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**Article — Accepted Manuscript (Postprint)**

## The Development of Life Goals Across the Adult Lifespan

The Journals of Gerontology: Series B

**Provided in Cooperation with:**

German Institute for Economic Research (DIW Berlin)

*Suggested Citation:* Buchinger, Laura; Richter, David; Heckhausen, Jutta (2022) : The Development of Life Goals Across the Adult Lifespan, The Journals of Gerontology: Series B, ISSN 1758-5368, Oxford University Press, Oxford, Vol. 77, Iss. 5, pp. 905-915, <https://doi.org/10.1093/geronb/gbab154>

This Version is available at:

<https://hdl.handle.net/10419/272049>

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## The development of life goals over the adult lifespan

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## Abstract

**Objectives.** Life goals are important organizing units for individual agency in development. On a societal level, they align with age-normative developmental tasks; on the individual level, they guide people's attempts at shaping their own development. This study investigates the development of life goals across the adult lifespan with a focus on differences regarding gender, parental status, education, and region. **Method.** Using longitudinal data from the German Socio-Economic Panel study (SOEP, N=52,052; age range: 18-84 years), we estimated the developmental trajectories of importance ratings for nine life goals across the adult lifespan using multiple-group latent growth curve modelling. **Results.** Having a happy relationship or marriage, having children, and being there for others are the life goals rated as most important across almost the entire adult lifespan. Having a happy relationship or marriage differed strongly by gender. Up to middle adulthood it was more important for women but more important for men in late adulthood. Parental status amplified gender differences in the work and family domain. Low education was associated with a higher perceived importance of being there for others. The largest regional differences (East vs. West) were found for home ownership. **Discussion.** Although the importance of some life goal trajectories reflects typical age-grading in developmental tasks, other life goals (e.g., having children) remain important even after goal attainment or after developmental deadlines have passed.

*Keywords:* Life Course and Developmental Change, longitudinal change, gender, parenthood, developmental methods

## Introduction

When asking people about their ideas of a successful life, most refer to the goals they want to achieve. Goals organize behavior and structure development (Heckhausen, 2000; Heckhausen et al., 2010; Nurmi, 1991). They are cognitive representations of desirable states (Austin & Vancouver, 1996), whereby desirability depends on societal expectations about what people ought to achieve and when.

Age-specific expectations are referred to as “developmental tasks” (Havighurst, 1948) and are theorized to influence behavior when adopted as goals (Havighurst, 1948; Nurmi, 1991). Adaptive developmental goals should align with the peak opportunity time for certain experiences and should follow a normative sequence (e.g., career entry and family formation in early adulthood) (Heckhausen, 1999; Heckhausen et al., 2019). As developmental opportunities change across the lifespan, goal engagement and disengagement should be roughly congruent (Heckhausen et al., 2010, 2019).

Societal changes may affect the timing and relevance of developmental tasks. For instance, in the 1950s, women married and had their first child in their late teens or early twenties (Koropeckyj-Cox et al., 2007). Today, the average age of first-time mothers is 30.1 years (Statistisches Bundesamt [Destatis], 2020). Moreover, recent findings suggest that the perceived importance of a romantic relationship for personal happiness is lower in younger birth cohorts (Scheling & Richter, 2021).

Life goals are domain-specific higher-order goals that span time and contexts and that reflect what people generally strive for (Atherton et al., 2020; Bleidorn et al., 2010; Roberts et al., 2004). To date, there are few empirical studies on the long-term development of life goals. Most earlier research was cross-sectional (Nurmi, 1992), focused on a specific developmental stage (Nurmi et al., 1994), or, if longitudinal, only covered brief time periods (e.g., about four years, Salmela-Aro & Nurmi, 1997; Yau et al., 2021). For two decades,

researchers have been calling for more longitudinal research in the field of goal development (Atherton et al., 2020; Dunlop et al., 2017; Roberts & Robins, 2000).

There are a few notable exceptions. A study investigating the development of life goals over a 24-year period from college age to middle adulthood found mean-level decreases over time (Atherton et al., 2020). The sample size, however, was relatively small (N=251), and the points of assessment were spread unevenly across the study period (four points in the first four years, plus one point in year 24). Moreover, the study gave no insights into the development of life goals in late adulthood. Another recent study covering a six-year period with biannual data collection found negative associations between age and the importance of work-, status-, and growth-related goals and positive associations between age and prosocial goals (Bühler et al., 2019). A study investigating life goals at the transition to parenthood found high rank-order and ipsative stability of life goals over the course of one year for parents and childless individuals (Wehner, van Scheppingen, & Bleidorn, in press ). The study period of one year seems short, however, in this context. Findings from personality research suggest that changes might occur long before or after the transition to parenthood (Asselmann & Specht, 2020).

### **Theoretical perspectives on goal development**

The motivational theory of lifespan development (MTD; Heckhausen et al., 2010) explains how individuals successfully navigate life's changing opportunities and challenges. It conceptualizes the lifespan as an age-graded, sequentially organized action field of opportunities and constraints in which individuals have to prioritize the pursuit of urgent, age-appropriate goals over others.

Young adulthood is characterized by high control capacity and ample opportunities. Therefore, life goals that are oriented towards the achievement of developmental gains (e.g., personal fulfillment) should have priority (Ebner et al., 2006). According to the action phase

model of developmental regulation (Heckhausen, 2000), goal-striving efforts differ depending on the distance from a developmental deadline. As the deadline approaches and opportunities shrink, the individual intensifies goal-related behaviors. In middle adulthood, opportunities begin to decline and developmental deadlines loom larger. Hence, the importance of age-constrained goals (e.g., parenthood) should spike before the critical developmental deadlines (e.g., biological clock) have been reached.

Old age is characterized by a loss in primary control capacity and decreasing opportunities, yet also bears some potential for new goal engagement after people retire from working life. Accordingly, this phase should be dominated by disengagement and goal adjustment (Heckhausen, 1999). Life goals for which the developmental deadlines have passed should lose relevance, while social goals that offer support and protection against loneliness should gain relevance. Both close social ties and weaker social ties (e.g., between spouses and between club members, respectively) have been linked to well-being in late adulthood (Huxhold et al., 2020).

### **Moderators of life goals beyond age**

Human development is inevitably a person-context interaction (Lerner, 1991). Thus, it is essential to investigate life goals in relation to personality and context variables. The current study stresses the relevance of context factors like gender, educational background, parental status, and geographical region. For recent work on the relationship between life goals and personality, see Atherton et al. (2020).

## **Gender**

Men and women are subject to differing social expectations, especially in the work and family domain, where gender-specific socialization is strong (e.g., Eccles, 1994).

Findings from the 1990s show a strong reflection of traditional gender roles in young adults' life goals: Career success and property-related goals were more important for young men, whereas family-related goals were more important for young women (Nurmi, 1991; Nurmi et al., 1994).

## **Parental status**

Research on the compatibility of career and family life concludes that, for most women, having a child comes with a career penalty (for a review, see Greenhaus & Allen, 2011). The question arises if women, or more generally parents, adapt their career goals after entering parenthood or if they placed lower importance on career-related goals before becoming parents. Some studies suggest substantial decreases in career-related goals and increases in family-related goals for women (and to a lesser degree for men) (Salmela-Aro et al., 2000). Others find hardly any changes (Wehner et al., in press).

## **Educational background**

Work-related opportunities increase with higher levels of education, which might lead to a prioritization of work-related over family-related goals in early adulthood. Among women, higher levels of education were associated with decreased fertility and a shift of the normative timing of parenthood to a later age (Cygan-Rehm & Maeder, 2013). Outside of the work and family domain, little is known about the influence of education on life goals.

## Region

For 40 years, the German Democratic Republic (GDR) and the Federal Republic of Germany (FRG) were separate states. Societal expectations, opportunities, and the normative timing of developmental tasks differed considerably between the two. In the FRG, women were predominantly responsible for housekeeping and childrearing, whereas GDR-women worked full-time. Unemployment was practically nonexistent in the GDR, yet opportunities for career development were limited, and positions requiring expertise and higher education offered only slightly better pay (Stephan & Wiedemann, 1990). In most cases, housing was allocated by the government. These differences can be expected to have shaped the life goals of people who are now middle-aged or older, even decades after Germany's reunification.

## The current study

The present study investigates how goals in different domains of life change in importance across the adult lifespan. Based on previous empirical work and the discussion of changes in goal-engagement opportunities across the lifespan, we derive the following hypotheses:

*H1:* Life goals oriented towards developmental gains (i.e., career success, personal fulfillment, travel) are perceived as more important in young adulthood and decrease over the adult lifespan.

*H2:* Life goals related to social interaction (i.e., being there for others, being socially or politically involved) increase in importance across the lifespan.

*H3:* The perceived importance of having children increases throughout early adulthood and decreases after middle adulthood.

*H4:* The importance of having a happy marriage or relationship and being able to afford things remains relatively stable throughout early, middle, and late adulthood.



*H5:* Throughout the adult lifespan, the perceived importance of family-related life goals (i.e., having children and having a happy relationship) is higher in women.

*H6:* Throughout the adult lifespan, the perceived importance of career success is higher in men.

*H7:* A higher educational background is associated with a higher perceived importance of career success up to retirement age and a lower perceived importance of parenthood in early adulthood.

*H8:* The trajectories of perceived importance of career success and home ownership differ between individuals socialized in the former GDR and those socialized in the FRG.

Due to the lack of existing research and partially inconclusive findings, we did not derive hypotheses for all moderator-goal combinations but tested them in an explorative manner. Additionally, we tested for cohort differences since our methodological approach is based on the assumption that there are no cohort effects.

## Method

### Participants

We used data from the German Socio-Economic Panel study (SOEP, version 35) at the German Institute for Economic Research (DIW Berlin). Launched in 1984, the SOEP is an ongoing, annual, large, and diverse multi-cohort longitudinal study of private households in Germany. For comprehensive information about survey design, assessment procedures, participants, and variables, see (Goebel et al., 2019).

For the present study, we included data from six waves (1992, 1995, 2004, 2008, 2012, and 2016). Though an annual survey, life goals were only assessed in the six waves mentioned above, plus an additional wave in 1990. The 1990 wave was not included since data were not available for the East German sub-population. All participants who provided information on at least one life goal at one point of assessment were included in the analysis.

Following Lemola and Richter (2013), we restricted our analysis to participants below the age of 85 to avoid imprecise estimates due to smaller sample size.

Sample characteristics are displayed in Supplementary Table 1. The total number of respondents ranged from 50,616 for “being able to afford things for myself” to 52,052 for “being there for others.” Of all respondents, 52.85% were women, and the mean age of our sample ranged from  $M=43.51$  ( $SD=16.28$ ) in 1992 to  $M=48.83$  ( $SD=17.07$ ) in 2008. On average, participants took part in  $M=2.20$  ( $SD=1.36$ ) waves. The majority (61.55%) were married and living with their spouse. On average, participants had  $M=1.47$  ( $SD=1.35$ ) children. Over a quarter of our sample (28.88%) remained childless throughout the study period.

## Measures

In line with previous research (Atherton et al., 2020; Bleidorn et al., 2010; Roberts et al., 2004; Roberts & Robins, 2000) we used normative importance ratings to assess life goals. The scale ranged from 1 (*very important*) to 4 (*not at all important*). The nine goals covered the domains of work and family (being successful in my career, having a happy marriage/relationship, and having children), materialistic goals (being able to afford things for myself and owning a house), self-realization (being self-fulfilled and seeing the world/traveling extensively), and altruistic goals (being there for others and being socially/politically involved). Prior to the analysis, goal ratings were centered at the wave-specific person-mean across all goals. This technique was adopted from research on values to measure respondents’ priorities rather than individual differences regarding the use of the response scale (Schwartz, 2012).

Participants’ location in 1989, before German reunification, and their current location were used as regional coding. Participants’ highest International Standard Classification of Education (ISCED) score throughout the study period served to code educational

background. Scores were split into three categories (low, middle, and high), with “low” representing below upper secondary level of education, “middle” representing upper secondary level, and “high” representing tertiary level. We coded individuals who had children at any point during the study period as parents. There were no adoptive parents in our sample.

### **Statistical Models**

To examine the lifespan trajectories, we estimated a series of latent growth curve models (LGMs). LGMs are convenient for studying development since they permit the estimation of inter-individual variability in intra-individual change patterns over time (Preacher et al., 2008) and offer a straightforward approach to modeling non-linear change (Grimm & Ram, 2009). The LGMs were estimated with Mplus Version 8 (see Muthén & Muthén, 1998-2017). Model fit was assessed with the Bayesian information criterion (BIC). Lower values indicate better model fit when comparing multiple models.

In this study, time is conceptualized as a function of participants’ chronological age rather than measurement waves. This means that our estimation must allow for individually varying points of observation. We solved this by fixing individual slope loadings (see Figure 1) based on participant’s age at each point of assessment (see Mehta & West, 2000; Preacher et al., 2008). This allows us to estimate the trajectory across the complete age range with information from all participants simultaneously. One of the central assumptions of this approach is that the common trajectory modeled with the multi-cohort sample represents the trajectory of a hypothetical sample in which the different cohorts are followed across the entire lifespan.

Prior to analysis, age was centered and rescaled by a factor of  $10^{-2}$  to obtain numerically larger estimates and improve readability. To investigate birth cohort differences, we split participants into six decade-based cohort groups (pre-1941, 1941-1950, 1951-1960,

1961-1970, 1971-1980, and post-1980) and estimated separate models. To test for moderator effects, we fit multiple group LGMs with and without cross-group constraints. If lifting constraints led to a better model fit, we assumed group differences.

We estimated three models with a linear, quadratic, and cubic slope factor for time for each of the nine goals in each (sub-)sample. For all models that included a quadratic and/or cubic slope factor, the variances of these factors were set to zero to allow for convergence of the models.

## Results

For seven life goals, the trajectories of importance ratings were best described by the model that included a cubic polynomial (see Supplementary Table 2). For the goals “owning a house” and “being there for others,” the quadratic model had a superior fit. An overview of pooled goal importance ratings across the adult lifespan can be found in Supplementary Figures 1 and 2.

### Gender

Multiple-group LGMs demonstrated better fit for all unconstrained models, indicating gender effects. For the importance trajectories of personal fulfillment, being able to afford things, and social/political involvement, gender differences appeared in early adulthood (<30) or old age (>70) (see Figure 2). Men showed higher importance ratings for being able to afford things in early adulthood, whereas women perceived this goal as more important in late adulthood ( $\Delta M_{age83M-F} = -0.217[-0.330;0.104]$ ,  $t(493)=-3.775$ ,  $d=0.349$ ). Gender differences for social/political involvement were largest at age 21 ( $\Delta M_{M-F} = 0.158[0.093;0.222]$ ,  $t(1772)=-4.808$ ,  $d=0.228$ ) and for personal fulfillment at 84 ( $\Delta M_{M-F} = -0.118[-0.268;0.033]$ ,  $t(367)=-1.535$ ,  $d=0.162$ ). Importance trajectories for being there for others and owning a house were almost parallel, with higher ratings for being there for others for women (greatest difference at age 79;  $\Delta M_{M-F} = -0.349[-0.265;-0.433]$ ,  $t(760)=8.171$ ,

$d=0.596$ ) and higher ratings of owning a house for men (greatest difference at age 20;  $\Delta M_{M-F} = 0.215[0.151;0.279]$ ,  $t(1861)=6.557$ ,  $d=0.304$ ).

There were substantial gender differences for the goal of having a happy relationship or marriage with regard to intercept and slope. In early adulthood, men's perceived importance of this goal was lower, but increased throughout life while women reached a turning point in their forties, after which importance ratings declined. Women rated a happy relationship highest at age 33 ( $M=0.801$ ,  $SD=0.464$ ), men much later at age 84 ( $M=0.907$ ,  $SD=0.634$ ). This was the largest gender difference at any age across all goals ( $\Delta M_{84M-F} = 0.542[0.374;0.710]$ ,  $t(354)=6.353$ ,  $d = 0.680$ ).

Another relatively large gender-related difference concerned the importance of parenthood ( $\Delta M_{M-F} = -0.356[-0.421;-0.291]$ ,  $t(2068)=10.708$ ,  $d=0.474$ ). Women consistently rated having children as somewhat more important than men. This gap was larger in early adulthood and middle adulthood but narrowed towards old age. Career success was rated more important by men across all ages (largest difference at 46;  $\Delta M_{M-F} = 0.338[0.152;0.239]$ ,  $t(2767)=8.757$ ,  $d=0.334$ ).

### **Parental status**

Multiple-group LGMs indicated significant group effects of parental status on all life goals except for being there for others. Parents and individuals who would later become parents perceived life goals outside the family domain as less important than childless participants (see Figure 3). The most prominent difference pertained to the goal of having children, followed by the goal of traveling. Gender-specific analysis (see Figure 4) revealed that for childless women, the importance of parenthood decreased consistently up to age 60, whereas for fathers, mothers, and childless men it increased. Notably, for all four groups, the importance of parenthood increased in old age ( $>70$ ). The results for career success were similar for fathers and childless women. Compared to fathers, childless men had a higher

intercept and steeper slope during the active phase of their careers (20-50), but past age 50, these differences disappeared. For mothers, the curve of the trajectory was similar to that for childless women and fathers, but significant level differences remained up to age 70.

For some goals, we find substantial intercept differences between parents and individuals who remained childless. In our sample, the mean age at birth of the first child for women was  $M=25.31$  ( $SD=5.15$ ) and  $M=28.84$  ( $SD=5.77$ ) for men. Only 4.16% of participants became parents at the age of 18 or younger. The largest differences between parents and those who remained childless at age 18 concerned being socially and politically involved ( $\Delta M_{P-C} = -0.158[-0.268; -0.048]$ ,  $t(1862)=2.811$ ,  $d=0.220$ ) and having a happy relationship/marriage ( $\Delta M_{P-C} = 0.161 [0.067; 0.256]$ ,  $t(1844)=3.358$ ,  $d=0.264$ ).

### **Educational background**

Model comparisons indicated no group effects of educational background on the perceived importance of parenthood, being able to afford things, and being socially or politically involved. For the remaining goals, the unconstrained multi-group LGMs had a better fit, suggesting group effects (see Supplementary Table 3). Group differences increased with age for having a successful career and being there for others, while the intercepts varied little (see Figure 5). At age 18, group differences regarding perceived importance of being there for others [ $F(2,1933)=0.481$ ,  $p=0.618$ ] and a successful career were nonsignificant [ $F(2,1892)=1.773$ ,  $p=0.170$ ]. Starting in middle adulthood, the differences began to increase. Throughout most of the adult lifespan participants with a low level of education perceived being there for others as more important than the other two groups did, while those with a high level of education perceived a successful career as more important. At age 60, the group differences were highly significant [ $F_{\text{career}}(2,1636)=34.22$ ,  $p=0.000$ ,  $\eta^2=0.06$ ;  $F_{\text{others}}(2,1541)=8.255$ ,  $p=0.000$ ,  $\eta^2=0.01$ ]. The perceived importance of traveling was consistently higher among participants with a high level of education than in the other

groups. Up to middle adulthood, there was almost no difference regarding the perceived importance of traveling between participants with a low and middle educational background ( $\Delta M_{age45L-M}=0.027$ ,  $t_{age45}(1811)=0.507$ ,  $p=0.612$ ). This changed as participants approached retirement age ( $\Delta M_{age60L-M}=-0.099$ ,  $t_{age60}(1240)=-1.677$ ,  $p=0.094$ ,  $d=0.135$ ).

## Region

The two regional coding variables were highly correlated ( $r=0.888$  [0.887;0.891],  $p=0.000$ ), indicating that most participants had remained in the region of Germany where they lived prior to reunification. The results presented here are based on participants' locations in 1989. Multiple group LGM showed no effect of region on having a happy relationship or marriage. Although statistically significant, intercepts and slopes in both regions were nearly identical for the goals of having children and traveling (see Supplementary Figure 3). There were larger differences for the goal of owning a house, which received consistently lower importance ratings from participants located in the former GDR in 1989. While the importance of home ownership increased consistently for former West Germans, it decreased after age 50 for former East Germans. The largest empirical difference was at age 77 ( $\Delta M_{W-E} = 0.567$  [0.450; 0.730],  $t(884)=8.2563$ ,  $d = 0.632$ ).

Up to retirement age, having a successful career was more important for individuals from the former East. The greatest difference was found at age 52 ( $\Delta M_{W-E} = -0.213$ [-0.261; -0.149;],  $t(1967)=-7.190$ ,  $d = 0.354$ ). Former West Germans placed less importance on personal fulfillment. This difference was small in early adulthood but increased with age. At age 75, the difference was largest ( $\Delta M_{W-E} = -0.232$ [-0.333; -0.152],  $t(1034)=-5.243$ ,  $d = 0.372$ ).

## Testing for cohort effects

Cohort-specific trajectories overlapped to a substantial extent for the importance of personal fulfillment, travel, and home ownership. Results for the importance of having a happy relationship or marriage, being there for others, and being socially or politically involved showed largely parallel trajectories, with slight level differences (see Supplementary Figure 4, panel C, F, and G). The most noticeable difference was for individuals born before 1941, who seemed to place substantially less importance on being socially or politically involved but valued being able to afford things considerably higher (see Supplementary Figure 4, panel D and F).

## Discussion

As expected, some life goals seem to be relatively independent of a person's current developmental stage, whereas others change over the lifespan in line with the individual's current developmental task. For the majority of goals, the greatest changes occurred in early adulthood and/or old age. These were, however, also the phases when inter-individual variability was highest. This is presumably one reason why these phases of development have received greater research attention.

We find partial support for H1: Both a successful career and personal fulfilment are perceived as more important in early adulthood and become less important throughout life. This corroborates the propositions of MTD. Importance ratings are highest in early adulthood, when personal control capacity is high and opportunities are plentiful. Furthermore, this finding is in line with recently published work on the development of life goals up to middle adulthood (Atherton et al., 2020; Bühler et al., 2019). Goals related to personal growth and new experiences decrease with age, as do opportunities. The exception to this pattern is the importance of travelling, which increases around the age of retirement, presumably due to increased time available to travel.



Confirming H2, our study shows that the importance of social goals increases with age. This trend was particularly strong for the goal of being socially/politically involved, highlighting the role of weaker social ties in late adulthood (see also Huxhold et al., 2020).

Generally, our findings emphasize the necessity of studies that cover the entire adult lifespan when investigating development (see also Lachman, 2015). Turning points go unnoticed when assessment periods are too short or when points of measurement are spread unevenly across the lifespan. Regarding the question of what causes these changes and/or turning points, several trajectories support the conceptual framework of MTD, which proposes that systematic changes in opportunities across adulthood drive changes in goal preference (Heckhausen, 2000; Heckhausen et al., 2010, 2019).

The trajectories for the goal of having children did not match the prediction in H3. Mothers and fathers reported an increasing importance of this goal in early to middle adulthood, confirming part of the hypothesis, but the importance ratings continued increasing after retirement. One explanation for this finding could be grandparenthood. Grandparenthood is part of the normative sequence of aging and is subject to societal expectations, like any other developmental task (Baltes et al., 2006). Thus, the high importance ratings of having children among older respondents may refer to grandchildren. It is also plausible that ratings of importance, in contrast to ratings of goal striving, reflect the value a person generally places on a given domain of life. This would imply that the value of having children is undiminished in old age and independent of actual goal attainment. However, people who do not have children would be expected to view parenthood as less important, as shown in studies comparing childless women before and after developmental deadlines have been reached (Heckhausen et al., 2001). Intriguingly, childless women show a pattern of decreasing importance ratings for having children. In late adulthood, however, this goal seems to catch up with them again. Increased levels of loneliness, greater time flexibility

after retirement, and societal expectations related to grandparenthood may be explanatory factors. Especially for women, recent research links the birth of a grandchild to improvements in quality of life and life satisfaction (Tanskanen et al., 2019). For childless men, the goal seems to steadily increase in importance throughout adulthood. Research on potential regret of childlessness in late adulthood suggests no significant well-being difference between parents and childless individuals (Koropecj-Cox, 2002). Some studies found gender-specific effects of childlessness on components of subjective well-being, but other factors (e.g., marital status) seem to play a far more important role in well-being in late adulthood (Hansen et al., 2009).

We find relatively stable importance ratings of a happy relationship/marriage and being able to afford things, supporting H4. In late adulthood, however, the perceived importance of this goal either increases (for men) or decreases (for women) only partially supporting H5. One possible explanation is that women are more likely than men to have close relationships with people other than their romantic partner (Birditt & Antonucci, 2007). Once developmental tasks that require a functioning relationship, like raising young children, have been completed, a happy relationship may therefore be less important to women, since they receive more social support from others. Similarly, childless women may view a happy relationship as less important once they have passed the developmental deadline for childbearing.

Interestingly, our results show substantial intercept differences between childless participants and those who became parents. Accordingly, the life goals of parents seem to differ from those of childless participants before they have made the transition to parenthood or before even thinking about having a child. This finding provides further support for a previously suggested selection effect of parenthood on life goals (Wehner et al., in press).

We find partial support for H7. There were clear differences between people different levels of education in the trajectories of career importance, but we found no effect of level of educational on the perceived importance of having children. Additionally, our results suggest a significant effect of educational background on the importance of being there for others. For the low educational level group, this trajectory increased steadily over the entire lifespan, while for middle and high educational level groups, it remained stable or decreased slightly into middle adulthood. This is in line with previous research linking lower socio-economic status to higher levels of prosociality (Piff et al., 2010).

### **Limitations**

One limitation of this study is that the German SOEP only followed participants over a period of 24 years and not over the entire lifespan. We used a cohort sequential longitudinal design to address this limitation. This methodology is based on the assumption that changes across age groups are predominantly due to intra-individual change rather than cohort effects. The results of our cohort-specific analysis, however, indicate that this might not be the case for all nine goals.

Unlike most previous research, the present study used single-item measures for each goal and refrained from inferring latent factors. While this may present the possibility of varied interpretations, recent research suggests that single-item measures can be stable and valid assessments and even out-predict scales (Möttus et al., 2020). Moreover, in utilizing this approach, we follow the recommendation to represent findings on the item level, especially in developmental research with a primary focus on description (Möttus & Rozgonjuk, 2019).

## **Future research directions**

Our results suggest that many life goals follow long-term developmental trends, comparable to personality traits. Despite increased interest in the relationship between life goals and personality traits (e.g., Atherton et al., 2020), longitudinal research covering the entire adult lifespan remains the exception rather than the norm. Generally, our results emphasize the relevance of social and historical context factors in the developmental trajectory of life goals. The current study should be understood as a starting point for more in-depth research that could address specific influencing processes. We suggest that future studies focus on domain- and group-specific research questions and place stronger emphasis on moderators. Parental socialization, for instance, has been shown to have a lifelong impact on value development (Johnson et al., 2020; Martinez-Escudero et al., 2020). Future research could investigate the impact of parenting on the development of life goals in adulthood across different generations

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### **Funding**

This study was funded by the Federal Ministry of Education and Research (BMBF, Grant: 01UJ1911BY). The responsibility for the content of this publication lies with the authors.

### **Acknowledgements**

Author contributions: Buchinger, Richter and Heckhausen planned the study, drafted and revised the manuscript, and approved the final version. Buchinger conducted the statistical analysis. R and Mplus code is made available at <https://osf.io/g56w8/>. This research was not preregistered.

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**Figure 1.** Growth curve model for cubic change in relative goal appraisals. Rhombi represent individually varying slope loadings to estimate development across the entire observed age range (Mehta & West, 2000; Preacher et al., 2008). To allow for the model to converge, variances of the quadratic and cubic slope factor were fixed to zero.

**Figure 2.** Model estimated goal importance trajectories for the full sample and by gender.

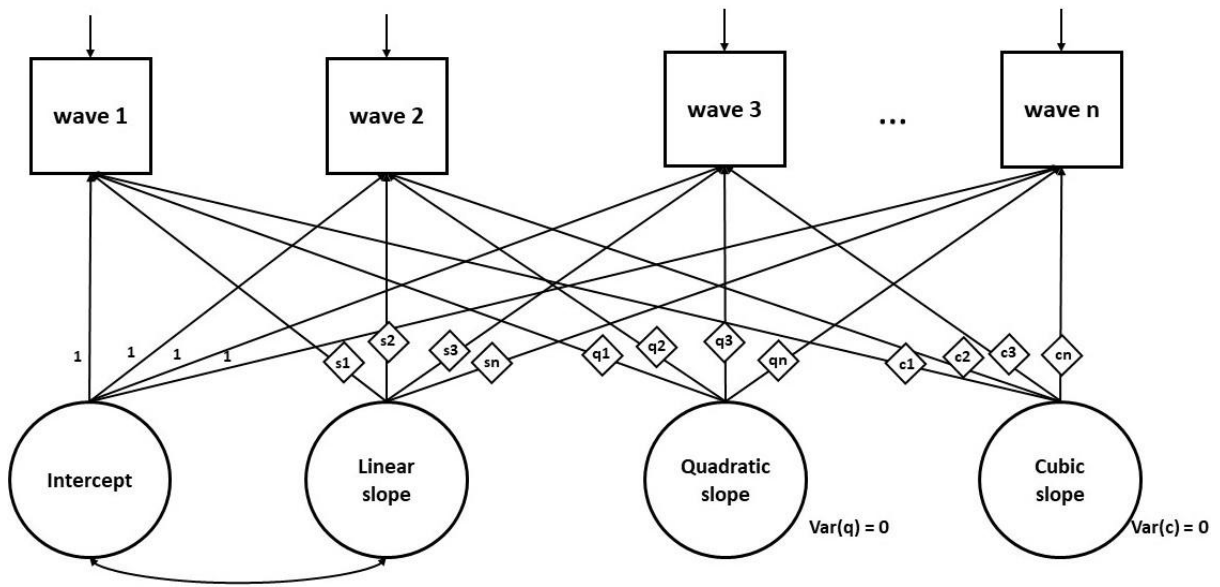
**Figure 3.** Model estimated goal importance trajectories for the full sample and by parental status.<sup>1</sup> Model with cross-group constraints had a better fit, indicating no group differences.

**Figure 4.** Model of estimated goal importance trajectories by gender and parental status for having children and having a successful career.

**Figure 5.** Model of estimated goal importance trajectories for the full sample and by educational background (only goals with group effects are displayed).

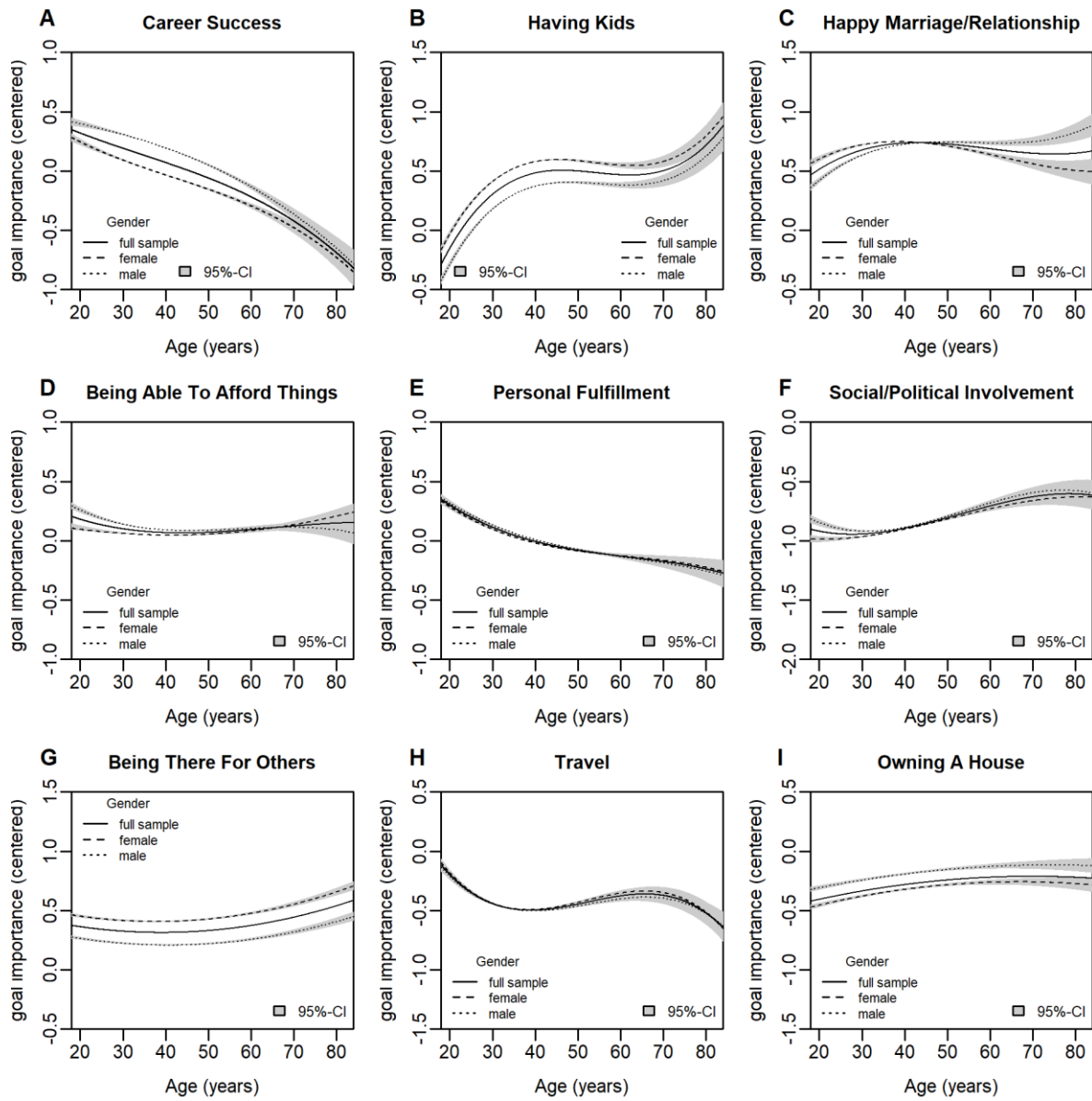
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Figure 1



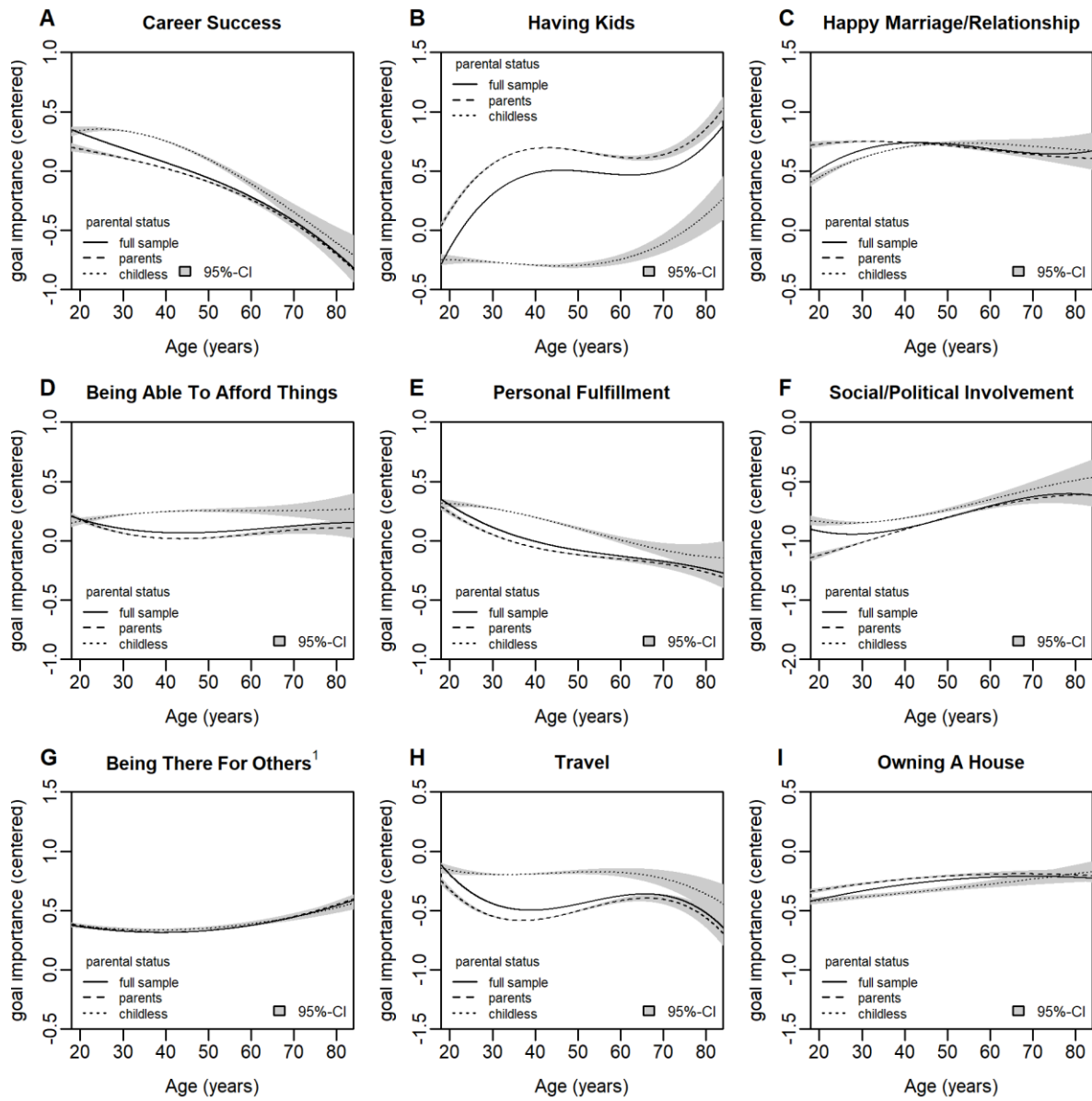
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Figure 2



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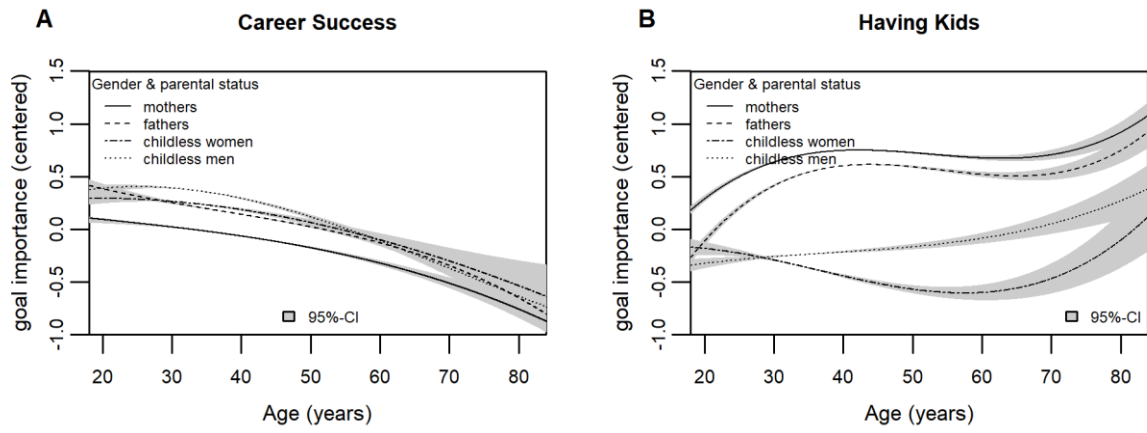
Figure 3



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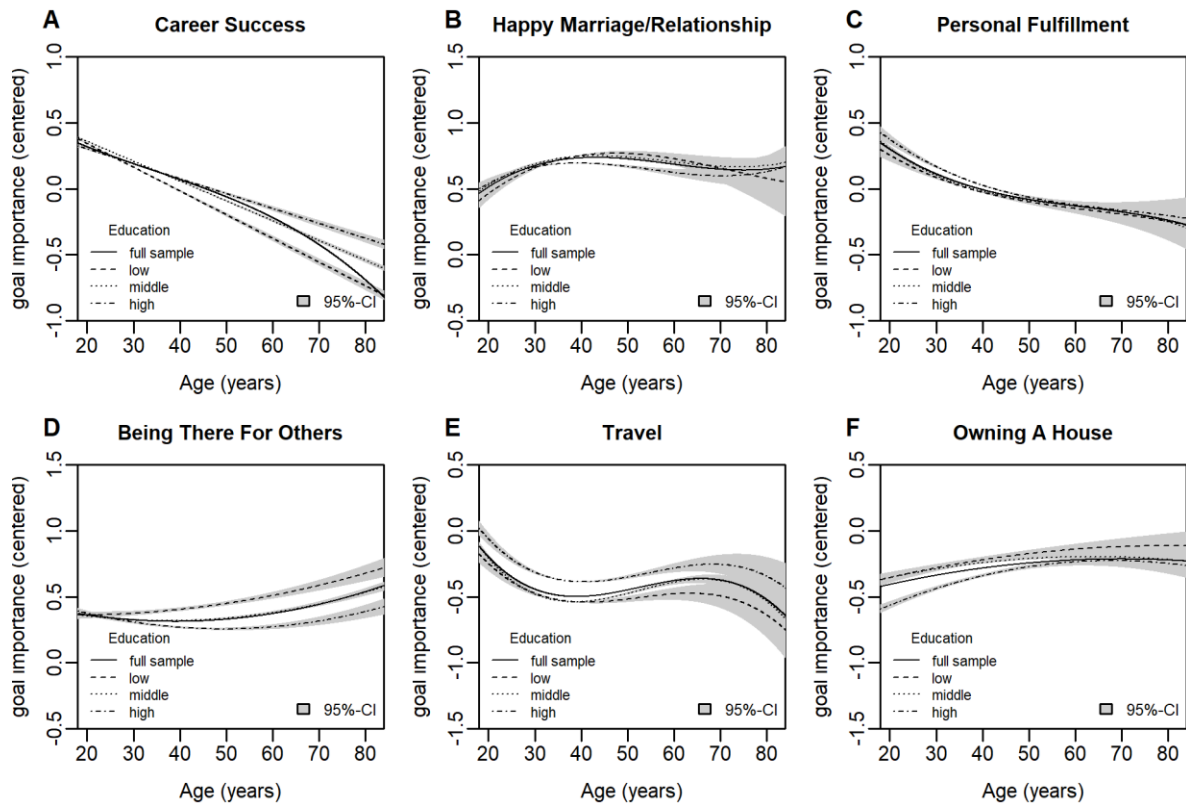


Figure 4



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Figure 5



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