia or Schleswig-Holstein). Thus, for those states, government units and federal state borders are identical. We were further not able to use smaller geographical units because the cell sizes of individuals in smaller units were too small due to sample size constraints.

Second and relatedly, this study used regional indicators on the state-level as crude indicators of local opportunity structures, which did not reflect within-state disparities such as between rural and urban areas within federal states (Arnold et al., 2015). Again, the findings can be used as a stepping-stone for future studies drawing on samples with larger cell sizes on fine-grained geographical to extent research on the contextual embeddedness of goal adaptation processes. This study further focused on regional indicators at the beginning of the recession to make the models more parsimonious rather than including time-varying regional predictors (Hoffmann & Stawski, 2009).

Third, respondents' nesting at the household-level was purposefully neglected because the treatment of dyadic data was beyond the scope of this study. It should be noted, however, that only about 36 percent of the sample reported to live by themselves. About 35 percent of participants reported to live in a two-person household and the remaining part of the sample resided in an at least three- and (in rare cases) up to ten-person household (about 16 percent for 3-person households, 4 percent for 4-person households, 9 percent in 5+-person households). Nevertheless, the influences of significant others on individual goal setting and adjustment have been documented elsewhere (Chartrand, Dalton, & Fitzsimons, 2007; Shah, 2003). It is my hope that future studies will incorporate both contextual and relational influences on goal setting, adaption, and pursuit.

Fourth, domain-specific trajectories are intertwined and individuals need to accommodate competing goals across multiple life domains (Elder & Shanahan, 2006; Knecht, Wiese, & Freund, 2016). Although the personal goals examined in this study cover multiple life domains, we did not examine the dynamic interplay between goal appraisals across domains because the predictive models for personal goals were run independently. Future studies should treat goal appraisals across different spheres of life in a more holistic fashion by examining their appraisals simultaneously (e.g., extracting group-specific profiles of goal appraisals across domains using mixture modeling).

Lastly, the results of the present study are based on a sample of German young adults and may therefore not be generalizable to young adults in other nations in Europe or the U.S. without precaution. Although the Great Recession affected national economies worldwide, the economic downturn in Germany was relatively mild and rather short-felt compared to other nations (Jenkins et al., 2013). Thus, patterns of change in goal appraisals and their link to individual and regional characteristics derived from other national samples could differ vastly from the findings this study depending on the severity of the recession, the setup of supporting institutions, and disparities between geographical areas in the respective countries.

3.8.5 Conclusion and Future Directions

Taken together, this study highlights the importance of contextualizing individuals' decision-making processes such as goal setting and goal adaptation (cf. Bronfenbrenner & Morris, 2006; Elder & Shanahan, 2006). Local opportunity structures serve as institutional filters between the macro-structural effects of the recession and the perceived impact of the recession on individuals, and amplified between-group differences in the rate of change in goal appraisal. Because the present study was exploratory in nature, the actual processes that link regional

indicators to change in personal goals remain an open question. Future micro-level, psychological and interdisciplinary research on personal goals could help to illuminate those mechanisms by considering community-level and neighborhood indicators.

Furthermore, individuals' perceptions of regional characteristics and perceived change in those could be an important dimension of understanding contextual influences on goal setting and adaptation (Nauck, 1995). Variables such as perceived social support and social cohesion within communities could in fact be more, or just as, impactful on goal setting and adaptation processes compared to objective regional indicators drawn from census data. Perceptions are likely to tap not only the availability (or lack thereof) of support, but also individuals' awareness or usage of those resources. For instance, it could be the case that two individuals within a more affluent area evaluate the state of a community vastly differently based on their personal experiences, which could imprint on their goal appraisals as well.

Lastly, future studies should incorporate educational attainment as a potential effect modifier in the study of personal goal adaptation and contextual influences for two reasons. First, the Great Recession affected lower educated individuals more severely (Jenkins et al., 2013) and, second, the access to and the ability to leverage community or state resources vary by educational attainment or as proxy of social class (e.g., Katz, 2010). Potential disparities in the usage of goal setting and adaptation across the educational strata, particularly in Germany's highly stratified school system, are likely to be aggravated in low-resource communities. Because these findings would have a high relevance for policy makers in order to make strategic decisions in public investments into structurally weak communities, advanced mapping techniques such as *Geographical Information System (GIS)* applications could be powerful tools

to translate these findings into practical and graspable information for the public and policy makers.

Table 3.1

Sample Characteristics over the Study Years ($N_{Level 1} = 3, 285$; $N_{Level 2} = 16$)

Indicator	2008	2012
Age, M (SD)	23.31 (3.53)	27.42 (3.55)
Male, n (%)	1, 452 (47.9)	925 (47.8)
West Germany, n (%)	2,284 (74.5)	1,474 (73.7)
Community type, n (%)		
Urban	1,387 (45.0)	1,097 (46.0)
Urbanized	962 (31.2)	761 (31.9)
Rural	733 (23.8)	528 (22.1)
School attainment ^a , M (SD)	11.97 (2.25)	13.01 (2.64)
Employed, n (%)		
Not employed ^b	1,625 (53.6)	632 (32.6)
Part-time employed	415 (13.7)	316 (16.3)
Full-time employed	994 (32.8)	988 (51.3)
Family status, n (%)		
Single	2,677 (88.2)	1,448 (74.8)
Married	332 (10.9)	453 (23.4)
Separated	25 (0.8)	34 (1.8)
Personal goals, M (SD)		
Afford something	2.17 (0.59)	2.11 (0.62)
Help others	2.31 (0.58)	2.37 (0.58)
Fulfill one' potential	2.20 (0.66)	2.19 (0.67)
Success in job	2.29 (0.65)	2.15 (0.67)
Happy marriage	2.55 (0.65)	2.62 (0.62)
Having children	1.92 (0.91)	2.03 (0.91)
Being active ^c	0.91 (0.73)	1.10 (0.74)
Traveling	1.60 (0.84)	1.61 (0.83)
Regional characteristics, M (SD)		
Fertility rate ^d	8.16 (0.67)	8.32 (0.91)
Youth unemployment ^e	10.42 (0.97)	9.45 (1.03)
Children in care ^f	37.74 (22.21)	44.71 (21.23)
Disposable income ^g	17.98 (2.04)	19.30 (2.03)
Net migration ^h	-1.23 (3.18)	4.02 (3.68)

Note. ^a School attainment presented in full years enrolled in primary and secondary education. ^b Includes respondents who are still in (post-secondary) training, military, or community service.

^c Full item wording is "being socially and politically active." ^d Per 1,000 inhabitants.

^e Unemployment rate of 18-24 year-olds in percent. ^f Children aged 3-5 in formal care in percent; for the onset of the recession, only 2009 data were available. ^g Per household in 1,000 Euro.

^h Within Germany per 1,000 inhabitants.

Table 3.2

Correlation Matrix of Personal Goals and Regional Characteristics in 2008 (N = 3, 285)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Afford something	--											
2. Help others	.06**	--										
3. Fulfill one's potential	.24***	.22***	--									
4. Success in job	.28***	.11***	.40***	--								
5. Happy marriage	.09***	.26***	.14***	.15***	--							
6. Have children	.01	.21***	.02	.03	.48***	--						
7. Being socially active	-.04*	.17***	.15***	.09***	.11***	.12***	--					
8. Travel	.21***	.11***	.28***	.18***	.11***	.04*	.20***	--				
9. Fertility rate ^a	-.02	.03	.02	.02	.06***	.02	.07***	.09***	--			
10. Youth unemployment ^b	-.01	.01	-.01	.00	-.05**	-.04*	-.06**	-.08***	-.45***	--		
11. Children in care ^c	-.10	-.01	.01	.02	-.09***	-.02	-.04*	-.07***	-.37***	.41***	--	
12. Disposable income ^d	-.00	.01	.00	-.02	.08*	.01	.04*	.10***	.59***	-.47***	-.79***	--
13. Net migration ^e	-.01	.02	.00	-.03	.07***	-.01	.04*	.07**	.77***	-.29***	-.62***	.68***

Note. ^a Per 1,000 inhabitants. ^b Unemployment rate of 18-24 year-olds in percent. ^c Children aged 3-5 in formal care in percent. ^d Per household in 1,000 Euro. ^e Within Germany per 1,000 inhabitants.

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

Table 3.3

Multilevel Results for Main Effect Models (N = 3, 044)

<i>Predictors</i>	Afford	Help	Fulfill	Job	Marry	Child	Active	Travel
<i>Person-level fixed effects</i>								
Intercept	2.69*** (0.55)	1.86*** (0.52)	1.94** (0.59)	3.39*** (0.58)	1.71** (0.54)	1.44 (0.81)	0.53 (0.65)	0.83 (0.75)
Time in Study	-0.01** (0.00)	0.01** (0.00)	-0.01 (0.00)	-0.03*** (0.00)	0.01* (0.00)	0.03*** (0.01)	0.04*** (0.00)	-0.00 (0.01)
Male	-0.00 (0.02)	-0.24*** (0.02)	-0.06* (0.03)	0.04 (0.02)	-0.17*** (0.02)	-0.27*** (0.04)	0.09** (0.03)	-0.11** (0.03)
Employed	0.19*** (0.03)	0.03 (0.02)	0.03 (0.03)	0.06* (0.03)	0.04 (0.03)	-0.02 (0.04)	-0.05 (0.03)	0.04 (0.04)
Partnered	-0.00 (0.02)	0.10*** (0.02)	-0.01 (0.03)	0.06* (0.03)	0.41*** (0.02)	0.28*** (0.04)	0.03 (0.03)	0.03 (0.03)
Parent	0.23** (0.08)	0.18* (0.07)	0.02 (0.08)	-0.04 (0.08)	0.04 (0.07)	0.70*** (0.11)	-0.17 (0.09)	-0.16 (0.10)
Age	-0.01* (0.00)	-0.02*** (0.00)	-0.02*** (0.00)	-0.03*** (0.00)	-0.00 (0.00)	0.02*** (0.01)	-0.02*** (0.00)	-0.04*** (0.01)
Education	-0.01 (0.01)	0.02*** (0.00)	0.04*** (0.01)	0.02** (0.01)	0.01* (0.00)	-0.01 (0.01)	0.08*** (0.01)	0.06*** (0.01)
Urban ^a	-0.00 (0.04)	0.03 (0.03)	-0.03 (0.04)	-0.00 (0.04)	0.04 (0.03)	-0.08 (0.05)	0.00 (0.04)	0.13** (0.05)
Urbanized ^a	-0.03 (0.03)	0.02 (0.03)	-0.01 (0.04)	0.02 (0.03)	0.03 (0.03)	0.04 (0.05)	0.07 (0.04)	0.10* (0.04)
<i>State-level fixed effects</i>								
Fertility rate ^b	-0.00 (0.05)	0.09 (0.05)	0.08 (0.06)	-0.02 (0.05)	0.03 (0.05)	0.11 (0.08)	0.09 (0.06)	0.05 (0.07)
Unemployment rate ^c	-0.02 (0.02)	0.03 (0.02)	-0.02 (0.02)	-0.02 (0.02)	0.02 (0.02)	-0.04 (0.03)	-0.03 (0.02)	0.01 (0.03)

Table 3.3 Continued

<i>Predictors</i>	Afford	Help	Fulfill	Job	Marry	Child	Active	Travel
Child care ^d	-0.00 (0.00)	-0.00* (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Disposable income ^e	-0.00 (0.01)	0.01 (0.01)	0.00 (0.01)	-0.01 (0.01)	0.00 (0.01)	-0.02 (0.02)	-0.02 (0.01)	0.02 (0.02)
Net migration ^f	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.02 (0.01)	-0.01 (0.01)	-0.00 (0.01)
<i>Random effects</i>								
Var (Intercept)	0.14 (0.01)	0.12 (0.01)	0.14 (0.01)	0.14 (0.01)	0.10 (0.01)	0.39 (0.02)	0.19 (0.01)	0.26 (0.02)
Var (Slope)	0.00 (0.00)							
Var (Residual)	0.20 (0.01)	0.18 (0.01)	0.27 (0.01)	0.25 (0.01)	0.23 (0.01)	0.32 (0.02)	0.29 (0.02)	0.39 (0.02)
LR test χ^2 ^g (df) ^k	202.00*** (2)	171.41*** (2)	125.90*** (2)	144.92*** (2)	107.19*** (2)	350.73*** (2)	179.63*** (2)	192.55*** (2)

Notes. Cells represent B (SE). No p-values were available for random effects.

^a Reference category is rural areas. ^b Per 1,000 inhabitants. ^c Unemployment rate of 18-24 year-olds in percent. ^d Children aged 3-5 in formal care in percent. ^e Per household in 1,000 Euro. ^f Within Germany per 1,000 inhabitants. ^g Likelihood ratio test compared the respective model to an ordinary, linear regression model.

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

Table 3.4

Multilevel Results for Models with Time x Person-level Characteristics Interactions (N = 3, 044)

<i>Predictors</i>	Help	Marriage
<i>Person-level fixed effects</i>		
Intercept	1.91 (0.52)***	1.68 (0.54)**
Time in Study	-0.01 (0.01)	0.02 (0.01)
Male	-0.26 (0.02)***	-0.19 (0.03)***
Employed	0.03 (0.02)	0.04 (0.03)
Partnered	0.10 (0.02)***	0.41 (0.02)***
Parent	0.18 (0.07)*	0.04 (0.07)
Age	-0.02 (0.00)***	-0.00 (0.00)
Education	0.02 (0.00)***	0.01 (0.00)*
Urban ^a	0.02 (0.04)	0.07 (0.04)
Urbanized ^a	-0.02 (0.03)	0.04 (0.03)
<i>State-level fixed effects</i>		
Fertility ^b	0.08 (0.05)	0.04 (0.05)
Unemployment ^c	0.03 (0.02)	0.02 (0.02)
Child care ^d	-0.00 (0.00)*	-0.00 (0.00)
Income ^e	-0.01 (0.01)	0.00 (0.01)
Net Migration ^f	-0.01 (0.01)	-0.00 (0.01)
<i>Time x Person-level characteristic interactions</i>		
Time x Male	0.02 (0.01)*	0.01 (0.01)
Time x Urban	0.01 (0.01)	-0.03 (0.01)*
Time x Urbanized	0.03 (0.01)*	-0.00 (0.01)
<i>Random effects</i>		
Var (Intercept)	0.12 (0.01)	0.10 (0.01)
Var (Slope)	0.00 (0.00)	0.00 (0.00)
Var (Residual)	0.18 (0.01)	0.23 (0.01)

Note. Cells represent B (SE). No p-values were available for random effects.

^a Reference category is rural areas. ^b Per 1,000 inhabitants. ^c Unemployment rate of 18-24 year-olds in percent. ^d Children aged 3-5 in formal care in percent. ^e Disposable household income in 1,000 Euro. ^f Net migration within Germany per 1,000 inhabitants.

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

Table 3.5

Multilevel Results for Models with Time x Regional Indicator Interactions (N = 3, 044)

<i>Predictors</i>	<i>Child</i>
<i>Person-level fixed effects</i>	
Intercept	0.86 (0.86)
Time in Study	0.56 (0.28)*
Male	-0.27 (0.04)***
Employed	-0.19 (0.04)
Partnered	0.28 (0.04)***
Parent	0.70 (0.11)***
Age	0.02 (0.01)***
Education	-0.01 (0.01)
Urban ^a	-0.08 (0.05)
Urbanized ^a	0.04 (0.05)
<i>State-level fixed effects</i>	
Fertility ^b	0.18 (0.08)*
Unemployment ^c	-0.03 (0.03)
Child care ^d	-0.00 (0.00)
Income ^e	-0.03 (0.02)
Net Migration ^f	-0.03 (0.01)*
<i>Time x Regional indicator interactions</i>	
Time x Fertility	-0.06 (0.02)*
Time x Unemployment	-0.01 (0.01)
Time x Child care	0.01 (0.00)*
Time x Income	0.00 (0.01)
Time x Net migration	0.01 (0.00)*
<i>Random effects</i>	
Var (Intercept)	0.39 (0.02)
Var (Slope)	0.00 (0.00)
Var (Residual)	0.32 (0.02)

Note. Cells represent *B* (*SE*). No *p*-values were available for random effects.

^a Reference category is rural areas. ^b Per 1,000 inhabitants. ^c Unemployment rate of 18-24 year-olds in percent. ^d Children aged 3-5 in formal care in percent. ^e Disposable household income in 1,000 Euro. ^f Net migration within Germany per 1,000 inhabitants.

* $p < .05$. *** $p < .001$.

Table 3.6

Multilevel Results for Models with Cross-Level Interactions (N = 3, 044)

<i>Predictors</i>	<i>Job</i>	<i>Travel</i>
<i>Person-level fixed effects</i>		
Intercept	2.95 (0.94)**	-1.19 (1.21)
Time in Study	-0.21 (0.36)	0.40 (0.43)
Male	1.25 (1.26)	3.16 (1.63)
Employed	0.06 (0.03)*	0.04 (0.04)
Partnered	0.06 (0.03)*	0.04 (0.03)
Parent	-0.04 (0.08)	-0.16 (0.10)
Age	-0.03 (0.00)***	-0.04 (0.01)***
Education	0.02 (0.01)**	0.06 (0.01)***
Urban ^a	-0.01 (0.04)	0.13 (0.05)**
Urbanized ^a	0.03 (0.03)	0.09 (0.04)*
<i>State-level fixed effects</i>		
Fertility ^b	0.01 (0.09)	0.22 (0.11)*
Unemployment ^c	-0.02 (0.03)	0.04 (0.04)
Child care ^d	0.00 (0.00)	-0.00 (0.00)
Disposable income ^e	-0.00 (0.02)	0.04 (0.02)
Net migration ^f	-0.01 (0.01)	-0.03 (0.02)
<i>Time x Gender x Regional indicator interactions</i>		
Time x Male x Fertility	0.04 (0.04)	-0.03 (0.05)
Time x Male x Unemployment	-0.02 (0.02)	0.05 (0.02)*
Time x Male x Child care	-0.00 (0.00)	-0.00 (0.00)
Time x Male x Disposable income	-0.00 (0.01)	0.00 (0.01)
Time x Male x Net migration	-0.02 (0.01)*	0.00 (0.01)
<i>Random effects</i>		
Var (Intercept)	0.14 (0.01)	0.26 (0.02)
Var (Slope)	0.00 (0.00)	0.00 (0.00)
Var (Residual)	0.24 (0.01)	0.38 (0.02)

Note. Cells represent *B* (*SE*). Models included all possible two-way combinations for the respective three-way interactions, but only target interactions are shown. No p-values were available for random effects.

^a Reference category is rural areas. ^b Per 1,000 inhabitants. ^c Unemployment rate of 18-24 year-olds in percent. ^d Children aged 3-5 in formal care in percent. ^e Disposable household income in 1,000 Euro. ^f Net migration within Germany per 1,000 inhabitants.

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

Table 3.7

Multilevel Results for Models with Cross-Level Interactions (N = 3,044)

<i>Predictors</i>	Fulfill	Child
<i>Person-level fixed effects</i>		
Intercept	2.37 (1.39)	0.65 (1.82)
Time in Study	-1.45 (0.52)**	1.27 (0.57)*
Male	-0.06 (0.03)*	-0.26 (0.04)***
Employed	0.03 (0.03)	-0.02 (0.04)
Partnered	-0.01 (0.03)	0.28 (0.04)***
Parent	0.02 (0.08)	0.72 (0.11)***
Age	-0.02 (0.00)***	0.02 (0.01)***
Education	0.04 (0.01)***	-0.01 (0.01)
Urban ^a	-0.22 (1.66)	1.03 (2.18)
Urbanized ^a	-1.39 (2.16)	-5.86 (2.84)*
<i>State-level fixed effects</i>		
Fertility ^b	0.04 (0.14)	-0.00 (0.18)
Unemployment ^c	-0.03 (0.07)	0.08 (0.09)
Child care ^d	0.00 (0.00)	-0.00 (0.00)
Disposable income ^e	-0.00 (0.04)	0.00 (0.05)
Net migration ^f	-0.01 (0.02)	-0.03 (0.03)
<i>Time x Community type x Regional indicator interactions</i>		
Time x Urban x Fertility	-0.04 (0.07)	-0.06 (0.08)
Time x Urbanized x Fertility	-0.08 (0.08)	-0.18 (0.09)*
Time x Urban x Unemployment	-0.07 (0.03)*	0.09 (0.03)*
Time x Urbanized x Unemployment	-0.08 (0.03)*	0.05 (0.03)
Time x Urban x Child care	-0.00 (0.00)	0.00 (0.00)
Time x Urbanized x Child care	-0.00 (0.00)	0.00 (0.00)
Time x Urban x Disposable income	-0.00 (0.02)	0.04 (0.02)*
Time x Urbanized x Disposable income	-0.01 (0.02)	0.03 (0.02)
Time x Urban x Net migration	-0.00 (0.01)	-0.01 (0.01)
Time x Urbanized x Net migration	0.01 (0.01)	0.00 (0.01)
<i>Random effects</i>		
Var (Intercept)	0.14 (0.01)	0.38 (0.02)
Var (Slope)	0.00 (0.00)	0.00 (0.00)
Var (Residual)	0.27 (0.01)	0.32 (0.02)

Note. Cells represent *B* (*SE*). Models included all possible two-way combinations for respective three-way interactions; only target interactions shown. No p-values available for random effects.

^a Reference category is rural areas. ^b Per 1,000 inhabitants. ^c Unemployment rate of 18-24 year-olds in percent. ^d Children aged 3-5 in formal care in percent. ^e Disposable household income in 1,000 Euro. ^f Net migration within Germany per 1,000 inhabitants.

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

Table 3.8

Simple Slopes for Personal Goals in Rural, Urbanized, and Urban Areas (N = 3, 044)

	Gender		Community type		
	Male	Female	Rural	Urbanized	Urban
<i>Job</i>					
Low net migration ^a	-0.25 (0.31)	-0.22 (0.34)	-	-	-
High net migration ^a	-0.33 (0.33)	-0.21 (0.36)	-	-	-
<i>Travel</i>					
Low unemployment ^b	0.36 (0.31)	0.22 (0.34)	-	-	-
High unemployment ^b	0.40 (0.30)	0.19 (0.33)	-	-	-
<i>Fulfill one's potential</i>					
Low unemployment ^b	-	-	-0.79 (0.35) *	0.20 (0.49)	0.20 (0.32)
High unemployment ^b	-	-	-0.69 (0.34) *	0.18 (0.50)	0.19 (0.31)
<i>Having children</i>					
Low fertility ^c	-	-	1.36 (0.53) *	0.31 (0.32)	-0.41 (0.29)
High fertility ^c	-	-	1.37 (0.55) *	0.15 (0.32)	-0.47 (0.30)
Low unemployment ^b	-	-	0.57 (0.39)	1.40 (0.54) *	0.14 (0.36)
High unemployment ^b	-	-	0.46 (0.37)	1.37 (0.53) *	0.16 (0.35)
Low disposable income ^d	-	-	0.78 (0.57)	1.62 (0.64) *	0.27 (0.52)
High disposable income ^d	-	-	0.67 (0.59)	1.62 (0.65) *	0.33 (0.54)

Note. Low = one standard deviation below the mean; High = one standard deviation above the mean. Cells represent *B* (*SE*).

^a Within Germany. ^b Unemployment rate of 18-24 year-olds in percent. ^c Per 1,000 inhabitants. ^d Per household in 1,000 Euro.

* $p < .05$.

Chapter 4: Integrative Conclusion

The “Great Recession” of 2008 led to massive declines in nations’ gross domestic products and job losses in many countries worldwide (Goodman & Mance, 2011; Jenkins, Brandolini, Nolan, & Basso, 2013). Furthermore, the recession left its mark on the social fabric of societies, communities, families, and individuals within these networks (Day, 2014; Grabka & Frick, 2013; Mejía, Settersten, Odden, & Hooker, 2015). Even though the impact of the Great Recession on Germany’s economy was relatively mild and short-lived compared to other nations, it became clear that young adults, particularly young male workers, were greatly affected by the economic downturn (Bargain, Immervoll, Peichl, & Siegloch, 2012; Grabka & Frick, 2013).

Because the launch into adulthood in a competitive economic climate requires careful and strategic planning (Hellevik & Settersten, 2013; Salemela-Aro, 2009), the two studies presented in this dissertation examined stability and change in German young adults’ personal goals over the Great Recession years. Both studies drew on data from the German Socio-Economic Panel (SOEP), which surveyed goal appraisals of young adults aged 18-29 at the onset of the Great Recession in 2008 and during its recovery period in 2012. By tracking continuities and discontinuities in personal goal appraisals over the course of the recession from both micro- and macro-analytic lenses, these studies highlighted how young adults’ goal adaptation (or the lack thereof) varied across sociodemographic characteristics and was embedded into larger societal forces, such as local opportunity structures, that may buffer or amplify the impact of the recession.

The first study utilized a micro-analytic lens to emphasize the interdependencies of personal goal appraisals across multiple life domains such as family, work, leisure, and self-fulfillment (Heckhausen, Wrosch, & Schulz, 2010; Knecht, Wiese, & Freund, 2016). In light of

economic strain and uncertainties arising from the Great Recession, young adults were expected to adjust and adapt appraisals of personal goals across multiple life domains from the beginning of the recession in 2008 and the onset of its recovery in 2012. In particular, the adaption of goal appraisals was expected to deviate from age-normative trajectories of goal appraisals by either favoring work- or family-related goals as response to the recession (Ranta, Dietrich, & Salmela-Aro, 2013; Salmela-Aro, Aunola, & Nurmi, 2007).

Using latent transition analysis (Collins & Lanza, 2009), two profiles of personal goal adaptation were extracted, which primarily differed in the endorsement of family formation (low vs. high). Only a small share of individuals transitioned between the latent profiles over time. Females, older participants, and partnered and employed respondents were more likely to be classified into high family formation profile, which was associated with higher levels of life satisfaction. Surprisingly, the results did not point toward drastic declines of the importance of family formation in favor of higher endorsements of self-fulfillment and work-related goals, or vice versa, over the recession years (cf. Kurz, Steinhage, & Golsch, 2005). The high degree of stability in profiles of goal appraisals and profile membership over the recession years further indicated that: (1) holding on to relational and family formation goals seemed to be important for emotional well-being (Kahn & Antonucci, 1980; Masten & Wright, 2009); and that (2) maintaining high aspirations on multiple goals was a protective factor in times of economic strain (Heckhausen et al., 2010; Vuolo, Staff, & Mortimer, 2012).

To complement the micro-analytic perspective of Study 1, the second study utilized a macro-analytic lens. It examined whether the availability of community resources—so-called local opportunity structures—buffered young adults from, or exposed them to, the effects of the recession in ways that altered their personal goal (e.g., Gerstorff et al., 2010; Hank, 2002; Nauck,

1995). Because young men were more heavily affected by the recession than young women, and individuals in certain geographical areas were more affected than other areas (Grabka & Frick, 2013), this study focused on the effects of the individual characteristics, gender and community type (i.e., rural, urbanized, and urban), regional indicators across federal states, and their cross-level interactions on change in appraisals of personal goals across multiple life domains. Goal adaptation was expected to be more pronounced for men, rural areas, and low-resource states.

Using multilevel regression models (Snijders & Bosker, 2012), decreases in work-related goals and increases in family formation and pro-social goals were found over the study period. Regional indicators did not directly relate to most goal appraisals, except the importance of having children, but rather amplified group differences in the rate of change in appraisals. Results suggested that (1) local opportunity structures serve as intermediate institutional filters through which the macro-level effects of the recession are transmitted to individuals (Mills & Blossfeld, 2009); and that, (2) even though family formation goals were highly endorsed, reproductive goals are particularly prone to contextual influences (Buchman & Kriesi, 2011; Mills, Rindfuss, McDonald, & te Velde, 2011).

Taken together, the two studies focused on recession-related changes in young adults' personal goal appraisals, but were informed by distinct and complementary, although not mutually exclusive, analytical and theoretical traditions (Shanahan & Porfelli, 2002). Study 1 took a more holistic, group-centered approach (von Eye & Mun, 2012) and leaned more heavily on theories affiliated with life span psychology (e.g., SOC model; Baltes, Lindenberger, & Staudinger, 2006). Study 2, in contrast, applied a variable-centered multi-level methodology (Snijders & Bosker, 2012) and drew heavily on life course sociology (Elder & Shanahan, 2006; Levy, 2013). Nevertheless, both studies borrowed from each other's conceptual framework, and

as a whole, they provide an interdisciplinary view of the complexities of young adults' goal adaptation over the Great Recession (Settersten, 2009).

Findings across both studies suggested that (1) family formation goals were highly salient despite potential influences of the recession and could serve as a protective factor; (2) goal appraisals may have been resistant to macro-level economic pressures because they largely followed age-normative patterns; and that (3) intermediate institutional filters, such as the make-up of geographical areas, play an important role in explaining the link between macro-level recession effects and micro-level goal adaptation. Each of these insights are discussed in greater depth in the following sections.

4.1 Goal Adaptation within Social Structures

Human life courses are embedded in and shaped by larger societal and structural forces such as historic events, welfare state regimes, and the social change they may bring about (e.g., Elder & Shanahan, 2006; Esping-Andersen, 1990; Mayer & Müller, 1986; Silbereisen, 2005). Yet, even person-level characteristics such as age and gender function as social categories that channel individuals into certain pathways due to differential expectations, norms, and treatments based on those categories (Levy, 2013; Linton, 1942; Neugarten, Moore, & Lowe, 1965). Individuals are nevertheless *active agents* who navigate their life course within a given set of societal parameters and at a given historic time point (Settersten & Gannon, 2009).

The overarching conceptual framework of both studies presented in this dissertation drew heavily from the life course *principle of historic time and place* by considering potential effects of the Great Recession as ubiquitous contextual influence on goal adaptation of a specific cohort of German young adults (Elder & Shanahan, 2006). Young adulthood, roughly defined as the ages between 18 to the early 30's (Furstenberg, Rumbaut, & Settersten, 2005), is a particularly

interesting time period to examine the recession-related influences because many age-normative transitions take place that may be prone to economic fluctuations such as the launch a career or family formation.

One way through which individuals maintain a sense of control and shape their developmental pathways in an agentic manner is the use of goal-related strategies, such as *selection* and *optimization*, to manage resources in light of proximal and distal stressors (Baltes, Lindenberger, & Staudinger, 2006; Heckhausen et al., 2010; Salmela-Aro, 2009). The two studies presented in this dissertation focused on goal appraisals because goal selection and compensatory processes are closely tied to appraisals. For example, highly appraised goals are more likely to be chosen over competing, lower valued ones (Heckhausen & Kuhl, 1985; Knecht, Wiese, & Freund, 2016). With regard to compensatory processes, individuals may disengage from a given goal because developmental losses no longer allow goal pursuit without considerable costs or, although rarely considered, due to external stressors such as the recession (Heckhausen et al., 2010; Salmela-Aro, 2009). Both studies in this dissertation therefore built on the notion of agentic adaptation of goal appraisals in light of external stressors, yet Study 1 explicitly examined the link between goal adjustment across life domains and life satisfaction (e.g., Miller & Wrosch, 2007).

Surprisingly, the profiles of goal appraisals extracted in Study 1 only differed in the endorsement of family formation goals (low vs. high “family formation endorser”) and the likelihood of transitioning between profiles was relatively low. The strong stability in the classification into the high family formation endorser profile may signal individuals’ strong need and desire to build meaningful relationships and ties to others (Kahn & Antonucci, 1980). Because forming meaningful and trustful bonds with others represents a core protective system

of resilience (Masten & Wright, 2009), the high salience of family-related goals may represent a coping strategy to maintain well-being in light of economic pressure and uncertainties.

Nevertheless, one might see more fluctuations between profiles of goal appraisals, or even different grouping, if data were collected more frequently and at an earlier time point during the recession since the recovery period was already in full swing in Germany by 2012 (e.g., Möller, 2010).

Study 2, however, extended the focus on individuals' embeddedness in historic time by emphasizing contextual influences such as social geographies and environments (Bronfenbrenner & Morris, 2006; Chetty et al., 2016; Elder & Shanahan, 2006; Gerstorf et al., 2010). The process of *channeling* in the *4C life span model of motivation* refers to the impact of environments on goal selection and adaptation by either promoting or limiting opportunities (Salmela-Aro et al., 2007). The structural make-up of environments can be examined on multiple levels ranging from legal regulations and support systems of respective *welfare state regimes* to *local opportunity structures* within smaller geographical units (Esping-Andersen, 1990; Hank, 2002; Mayer & Müller, 1986; Nauck, 1995).

Both studies presented in this dissertation acknowledged the potential impact of gendered policies on goal adaptation for young men and women in Germany's conservative welfare state, which actively promotes traditional ideals of the male breadwinner and the female housekeeper (Buchmann & Kriesi, 2011). Women were indeed more likely to be classified into the high family formation endorser profile, which could reflect the persisting influence of gender role models and policies. Study 2 examined the impact of local opportunity structures on the federal state-level, which comprised regional indicators that are highly relevant for young adults' launch into adulthood and prone to the effect of macro-economic fluctuations (e.g., youth

unemployment and fertility rates). Results indicated that regional indicators did amplify group differences (e.g., men vs. women) in the rate of change in goal appraisals (Gerstorf et al., 2010), even though the direction of effects varied across goals and regional indicators. Regional indicators can therefore be seen as *institutional filters* that represent the intermediate link between the macro-structural effects of the recession and individuals' micro-decisional processes (cf. Mills & Blossfeld, 2009). Thus, motivational theories should incorporate the intersection and interdependency between individual decision-making and structural forces on multiple levels of analyses more explicitly.

4.2 Relative Stability in Light of Rapid Economic Changes

Germany's rapid recovery from the Great Recession has received considerable attention in the literature as "the German job miracle" and its specific mechanisms could therefore inform the recovery process in other countries or for future downturns (Rinne & Zimmermann, 2012). Even though the impacts and repercussions of the Great Recession not fully understood yet, it became clear that young adults, particularly young male workers, have been greatly affected by the economic downturn in Germany and other nations (Bargain et al., 2012; Goodman & Mance, 2011; Jenkins et al., 2013). The stark contrast between the overall mild and short-lived effect of the recession on Germany's economy, despite dramatic media coverage, and the heavy weight on a vulnerable subpopulation because of Germany's limited policy support for labor market entries (Buchholz & Kurz, 2008), made Germany an interesting case study for this dissertation.

It was therefore unexpected that the results of both studies presented in this dissertation revealed a high degree of stability in goal appraisals across domain (Study 1) and relative small effect sizes for the rate of change in individual goal appraisals (Study 2). A common theme across both studies, however, was the heightened importance of family formation goals, which

were interpreted as indication of resilience in light of economic pressure (Masten & Wright, 2009). Because this dissertation was, to my knowledge, the first attempt to examine goal adjustment of German young adults over the recession, evidence from other countries such as the U.S. and Finland had to be utilized to make sense of these findings (e.g., Ranta et al., 2013; Mejía et al., 2015; Vuolo et al., 2012).

With regard to globalization-related changes, it had been suggested that young adults tend to put long-term commitments such as marriage and parenthood on hold because of increased societal uncertainties and a competitive economic climate (Kurz et al., 2005; Mills & Blossfeld, 2009). This notion was supported by trends toward later transition ages for major developmental milestones signaling the launch into adulthood (Buchmann & Kriesi, 2011; Furstenberg et al., 2005; Shanahan, 2000). A similar logic can be applied to recession-related influences on young adults' goal appraisals. Ranta and colleagues (2013) found that career and education-related goals were more salient than relational goals among Finnish young adults aged 20-23 over the recession years. Similarly, Vuolo and colleagues (2012) concluded that maintaining high levels of *agentive striving* concerning work and career-related goals shielded U.S. young adults aged 18-31 from unemployment in the beginning of the recession.

The discrepancies between evidence from Finland, the U.S., and the results presented in this dissertation can be attributed to three main issues. First, the Great Recession had a more severe and long-lasting effect on Finnish and U.S.-American young adults with heightened youth unemployment rates (e.g., 20% in Finland vs. 8% in Germany in 2012; Eurostat, 2012). Thus, it could have indeed been more crucial for those young adults to invest all energy and resources into entering the labor market successfully or investing into post-secondary training. Second, the age range was very narrow for the Finnish sample (Ranta et al., 2013). If this sample would be

re-examined in their mid- to late-20's, relational and family formation goals may be more salient as well. Third, the U.S.-based study focused solely on work- and educational goals, whereas the studies presented in this dissertation considered the interconnectedness and role of multiple personal goals across life domains (Heckhausen et al., 2010).

It should be noted, however, that goal appraisals do not necessarily translate into realized transition patterns, although highly salient goals are more likely to be put into action (Heckhausen & Kuhl, 1985; Salmela-Aro, 2009). Successful goal pursuit requires favorable conditions to fulfill a given goal such as time constraints or available means (Heckhausen & Kuhl, 1985). From this perspective, it could be possible to appraise a given goal highly (e.g., relational goals), but to potentially act on a less-valued goal because, at this time point, conditions may be more favorable toward goal pursuit for a lower-appraised goal (e.g., work goals). Study 2 extended the concept of situational opportunity by examining the effect of opportunity structures linked to federal states on the rate of change in goal appraisals over the recession years. Results indicated that the appraisals of both family formation goals increased over the recession years, which could signal that family formation is a unique and uniform organizer of young adults' life courses despite economic strain (Spéder, Murinkó, & Settersten, 2014).

Only the importance of having children, however, was prone to both direct and indirect contextual influences. This finding is in line with previous work comparing the effects of welfare states' generosity on the timing of entering parenthood that linked the absence of supportive family policies to later transition ages (Mills et al., 2011). Similarly, more generous regional offerings, such as available childcare, were related to higher rates of increased appraisals of having children. Equalizing the provision of childcare and other support systems for young

parents across federal states could therefore be an important investment in light of regional disparities concerning public spending and Germany's relatively low and stagnating fertility rates (Arnold, Freier, Geissler, & Schrauth, 2015; Eurostat, 2016; Hank & Kreyenfeld, 2003).

4.3 Limitations

Although this dissertation brought together two innovative studies that examined stability and change in young adults' personal goal appraisals over the Great Recession from a micro- and macro-analytical perspective, these studies are not without limitations. First, both studies utilized only two specific waves of the German Socio-Economic Panel (SOEP; i.e., 2008 and 2012) and therefore lacked pre-recession measures of individuals' personal goal appraisals. The personal goals items were not part of the annual core module of questions, but rather part of a periodically repeated topic module (i.e., the assessment schedule was 1995, 2004, 2008, and 2012).

Expectations of change in goal appraisals over the recession years were therefore based on previous theoretical and empirical work on age-normative goal setting and adaptation, contextual influences, and transition patterns (e.g., Buchmann & Kriesi, 2011; Heckhausen et al., 2010; Salmela-Aro et al., 2007). In an attempt to disentangle maturation from recession-related influences, at least for Study 1, an independent SOEP sample of 18-29 year olds in 2004 were analyzed ($N = 3,453$; 48.2% male; Appendix 2.B).

Results indicated that the three-class solution was the best fit and two of the three derived profiles mirrored the low and high family formation endorsers extracted in 2008 and 2012 (see Appendix 2.C-2.E). In addition, a profile labeled "no family formation endorser" emerged that reported even lower appraisals on the importance of owing a car, having a happy marriage, and children. Note that the no family formation profile also emerged for the 2008 and 2012 three-class solutions, but with very low sample sizes for this subgroup, especially in 2012.

Nevertheless, the two-class solution was selected for 2008 and 2012 because it had a better fit than the three-class solution. The replication of the low and high family formation endorser profiles is comforting and troubling at the same time because it suggested that, on the one hand, the established profiles are likely to be actually meaningful and existing, although non-observable, categorizations of the study populations (Maysn, 2013). On the other hand, the similarity of solutions across samples from different historic time points could suggest that the recession did in fact have little effect on the groupings and that goal appraisals are largely shielded from macro-economy effects.

Second, the results are based on a sample of German young adults and may therefore not be generalizable to young adults in other nations in Europe or the U.S. without precaution. Although the Great Recession affected national economies worldwide, with a heightened risk of unemployment for young workers under the age of 25 particularly, the economic downturn in Germany was relatively mild and rather short-felt compared to other nations (Jenkins et al., 2013). Thus, profiles of goal appraisals from other national samples could differ vastly from the groups extracted in Study 1, depending on the severity of the recession as well as the supporting institutions such as the welfare state in the respective countries. With regard to the second study, the meaning and level of disparity between community types such as urban and rural areas could also vastly differ within and across countries (e.g., in the U.S.; Carr & Kefalas, 2009). European states tend to be more densely populated compared to some areas in the U.S. and living in rural regions in Germany or other European state areas could therefore mean that a person is still in close proximity to an urban center. The link between personal goals and community types can therefore not be generalized without caution as well.

Third, the items that were used to operationalize personal goals in both studies captured broad developmental milestones, such as forming a family and establishing a career, rather than smaller transitions leading up to those adulthood markers (Furstenberg et al., 2005). Especially the item wording concerning family formation goals reflected exclusively traditional family forms (e.g., having a happy marriage), which may not align with the personal goals and values of a large share of young adults, particularly those from East Germany. It stands to reason that the results of both studies therefore even underestimate the significance of family formation, and if items would have been worded more inclusively (e.g., asking about the importance of having a partner or living with a partner), endorsements may be even higher. It would also be more beneficial to let participants generate their personalized list of goals, which they would rate according to their importance subsequently, rather than rate a fixed list (see Little, 1983; Ranta et al., 2013). Because the personal goal measures available in SOEP did not include such an open-ended format, both studies focused on change in goal appraisals instead of goal selection processes.

Lastly, the impact of the Great Recession was incorporated into both studies implicitly as study context during data collection, which was expected to imprint on individuals' goal setting and decision-making (Elder & Shanahan, 2006; Salmela-Aro, 2009). Integrating more explicit measures of young adults' objective and subjective level of impact by the recession such as changes in employment status, drop in household income, or changes in concerns about the economy could have informed the interpretations of results for both studies. Similarly, more subjective ratings of concerns about the recession and the make-up of local opportunity structures could further explain changes in the appraisal of personal goals (Gerstorf et al., 2010). Variables such as perceived social support and social cohesion within communities could in fact

be more, or just as, impactful for goal setting and adaptation processes compared to objective regional indicators drawn from census data. Perceptions are likely to tap not only the availability (or lack thereof) of support, but also individuals' awareness or usage of those resources. For instance, it could be the case that two individuals within a more affluent area evaluate the state of a community vastly different based on their personal experiences, which could imprint on their goal appraisals as well.

4.4 Final Conclusion

The overarching aim of this dissertation was to examine change and stability in German young adults' goal adaptation across multiple life domains, who were navigating their launch into adulthood in the competitive economic climate of the Great Recession. This work was inspired by seminal work on individuals' adjustment under crisis and rapid societal change that highlighted the role of historic events as important study contexts and hidden variables shaping the life course (e.g., Elder, 1974; Conger & Elder, 1994; Diewald, Goedicke, & Mayer, 2006; Settersten, 2006; Silbereisen, 2005). The two studies outlined in this dissertation each took a distinct theoretical and analytical approach, ranging from macro- to more micro-level forces and processes, to understand the complex patterns of influences on personal goal appraisals. Taken together, both studies emphasized the high salience of family formation goals as indication of a basic human need to feel connected to others, which could be a protective factor in light of external stressors (Masten & Wright, 2009; Mejía et al., 2015). However, young adults may only actually translate highly valued goals into action, if environmental conditions are favorable to successful goal pursuit of a given goal such as entering parenthood (Heckhausen & Kuhl, 1985).

Circling back to the conceptual model introduced in Chapter 1 (Figure 1.1), it became clear that, even though life domains are interconnected, family formation goals seemed to have

been the driving force in young adults' adjustment to the Great Recession. In contrast, less apparent trends were visible for appraisals of personal goals that mapped on to the domains work or leisure. It should be noted, however, that dynamics between personal goals across multiple life domains were only examined in Study 1. Study 2 showed that fertility-related goals seemed to be particularly prone to contextual influences, such as state-level fertility rates or the availability of childcare. This is particularly problematic in light of Germany's comparatively low and stagnating birth rates (Eurostat, 2016). It stands to reason that the supporting institutions of the German welfare state, which allow little flexibility in reacting to economic fluctuations and foster traditional role distributions between men and women, served as stabilizing forces in young adults' personal goal appraisals. Because German young adults are firmly channeled through the tracked educational system and into the labor market (Levy, 2013), that is guided by the male-breadwinner ideology, the appraisals of most goals may have appeared to be relatively unaffected by the recession. In welfare states with less regulations concerning education, labor market entry, and family policies, such as the liberal welfare state, young adults have to shoulder more risk own their own, but may also be able to react to external stressors, such as the recession, in a more flexible manner. In turn, personal goals of all three life domains may fluctuate more strongly compared to the German case.

On a social policy level, more generous investments and resources for young parents should be put into place, in addition to equalizing availability and access to resources across federal states and communities, to increase stagnating fertility rates (Arnold et al., 2015; Hank & Kreyenfeld, 2003; Mills et al., 2011). Furthermore, the composition of families and family-related transition patterns are changing rapidly in Germany, Europe, and other Western nations (Buchmann & Kriesi, 2011; Cherlin, 2010; Huinink, 2013; Mayer & Schulze, 2009). Family

transitions occur at later ages in the life course and marriage does not necessarily precede childbirth for many young parents, although rates of non-marital birth vary across geographical regions and socioeconomic strata (Mayer & Schulze, 2009; Smock & Greenland, 2010). Yet, policies of the conservative welfare state do not support non-traditional family forms or caregiving arrangements (Caliendo & Hogenacker, 2012; Mayer, 2009). If the compliance with gender-specific expectation to provide for a family is threatened by the differential impact of the recession, young men and families are put at risk (Levy, 2013). Policymakers should therefore react to the realities of the new landscape of family life and relieve pressure from young men by implementing more inclusive family policies (Müller, Neumann, & Wrohlich, 2016).

4.5 Future Research Agenda

This dissertation demonstrated that goal adaptation processes are embedded in and shaped by a multitude of factors and forces that should be incorporated in the future study of goal setting, adaptation, and pursuit. First, young adulthood is a period in the life course that is densely populated with major life decisions and transitions across life domains during a relatively short time span (Furstenberg et al., 2005). It is therefore important to consider the complexities of goal setting and adaptation across multiple, potentially competing goals because life domains are intertwined (Elder & Shanahan, 2006; Knecht et al., 2016). Moving forward with a set of goals in one domain could hinder progress in another and vice versa, on a daily basis as well as on over an extended time period. Focusing on goals of a single domain, however, may lead researchers to false conclusions that do not adequately reflect the realities of short- and long-term decision-making process.

Second, young adults do not set goals and make choices in isolation, but rather in consideration of the plans and choices of others surrounding us (Elder & Shanahan, 2006; Kahn

& Antonucci, 1980). Future studies should therefore be extended to dyadic and even social network data. Individuals are embedded in a complex web of romantic partners, parents, nuclear and extended family members, friends, coworkers, neighbors and other confidants and acquaintances (Bernardi, Keim, & von der Lippe, 2006). Of course not every network member will have the same amount of influence on individuals' goal adaptation, yet couples', families', and networks joint responses to proximal and distal stressors could be a fertile ground for innovative studies taking an interdisciplinary look at goal setting and adaption processes.

Third, young adults between the ages of late teens to early thirties are not a homogeneous group with regard to goal setting and goal adjustment processes. The goals they endorse and that are most pressing for them may depend on key characteristics such as age (Salmela-Aro et al., 2007). For example, young adults in their early 20's are less likely to be preoccupied with family formation goals compared to somebody who is approaching 30. Future studies will need to place an emphasis on disentangling motivational processes and the impact of contextual forces on these for individuals in their "early" vs. "later" young adulthood years rather than drawing uniform conclusions based on a sample that spans a wide band of chronological ages (Settersten, 2003).

Relatedly, educational attainment is another key characteristic that is shaping and stratifying the life course of young adults, particularly within the rigidly-tracked German educational system and labor market (Bosch & Jansen, 2010; Cook & Furstenberg, 2002). Future studies should therefore incorporate and highlight the impact of educational attainment on in the relationship between personal goals and contextual influences. Going back to school and enrolling in further post-secondary education, however, could be a personal goal in itself in response to limited opportunities of the recession-stricken labor markets (Vuolo et al., 2012).

Nevertheless, the ability to invest in more training in times of economic pressure may be restricted to those who were already in a more fortunate position before the recession hit. Educational attainment, as a proxy of social class and privilege, should therefore be critically examined on all levels of analysis such as predictor, outcome, and effect modifier.

Lastly, the interdisciplinary framework of this dissertation made a case for considering macro-level influences, ranging from historic time to geographical space, in the study of motivational processes such as goal setting and goal adjustment. It is my hope that this approach will be carried forward and applied to other historic events, such as future economic downturns or the *Syrian Refugee Crisis* unfolding in the EU since 2014 (e.g., Brenke, 2015), and other study contexts within and across countries. Taking a comparative, cross-national perspective on the study of macro-contextual influences on motivational processes could further help to contextualize and synthesize diverging findings based on national samples.

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Appendices

Appendix 2.A

Table 2.A

Mean and Standard Deviation of Personal Goals by Sex (N = 3,034)

Personal Goal	2008	2012
<i>Women</i>		
Afford something	2.16 (0.58)	2.10 (0.60)
Help others	2.44 (0.55)	2.47 (0.55)
Fulfill one's potential	2.23 (0.67)	2.20 (0.66)
Success in job	2.64 (0.66)	2.11 (0.68)
Happy marriage	2.67 (0.57)	2.73 (0.53)
Have children	2.09 (0.89)	2.19 (0.87)
Own a home / car	1.46 (0.86)	1.51 (0.91)
Being socially active	0.87 (0.70)	1.08 (0.72)
Traveling	1.65 (0.82)	1.66 (0.81)
<i>Men</i>		
Afford something	2.18 (0.61)	2.13 (0.64)
Help others	2.17 (0.57)	2.27 (0.60)
Fulfill one's potential	2.17 (0.65)	2.17 (0.68)
Success in job	2.32 (0.63)	2.21 (0.66)
Happy marriage	2.42 (0.70)	2.50 (0.69)
Have children	1.75 (0.89)	1.85 (0.91)
Own a home / car	1.53 (0.89)	1.58 (0.93)
Being socially active	0.94 (0.89)	1.12 (0.75)
Traveling	1.54 (0.85)	1.56 (0.84)

Note. In 2008, respondents were asked to rate the importance of "owning a home". For the 2012 assessment, however, participants were asked to rate the importance of "owning a car".

Appendix 2.B

Table 2.B

Sample Characteristics for the 2004 Replication Sample (N = 3,453)

Indicators	2004
Age, <i>M (SD)</i>	23.28 (3.41)
Male, <i>n (%)</i>	1,666 (48.2)
West Germany, <i>n (%)</i>	2,538 (73.5)
Community type, <i>n (%)</i>	
Urban	2,291 (66.4)
Urbanized	1,162 (33.6)
School attainment, <i>M (SD)</i>	11.77 (2.11)
Employed, <i>n (%)</i>	2,038 (59.0)
Family status, <i>n (%)</i>	
Single	2,983 (86.4)
Married	443 (12.8)
Separated	27 (0.8)
Personal goals, <i>M (SD)</i>	
Afford something	2.20 (0.65)
Help others	2.24 (0.63)
Fulfill one' potential	2.24 (0.65)
Success in job	2.29 (0.65)
Owning a car	1.58 (0.90)
Happy marriage	2.51 (0.69)
Having children	1.81 (0.94)
Being socially active	1.07 (0.74)
Traveling	2.08 (0.87)

Note. School attainment presented in full years enrolled in primary and secondary education.

Appendix 2.C

Table 2.C

Goodness of Fit Statistics for Cross-sectional LPA Models in 2004 (N = 3,453)

Classes	-LL	npar	AIC	BIC	SABIC	Entropy	VLM-Rubin	LM-Rubin
1	-34268.36	18	68572.72	68683.37	68626.18	-	-	-
2	-33196.29	28	66448.59	66620.70	66531.73	0.93	< .001	< .001
3	-30115.14	38	60306.28	60539.87	60419.12	0.99	< .05	< .05
4	-29830.42	48	59756.83	60051.89	59899.37	0.84	< .001	< .001
5	-29661.99	58	59439.97	59796.50	59612.20	0.82	< .001	< .001

Note. - LL = log likelihood; npar = number of free parameters; AIC = Akaike information criterion; BIC = Bayesian information criterion; SABIC = sample-size adjusted Bayesian information criterion; VLM-Rubin = Vuong-Lo-Mendell-Rubin likelihood ratio test; LM-Rubin = Lo-Mendell-Rubin likelihood ratio test. Dash indicates criterion was not applicable to the model. Bold type indicates selected model.

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

Appendix 2.D

Table 2.D

Means and Standard Errors of Personal Goals for the 2004 LPA Solutions (N = 3,453)

<i>Two-Class LPA</i>	Low FF	High FF	-
Afford something	2.16 (0.02)	2.22 (0.01)	-
Help others	2.00 (0.02)	2.39 (0.01)	-
Fulfill one's potential	2.20 (0.02)	2.26 (0.01)	-
Success in job	2.22 (0.02)	2.34 (0.01)	-
Happy marriage	1.73 (0.02)	2.98 (0.01)	-
Have children	1.25 (0.03)	2.15 (0.02)	-
Own a car	1.26 (0.03)	1.78 (0.02)	-
Being socially active	1.01 (0.02)	1.11 (0.02)	-
Travel	2.09 (0.03)	2.08 (0.02)	-
<i>N (%)</i>	1,328 (0.37)	2,125 (0.63)	-
<i>Three-Class LPA</i>	Low FF	High FF	No FF
Afford something	2.17 (0.02)	2.22 (0.01)	2.16 (0.04)
Help others	2.07 (0.02)	2.39 (0.01)	1.82 (0.04)
Fulfill one's potential	2.19 (0.02)	2.26 (0.01)	2.25 (0.04)
Success in job	2.26 (0.02)	2.33 (0.01)	2.11 (0.04)
Happy marriage	2.00 (0.00)	3.00 (0.00)	0.84 (0.02)
Have children	1.43 (0.02)	2.15 (0.02)	0.76 (0.04)
Own a car	1.37 (0.02)	1.78 (0.02)	0.99 (0.05)
Being socially active	1.04 (0.02)	1.11 (0.02)	0.94 (0.04)
Travel	2.11 (0.03)	2.08 (0.02)	2.01 (0.06)
<i>N (%)</i>	1,029 (0.30)	2,125 (0.61)	299 (0.09)

Note. Low FF = low family formation endorser profile; High FF = high family formation endorser profile; No FF = no family formation endorser profile.

Appendix 2.E

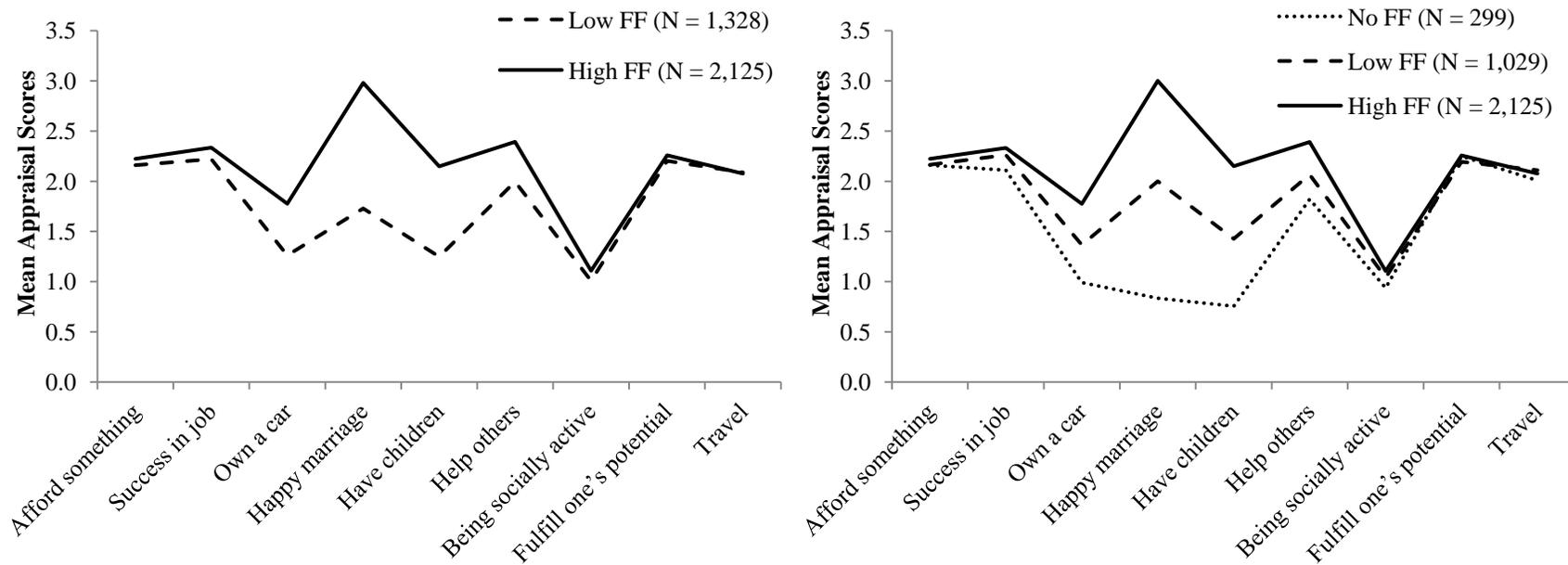


Figure 2.E. Latent profiles of personal goals for the two-class (left) and three-class solution in 2004 (right). Low FF = low family formation endorser profile; High FF = high family formation endorser profile; No FF = no family formation endorser profile.

Appendix 3.A

Table 3.A

Regional Indicators by Federal State for 2008 (N = 16)

<i>Federal States</i>	Fertility Rate ^a	Unemployment Rate ^b	Child Care ^c	Disposable Income ^d	Net Migration ^e
Baden-Wuerttemberg	8.55	9.7	11.6	20.415	0.41
Bavaria	8.49	10.5	21.5	20.819	1.12
Berlin	9.33	10.4	54.6	16.535	4.47
Brandenburg	7.44	11.1	52.6	16.192	-2.09
Bremen	8.41	8.9	21.3	19.407	0.85
Hamburg	9.46	8.6	32	21.179	0.99
Hessen	8.53	10.4	32.5	19.307	-0.23
Mecklenburg-Western Pomerania	7.83	11.4	55.9	15.184	-6.35
Lower Saxony	8.15	10.4	12.6	17.602	-0.54
North Rhine-Westphalia	8.35	9.7	30.7	18.857	-1.33
Rhineland-Palatinate	7.98	12.0	28.4	19.244	-1.65
Saarland	6.93	9.4	22.6	17.335	-0.86
Saxony	8.18	11.5	70.3	15.942	-2.98
Saxony-Anhalt	7.38	10.8	56.5	15.158	-7.74
Schleswig-Holstein	8.00	11.5	14.6	18.833	1.78
Thuringia	7.61	10.4	86.1	15.602	-5.57

Note. ^a Fertility rate per 1,000 inhabitants. ^b Unemployment rate of 18-24 year-olds in percent. ^c Children aged 3-5 in formal care in percent; for the onset of the recession, only 2009 data were available. ^d Disposable household income in 1,000 Euro. ^e Net migration within Germany per 1,000 inhabitants.

Appendix 3.B

Table 3.B

Regional Indicators by Federal State for 2012 (N = 16)

<i>Federal States</i>	Fertility Rate ^a	Unemployment Rate ^b	Child Care ^c	Disposable Income ^d	Net Migration ^e
Baden-Wuerttemberg	8.49	8.6	16.1	21.787	6.24
Bavaria	8.58	10.6	27.0	22.426	7.34
Berlin	10.35	9.9	58.7	17.376	12.33
Brandenburg	7.54	8.8	59.1	17.43	2.34
Bremen	8.63	9.1	26.6	19.737	6.28
Hamburg	10.26	7.4	38.4	22.054	8.70
Hessen	8.59	9.8	41.4	20.886	5.10
Mecklenburg-Western Pomerania	7.93	9.8	62.6	16.546	-0.38
Lower Saxony	7.91	10.0	19.0	19.165	3.68
North Rhine-Westphalia	8.31	9.7	37.9	20.263	3.05
Rhineland-Palatinate	7.81	10.9	44.7	20.796	3.20
Saarland	6.91	10.6	34.8	18.945	1.55
Saxony	8.56	8.5	76.5	17.273	2.89
Saxony-Anhalt	7.45	8.8	63.5	16.726	-1.88
Schleswig-Holstein	7.85	10.7	21.6	20.443	4.68
Thuringia	7.97	8.0	87.4	16.965	-0.79

Note. ^a Fertility rate per 1,000 inhabitants. ^b Unemployment rate of 18-24 year-olds in percent. ^c Children aged 3-5 in formal care in percent. ^d Disposable household income in 1,000 Euro. ^e Net migration within Germany per 1,000 inhabitants

Appendix 3.D

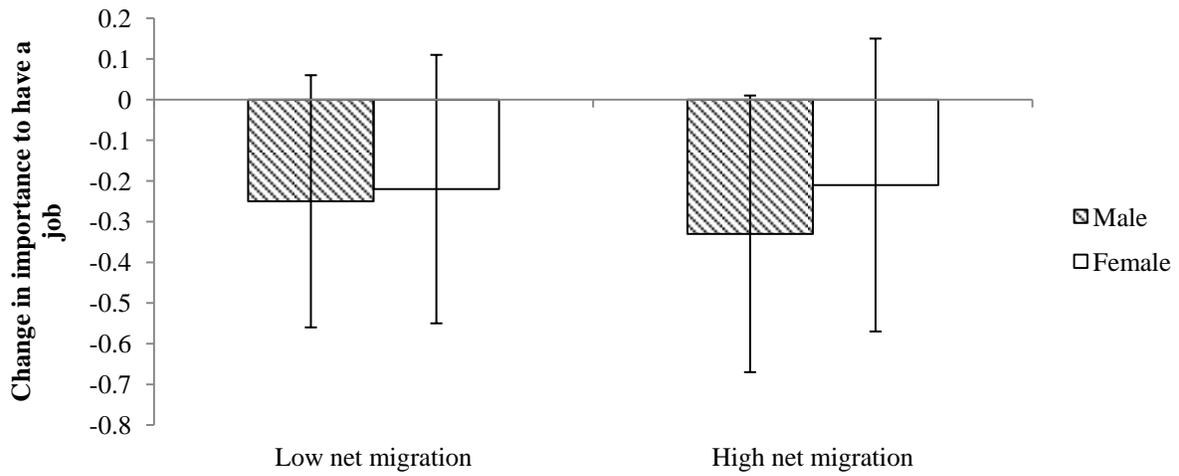


Figure 3.D. Simple slopes of the importance to have a stable job for net migration within Germany one standard deviation below (low) and above (high) the mean by gender. Net migration within Germany per 1,000 inhabitants.

Appendix 3.E

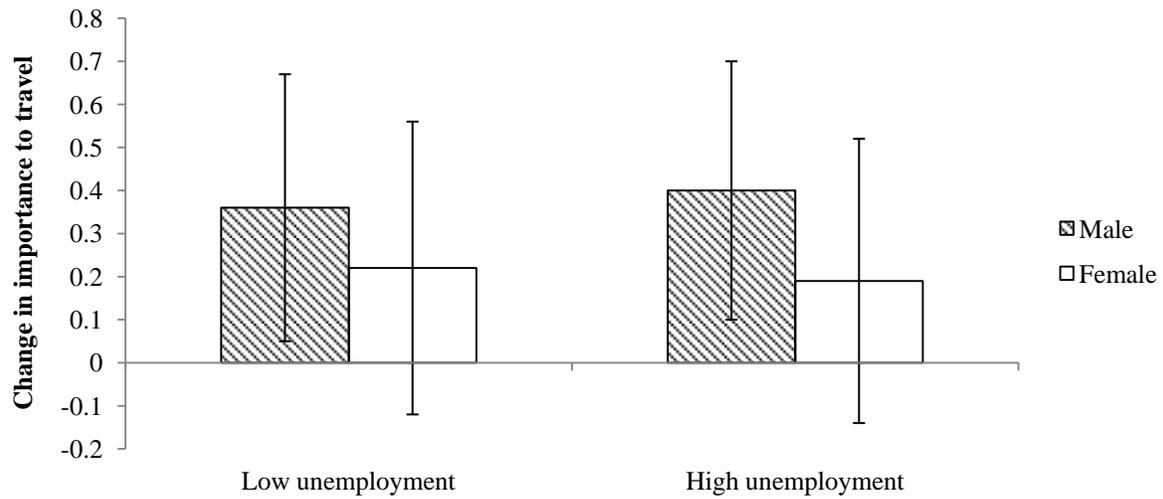


Figure 3.E. Simple slopes of the importance of travelling for youth unemployment one standard deviation below (low) and above (high) the mean by gender. Youth unemployment of 18-24 year-olds in percent.

Appendix 3.F



Figure 3.F. Simple slopes of the importance to fulfill one’s potential for youth unemployment one standard deviation below (low) and above (high) the mean by community type. Youth unemployment rate of 18-24 year-olds in percent.

Appendix 3.G

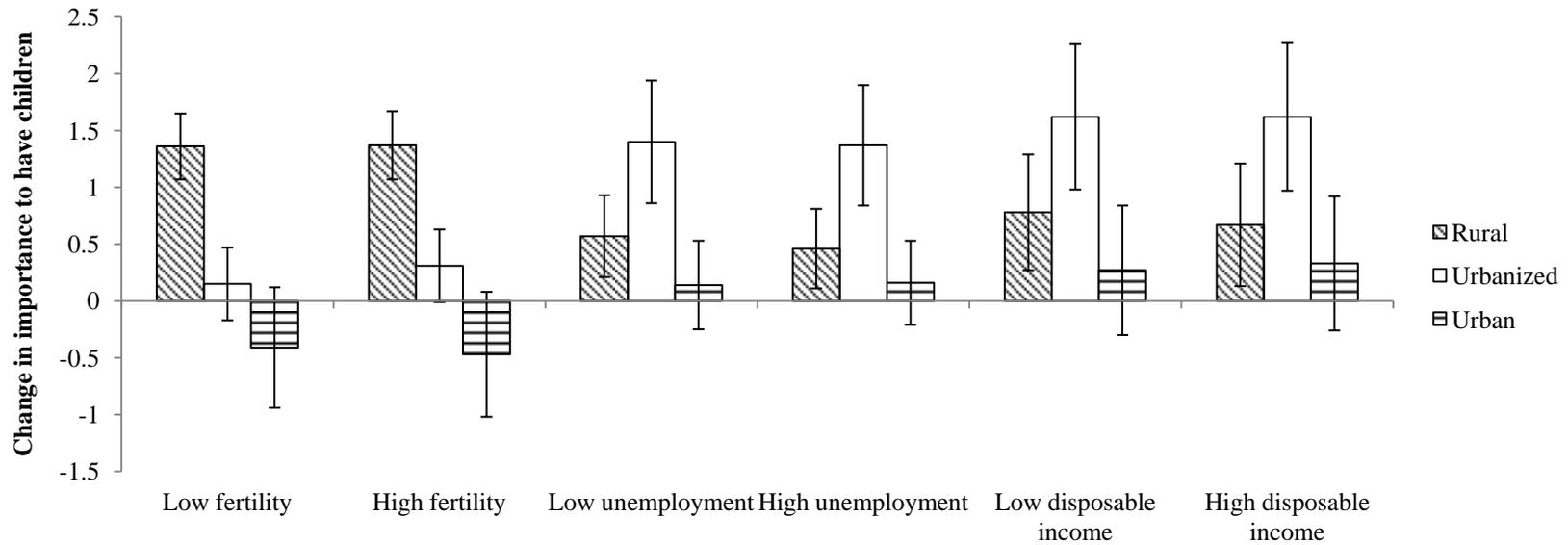


Figure 3.G. Simple slopes of the importance to have children for regional indicators one standard deviation below (low) and above (high) the mean by community type. Fertility rate per 1,000 inhabitants. Youth unemployment rate of 18-24 year-olds in percent. Children aged 3-5 in formal care in percent. Disposable household income in 1,000 Euro.

