The differences in perceived social support potential and perceived additional support between permanently childless individuals and parents.

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1 Introduction

The proportion of childless individuals has increased and reached a substantial size for recent cohorts, not only in the US but also in large parts of Europe (Rowland 2007; Morgan 1991). This trend has been observed as one component of demographic change at large (see, e.g., Sobotka 2008), and the institutional as well as individual determinants of childlessness have been studied (e.g., Kaufmann et al. 1998, 2002; Bloom and Trussell 1984). Less research exists on the *individuals consequences* of childlessness, esp. in regard to their social support relations in old age (Dykstra and Hagestad 2007:1275n).

Much research has been done on relationships of parents and adult children (e.g., Szydlik 1995; Lye 1996; Alice S. Rossi and Peter H. Rossi 1990; Silverstein, Bengtson, and Lawton 1997:430n). The overall conclusion of this research is that parent-child relationships are good and that children besides spouses and partners are the most important care-takers in old age. Furthermore, and against previous accounts on the nuclearization of the family, it has been found that multi-generational bonds have become more important (Bengtson 2001), an important condition for this being the increased overlap of life-time between the generations and the lower number of grandchildren per grandparents due to decreased medium to higher parity births (cf., George and Gould 1991). It can thus be concluded that parents, even in old age, are integrated into a system of lively intergenerational exchange where some types of support go from the older to the younger generations and some types of support the other way around (see e.g., M. Kohli and H. Künemund 2005). Even despite imbalances in the perception of the importance of intergenerational relations that are usually captured through the intergenerational stake hypothesis, old parents and grandparents can be assumed to benefit from their access to different types of family relationships in many ways: children and children-in law provide different forms of support,

both children and grandchildren may buffer against isolation, and being able to provide support (e.g., childcare or financial help) may contribute positively to well-being in old age.

Given that children and partners have been shown to be important support persons for parents in old age (e.g., Szydlik 1995; Lye 1996; Alice S. Rossi and Peter H. Rossi 1990; Silverstein et al. 1997:430n), the question arises as to what the situation of the childless is, esp. of those that don't have a partner. Are they able to compensate the lack of children?

In this article I aim to contribute to research on the situation of the childless old by analyzing how the childless differ in their perceived social support potential and in their perceived need for additional support. Both, perceived support and perceive need for additional support are two dimensions assumed to affect individual well-being directly. Future analyses will be extended to also take into account actual support received and provided. In my analyses I apply the concept of intergenerational solidarity developed by Bengtson and others (Bengtson and Roberts 1991:858; Roberts, Richards, and Bengtson 1991), which has also been adjusted for the German context (e.g., Diewald 1991).

Existing research on childlessness and social support relations beyond being rare has often been limited by small case numbers (e.g. Larsson & Silverstein 2004,) that didn't allow for simultaneous consideration of many influential variables and thus prevented advanced differentiation of the childless and comparison of effect sizes. And also often very special groups have been studies that led to a somewhat fragmented set of results, also making comparisons of effect sizes difficult (e.g. Larsson & Silverstein: older than 80 years old and living alone; Cwikel, Gramotnev & Lee 2006: never-married childless women).

Existing research on childlessness and social support relations, beyond being rare (Dykstra and

Hagestad 2007:1275n), has often been limited by small case numbers (e.g., Larsson and Silverstein 2004) that didn't allow for simultaneous consideration of many influential variables and thus prevented advanced differentiation of the childless and comparison of effect sizes. Often special groups have been studied that led to a somewhat fragmented set of results, making comparisons of effect sizes difficult (e.g. Larsson & Silverstein: older than 80 years old and living alone; (e.g., Cwikel, Gramotnev, and Lee 2006 on never married childless women; Larsson and Silverstein 2004 on those older than 80 years and living alone). Also previous research has often treated the childless as one homogeneous group (Dykstra and Hagestad 2007) while those factors that can possibly differentiate the experiences of childless individuals and how they compare to parents have been neglected. In very recent years researchers have become more aware of the gap in research on the individual consequences of childlessness and now try to close this gap with new research efforts. The most up-to-date culmination of this new awareness is a two-issue special edition of the Journal of Family Issues in 2007 which presents findings from seven countries on the "Multiple Meanings of Childlessness in Late Life—Findings for Seven Societies" (see Dykstra and Hagestad 2007). These studies contribute a lot to our understanding of the individual consequences of childlessness, one shortcoming is however that many of these studies still lack sufficient case numbers of childless individuals in old age that allow to simultaneously take different relevant factors into account and thus have to remain mainly descriptive (see, e.g., Koropeckyj-Cox and Call 2007).

2 Previous Research and Theory

(STILL LARGELY IN DEVELOPMENT)

2.1 Definition of childlessness

When talking about childlessness it is useful to start with a number of nominal distinctions. First, we need to distinguish general childlessness and specific types of childlessness with regard to particular biological or socially defined child-parent relationships. A person is *childless* when he or she has never had any living biological children or any foster-, step-, or adopted children.. A person is *biologically childless* when not having any own biological children, in this case not excluding the possibility for social parenthood. Similarly, one could define various types of *social childlessness*, e.g., with regard to adoptive or foster children. But the latter are not of importance for the subsequent analyses in this paper and are thus not discussed in detail.

To distinguish between those permanently childless and those parents who survived their own children, I will distinguish between the *childless* and *orphaned parents*. In addition I will distinguish *temporary childlessness* from *permanent childlessness,* where the former refers to the period when a couple or individual deliberately remains childless but without excluding the possibility to ever want to have children at a later point. Following this definition, every parent would be called temporary childless up to the point of the first birth.

2.2 Methodological difficulties in estimating current rates of childlessness

Female fertility is biologically limited to the period between the onset of menarche and the onset of menopause, for women in the US estimated as occurring at the average ages of about 13 and 50 years respectively (Nichols et al. 2006). But since other proximate factors determine *effective* fertility rates (Frejka 2001), it is common in statistical reporting on fertility rates to limit female reproductive period to the ages of 15-45.

Thus for providing estimates on current rates of childlessness as part of continuous statistical reporting, there are some difficulties involved in estimating current rates of childlessness, as theoretically one would have to wait until the end of the reproductive period of women to estimate their levels of childlessness, and for men even longer. Some researchers go as far as saying that, strictly speaking, it is not possible to conclude from individual childlessness to permanent childlessness as long as the person is still alive, due to possibilities of modern medicine or (in case of social parenthood) adoption, fosterage, and step-parenthood that might be chosen later in ones life course (see e.g., Bien et al. 1996:97).

Given that the focus of this paper is on a comparison of childless and parents in old age, this problem doesn't exist for the current purpose, that is in our own analysis, because the probability of childbearing is very low above a certain age. As the data of German Aging Survey, the source also used for all subsequent analyses in this paper, indicate, first births at an age above 40 are rare even for men (see Table 1), and the highest age at first birth is around the age of 50 for both men and women (see Table 2).

2.3 The postponement of childbearing and age-related infertility

For both men and women there is evidence for age-related fertility decline (Dunson, Baird, and Colombo 2004; Kidd, Eskenazi, and Wyrobek 2001), but for men the evidence has so far been less conclusive (see e.g., Moskovtsev, Willis, and Mullen 2006; Paulson, Milligan, and Sokol 2001). Besides age-related effects on infertility, several conditions can lead to infertility even at a young age (REF). Thus, at any age a couple can face the problem of not being able to fulfill the desire to have their own biological children (involuntary childlessness), a risk that increases with age of either partner. Thus the temporary postponement of the realization of the desire to have biological children can lead to permanent involuntary childlessness.

Knowing about the increasing risk of infertility with increasing age helps explain one aspect of how temporary voluntary childlessness can turn into permanent (involuntary) childlessness. Only few individuals and couples opt for permanent childlessness at an early stage of their relationships and life courses. Instead couples tend to postpone their desire to have children temporarily, a temporary voluntary childlessness that can, given the mentioned biological reasons, turn into a permanent involuntary biological childlessness, or into a voluntary permanent childlessness if the couple got used to the childless lifestyle (Nave-Herz)

What are the motives of those who decide to remain childless either temporarily or permanently? Little research actually exists that traces the decision-making process over time. In her interviews with married couples, Nave-Herz found that at the time of marriage, occupational reasons played a predominant role in the decision to remain childless. Other reasons were, in order of decreasing importance, preference for a particular lifestyle, lacking desire to have children or negative attitude towards children, financial reasons, partner-related reasons, medical reasons, and pessimistic view on

future (Nave-Herz 1988: p. 40). At the date of the interview, however, preference for a particular lifestyle was the predominant motive (p. 49). This shift in the importance of motives indicates how couples might get used to a certain lifestyle without children over time leading them to decide at some point to not have any children at all, even if no biological condition would limit them.

For the current purposes, understanding the motives of couples or individuals to remain childless or not are important insofar as they are linked to behaviors in other life domains that are relevant in understanding the support potential of childless individuals and parents in old age.

We can roughly distinguish between the following four idealtypes of the permanently childless with regard to the pathways that led them into childlessness and the associated potential consequences for their social support networks available at old age:

- *High-status postponers:* Those who are in high status jobs and became childless after initially postponing childbearing, as an aggregate group, are expected to have larger networks and thus access to some types of social capital. But since such professional network might consist more of weak ties rather than strong ties, the types of resources that can be accessed through these ties are limited (advise, information).

- *Early rejectors:* Those who always wanted to remain childless permanently might have organized their lifestyle around this plan, maybe put more emphasis in friendships and other family relationships. Thus, in this group me might expect to find more strong ties to non-children than in both the group of high-status postponers who remained childless, and in comparison to parents for which strong ties to other people than their children might have played a less important role and for which the time-resources were limited due to

childbearing....

    –   *Orphaned parents:* Another group are orphaned parents. For this group we can expect the worst conditions with regard to support in old age since they lost potentially important supporters and also didn't have the option to build alternative networks.

    –   *Involuntary childless:* Yet another group are those who always wanted children, but either postponed to a point when it became impossible to have children, or who were unable to have children even at an early age. There is a potential overlap with the high-status postponers, but with regards to status the group of involuntary childless is expected to have a higher variance with regards to status and access to weak-tie networks. If a couple tried to fulfill their desire for children their lifestyle can be expected to differ from that of couples and individuals who never planned to have children. Thus in terms of their networks (strong and weak ties) they are expected to be somewhere between the other groups.

Often, the necessary data are not available to distinguish these groups empirically in respective data analyses. Abma and Martinez show that those women voluntarily and temporarily childless have higher income, more prior work experience, and lower religiosity, giving some only rough support to the preceding type descriptions (2006). Also in the data that are used for the analyses in this paper, such a distinction into types cannot be undertaken. But the type descriptions underscore the need for a differentiated analysis of the childless in old age, as it illustrates the variety of pathways that can lead to childlessness and the different consequences these pathways can have for the social support situation in old age.

2.4 Mediating factors in the association of childless status and support in old age (STILL IN DEVELOPMENT)

2.4.1 Partner Status

Additional factors certainly are relevant as well and complicate matters to some degree. Very important is to further distinguish these groups into those childless who do have a partner and those who don't. Being without a partner can in itself be the reason for remaining involuntarily childless. But given alternative options it is not an exclusive criterion. On the other hand, partner status is an important factor in explaining the situation of individuals in old age, as a romantic partner / spouse has been shown to be the most important support person (besides children).

2.4.2 Marital Status

2.4.3 Gender

2.4.4 ...

Beyond these very tangible differences of being close to any of these childless idealtypes, less tangible but not less severe consequences might exists. Dykstra and Wagner (2008), for instance, hypothesize that childlessness only has negative consequences for the ever married and not for the never married, because remaining childless is only perceived as a deviation from a normal, expectable life course for the former (p. 1490). Such value-based measures might become tangible insofar as they influence alteri's willingness to support only certain childless acquaintances but not others, and insofar as social

sanctions influence well-being directly.

2.5 Intergenerational Solidarity – Dimensions of Support

Bengtson and others developed the construct of "intergenerational solidarity". On the basis of various separate theoretical traditions[1], they derived a taxonomy of six dimensions of "solidarity" as a multi-dimensional measure of the strength of intergenerational relations. This is a taxonomy that "is certainly not exhaustive [but] the dimensions continue to reflect an implicit organization of existing findings." (Bengtson and Roberts 1991:858; Roberts et al. 1991). The authors distinguish between associational, affectual, consensual, functional, normative and structural solidarity (see Table 4 for definitions of each of these constructs of dimensions of solidarity). Similar taxonomies have since been used in other contexts (for Germany see e.g., Diewald 1991).

In further development of the theory the interrelation between these constructs of solidarity were tested. and a theoretical model on how they interact and are influenced proposed. Silverstein, Bengtson & Lawton (1997) used these dimensions of solidarity in order to empirically classify different types of relationships in American families[2]. The authors label the five types of relationships they find according to the degree of closeness between the members in the dyads: "tight-knit", "sociable", "intimate but distant", "obligatory", and "detached" (ebd.).

Most of the research within the framework of intergenerational solidarity has been on adult child-

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1   Those theoretical traditions are "(a) classical theories of social organization, (b) the social psychology of group dynamics, and (c) the developmental perspective in family theory" (Bengtson and Roberts 1991:858).

2   In this study, the authors don't take the normative dimension into account because of limits in the data they use.

parent relations (Silverstein, Giarrusso, and Bengtson 1998), but the concept can as well be applied to research on the relations of members of non-adjacent generations (ebd.). While the research within the intergenerational solidarity framework focuses on family relations, the provided taxonomy provides a useful starting point for empirical analyses to examine the role of non-familial relations. The taxonomy can thus be used to compare different types of relationships on all of these dimensions: e.g., how do parent-child relationships compare in terms of mutual affect to friendship or neighbor relations; is it more likely that an individual agrees in regard to values with other family members or with friends; what kind of resources and support do parents and children exchange and do childless individuals have other relationships that provide such resources; etc.?

Here I am focusing only on the functional dimensions, that is, the question on what kind of support and resources can potentially be exchanged in social relations and which are actually exchanged. For the German Aging Survey the functional dimension was further differentiated into emotional, cognitive, and instrumental support.

My analyses are further restricted in that they don't capture actual support [AT LEAST CURRENTLY; MIGHT BE EXTENDED IN NEXT STEP OF DEVELOPING THIS PAPER] but only perceived support potential and the perceived need for additional support. While perceived support potential can only be a rough approximation of actual support that would be provided in the event of need (see Kuenemund/Hollstein 2000) it can be seen as a dimension itself affecting well-being.

2.6 Hierarchical Compensation vs. Functional Specificity

In empirical research on social support in old age, spouses/partners and children have been found to be

the most important and frequently exclusive support providers. For a comparison of the situation of the childless with that of parents, the central question is thus, do the childless have other support persons, esp. those without a partner, and who usually are these alternative supporters.

The question divides into several aspects:

- Do the childless have no (fewer) support persons and thus less support?

- Where the childless do receive support (from others), does this involve only one directional giving or mutual support?

- Who are the persons who support the childless and who are supported by the childless? Is it friends, other relatives, or informal caregivers?

Not much literature exists on the question which types of relationships fulfill which kind of functions, but at least three positions have been brought forward: (1) the thesis of functional specificity, (2) the thesis of hierarchical compensation, and (3) a combination of the two.

(1) The functional specificity model states that certain types of relationships are better suited for fulfilling particular functions (REF), a fit that can change with structural changes in society, esp. technological change[3].

(2) Cantor postulates the model of hierarchical compensation, assuming the existence of a culturally determined preference order of potential support persons. This order is assumed to be independent of any particular help content but is thought to be dependent on the type of relationships - partners and

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3 Litwak & Szelenyi (1969) argued that technological change in industrial societies made it easier than previously to retain good family relationships even over longer distances than previously, something that is even easier nowadays that costs for communication and travel have dropped and the means of communication allow for a higher variety of sharing experiences (e.g. sending holiday pictures via email, chatting via video call).

children being the most preferred support persons. Others like friends, neighbors, etc., play only a role insofar as these persons are not available.

(3) While these first two models haven often been treated as competing hypotheses in the literature (see, e.g., Diewald 1991:150n), Künemund and Hollstein (2000) propose a model that integrates both by specifying that hierarchical compensation applies to preferences for support persons while functional specificity comes into play when looking at actual support provision. For a helper preference of person B by person A to be satisfied several conditions need to be fulfilled: (i) B must exist, (ii) B must know about A's need of support, (iii) B must be willing to help, (iv) A must have a concrete need for help, (v) B needs to be structurally available, (vi) B needs to have the right competency to help.

There are still reasons to assume that even this integrated model is too simplistic because it doesn't take into account potential direct and indirect effects of having a larger and varied social network. People strive for social recognition, and thus perceiving to have a network that is larger than merely consisting of one or two preferred support persons might in itself provide a positive effect on well-being. Also, the integrated model seems to reduce older individuals to having very limited needs and expectations.

For the current article this discussion is relevant as the different models lead to different predictions on how the childless can compensate for the lack of children. It follows from the model of functional specificity that there might be certain functions that can exclusively be provided by children. The hierarchical compensation model, on the other hand, predicts that other network members will take the role of children, e.g. friends or siblings. According to the third and integrated perspective many other factors have to be taken into account to be able to predict if the desired support persons will actually provide support.

In sociology, helper preferences and support willingness are usually explained by family and reciprocity norms. Biological theories on the other hand predict that people are more likely to support close kin, relative to their kinship weight. But this argumentation usually doesn't apply for support from the young to the old, esp. when the latter are outside of their reproductive phase. One might argue that the fact that individuals reach a phase where they don't contribute to reproduction anymore is relative new development and thus possibly all mechanisms for younger individuals apply here as well. But this point hasn't been explored, to my knowledge either theoretically nor in empirical applications, and thus doesn't provide any useful application here.

In the following we will only focus on perceived support potential and the need for additional support and thus won't be able to explore all of the above mentioned steps (i to vi) in detail, but the preceding summary is useful to keep the following analyses in a larger perspective.

2.7 Childlessness and social support in old age (STILL NEEDS TO BE DEVELOPED)

Childless individuals have been shown to have smaller networks (Dykstra 2006) and to be more isolated than parents, the latter being defined as having no contact with friends, neighbors, family members over the past few days (Bachrach 1980). To evaluate what both network size and isolation mean for the person studied, however, it is important to also think about the functions that social contacts serve for individuals and how different types of relationships can differ in fulfilling these functions. If the networks of childless individuals are on average simply smaller than networks of parents due to the lack of children and grandchildren then this might not have a huge impact or it could

– depending on which exclusive effects children have on parents.

When health taken into account, it is that childless are more likely to have frequent contact with friends and neighbors, suggesting some compensation of the lack of children. However, with increasing seriousness of health problems the frequency of contact to neighbors and friends among the childless drops below the level of parents. (Bachrach 1980:634)

[...]

Childless individuals have less informal support than parents, marital history not playing a role (Larsson and Silverstein 2004)

[...]

3 Data Analysis

3.1 Data Source: The German Aging Survey

For the following analyses I draw on data from the German Aging Survey, a representative study of the German population aged 40 to 85 years. Data collection started in 1996 and was conducted by the Research Group on Aging and the Life Course at Free University in Berlin in cooperation with the Research Group on Psycho-Gerontology at the University Nijmegen (Künemund 2000; Kohli 2000). A second wave was conducted by the German Center for Gerontology in 2002 and consists of a panel wave for the original sample of the 1996 survey as well as a new sample of 40-85 year old individuals in Germany. In both waves, stratified samples were drawn according to age, region and sex. To guarantee sufficient case numbers for differentiated analyses of the life situation of people in their later life, the sample was stratified by age groups (40-54, 55-69, 70-85), region (West/East Germany), and sex (male/female).

The German Aging Survey offers plenty of data on personal networks and social support relations: information on the people in the respondents' family and friendship networks, data on support provision and receipt, as well as on the perceived need for support are covered (Dittmann-Kohli et al. 1997:6).

In order to gain a sufficiently high number of childless individuals for the analyses, I merged the original sample with the 2002 sample of additional respondents. The merged dataset contains a total of 980 permanently childless individuals. The data thus provide a valuable source to conduct differentiated analyses of the social networks and support relationships of childless individuals and

allows comparison with parents in many important dimensions.

3.2 Data Limitations

Data from the aging survey exclude those individuals living in institutions. Other research has shown that the childless are more likely to live in institutions in old age (REF), thus the analysis in this paper are likely to paint a slightly more positive picture for the overall situation of the childless in old age.

Another limitation is that no information is available on the question of the reasons of childlessness. Thus also in this paper we cannot clearly distinguish between different the four idealtypical groups of the childless.

3.3 Descriptive Analysis: Socio-economic characteristics

(TO BE DEVELOPED)

3.4 Regression Analyses

For the German Aging Survey the functional dimension of solidarity was divided into three sub-dimensions: emotional support, cognitive support, and instrumental support. In my analyses I concentrate on the perceived support potential, that is, whether a respondent believes that she or he has person who would help in any type of support. The respective question has not been asked for instrumental support, however. In addition I look at the additional need that respondents report in each

of the three types of support, above any support that they currently have.

I conducted logistic regression models for perceived social support potential (Tables 6 and 7) and for perceived need for additional support (Tables 8 to 10). All regressions are weighted to adjust for sample stratification. For the dependent variables the positive outcome is coded as one ("knows a person", "doesn't need additional support"), and the negative outcome as zero ("doesn't know a person", "needs additional support").

The main goal of the analysis was to test for the effect that childlessness has on perceived support potential and perceived need for additional support net of other relevant factors. To this purpose I created a series of regression models for each of the five dependent variables. For each of the dependent variables and the corresponding Tables 6 to 10 the series of regression models consists of six models. In some of the tables the sixth model is not reported because none of the included effects was significant and a log likelihood ratio test didn't yield any significant improvement to the fuller model.

Model 1: In a first step I controlled for parental status (childless or not), sex and age of the respondent, whether the respondent had a partner at the date of the interview, as well as household and network size to capture the availability of other social contacts beyond children and partners. I also included a study dummy variable to capture any differences between the two waves of the German Aging Survey that were included in my merged dataset.

Model 2: In a second step I included reported health status (good, medium, bad) as an indicator for actual support need.

Model 3: Assuming that it matters more to have at least one or a few persons in the social network,

and that each additional member of the social network has a decreasing effect on perceived social support potential and perceived need for additional help, I included squared network size into the models.

Model 4: As a next step I included a number of socio-economic variables: current or last employment status (homemaker, full-time worker, or part-time worker), collapsed Casmin educational classes, highest available SES for respondent, and whether the respondent has ever been employed. It is assumed that higher socio-economic status and participation in higher education go along with access to high-resource and diverse (weak-tie) networks. Higher socio-economic status could thus be a buffer against the negative effects of childlessness, at least on certain dimensions.

Model 5: Next I included two-way interaction effects of the variables in the first model with parental status. These interactions were included to see whether potential compensating factors are only effective when people are childless. According to the model of hierarchical compensation, individuals would only mobilize other resources when their preferred support person (children) are not available. But also on the basis of the integrated model of Kuehnemund/Hollstein (2000) it is that other contacts become only relevant when preferred helpers (again: children) are not available.

Model 6: Based on the same reasoning as for Model 5, I included two-way interaction between parental status and the socio-economic variables added in Model 4. Model 6 was excluded from the table if none of the two-way interactions was significant and Model 6 didn't yield a significant improvement compared to Model 5 on the basis of a log-likelihood ratio test.

For each of the models a number of goodness-of-fit statistics are provided in Tables 6 to 10.

3.5 Regression Results (see Tables 6 to 10)

3.5.1 Partner and Parental Status

What all models confirm is the strong positive effect of spouses and partners in regard to their perceived social support potential and their actual need for support. The presence of a partner, not surprisingly, increases the odds of being able to name a support person, and decreases the odds of being in need of more support. This results is robust in that the effect direction and size of partner status remain stable and statistically significant even after controlling for all independent variables, and the effect appears in all five series of models. The only difference is that the positive effect of having a partner is slightly smaller for models on perceived need of support. The results thus confirm the importance of romantic partners that has been emphasized in the literature on social support in middle and old age. One qualification to this effect is, however, that having a partner and being childless has a relatively strong and statistically significant negative effect on perceived cognitive support potential. In the final model on that support dimension this effect in the size of -0.81 would almost cancel out main partner effect of 1.02.

An increasing household size, however, even when controlling for parental status, partner status, and network size, seems to buffer this negative cumulation effects for the childless. Increasing the number of household members increases the odds of knowing of a support person by about .6-.8 depending on the particular model. But this two-way interaction disappears when we look at actual support need. There is no main household size effect, and if existent it disappears at latest when network size is controlled for. This indicates that household members are most likely also named as important persons in ego's network. Network size has a relatively high and statistically significant positive effect on perceived support potential, that is, each additional in a respondent's network increases the odds of

having a person in mind that might be available for help (coefficient sizes are slightly higher than .2 at a range of 1-8 network members).

Besides partnership, also the parent-child relationship has been emphasized in the literature as salient for social support and is of main interest here. Indeed, the data show that being childless has a negative effect on perceived social support potential and need of social support. However, for the former it decreases with the the introduction of additional covariates and becomes statistically insignificant. And for the latter it is that the negative effect of being childless becomes weaker and statistically insignificant and with the introduction of more covariates turns into a positive marginal effect which is significant and extremely high, though, only for perceived need of cognitive support[4].

Childlessness does not consistently have a main negative effect on perceived support potential and perceived need of additional support. On some dimensions childlessness initially has a negative main effect, but the it disappears when more terms are included (perceived support potential, Tables 6 and 7). For perceived need for additional cognitive support childlessness doesn't have any effect (Table 8). And for perceived need for additional emotional and instrumental support childlessness doesn't have a main effect but appears only in some two-way interactions (Tables 9 and 10). This general point speaks against seeing the childless as a homogeneous and disadvantaged group and highlights the importance of a differentiated account that takes multiple factors into account.

3.5.2 Network Size

Network size has a positive effect on perceived support potential, but the effect for each additional network member is decreasing as the statistically significant and negative quadratic term indicates. Household size doesn't have a statistically significant effect on perceived support potential

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4   It is not sure, though, if this extremely high effect of about 7 is due to some omitted variables.

3.5.3 Age

Aging, probably widely seen as one of the most salient factors in need and availability of social support has indeed a negative effect on perceived social support potential and perceived need of additional instrumental help. Given the overall age range in the sample of 45 years, coefficients of sizes between -.01 and -.04 translate into relatively high differences in marginal probabilities if one compares the youngest and oldest members in the sample. Interestingly, however, this age effect disappears once several other factors are taken into account. For perceived cognitive and emotional support none or hardly any of the models show a statistically significant age effect.

3.5.4 Gender

Being female seems to be beneficial on all support dimension examined here. Women have higher odds to know somebody who they think would support them, and they have lower odds to be in need of additional support. This result is in line with the finding in family sociology women are usually the ones who maintain their family relationships. It could be that mothers might have closer relationships with their kids than fathers and thus rely more on them for support than their male partners. It could thus be that important differences between parents and the childless in the direction and size of the sex effect exist. For that reason I also tested the interaction between parental status and sex, but the effect was not statistically significant, at least when added to the full model on each dimension (not represented in the tables).

3.5.5 Socio-Economic Variables

Socio-economic variables play a surprisingly little role. They don't matter at all for perceived support potential. With increasing socio-economic status, the odds of not needing additional cognitive support

increase. This effect is independent of parental status (no interaction effect), that is, childless and parents mobilize these resources to the same degree. Socio-economic status does not have a statistically significant effect on perceived need of additional emotional and instrumental support. This selective effect of SES on only cognitive support might be interpreted as characteristic for weak-tie networks that higher status jobs offer. Advise is a resource that is easily accessible, while emotional and instrumental support require stronger relations and a higher time commitment. Being a homemaker versus working full-time increases the odds of not needing additional cognitive support, the same not being true for emotional and instrumental support. The reason might be similar as for higher SES: being at home increases the potential for interaction with neighbors, but these relationships might be too weak to allow for higher-commitment support that is required in the case of emotional and instrumental help. More education surprisingly increases the need for more support: in regard to cognitive support, respondents with an academic degree have higher odds to be in need of additional support as compared to those in the lowest Casmin group, and in regard to instrumental support all educational groups have higher odds of needing more support than the lowest Casmin group.

3.5.6 Health Status

Being of better health as compared to the group with the worst reported health status goes with higher odds of having a support person and lower odds of needing additional support. Other than expected adding health status in Model 2 doesn't affect the coefficient results of Model 1 much. I would have expected that partner and parental status matter less once health status as indicator of need is taken into account. But this is clearly not the case as the main effects don't change with the introduction of health status and the interaction between health status and parental status is not significant.

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3.5.7 Unobserved differences between time of interview

For three of the dependent variables (perceived cognitive support potential, need for additional emotional and cognitive support) the study dummy variable is statistically significant (Tables A1, A3, and A4). Being a respondents in the second wave increases the odds of knowing a support person for cognitive support and also decreases the odds of being in need of additional cognitive and emotional support. Part of the study effect could be cohort or period effects, but those couldn't be tested with the current data. The correlation of the cohort variable, even if reduced to three cohorts only spanning around 16 years each, with the age variable is above .9.

3.5.8 Current Problems

Household and network size can be partially depicting the same information as partner and parental status, i.e., currently the data don't distinguish whether the persons in a household or network are other than partners and children. It would be useful to recode the data more precisely to distinguish household and network members that are partners/children and those who are not.

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5 Tables

Table 1: Age at first birth by gender (respondents aged 70-85 at date of interview)

Age at first birth	Percentage, by gender		
	Men	Women	Total
34 years and younger	70.1	74.1	72.6
35-39 years old	9.1	5.3	16.5
40 years and older	3,5	1,2	2,1
Only non-biological children	4,8	3,0	3,6
Age of child missing	0,4	0,8	0,6
No children	12,1	15,6	14,3
Total[1]	100,0	100,0	99,9

Source: German Aging Survey, Wave 1 (1996); n=839; own calculations; percentages are weighted to account for sample stratification.

[1] Totals differing from 100% due to rounding error.

Table 2: Highest age at first birth in sample among those aged...

	...40-54 years	...55-69 years	...70-84 years
Men	46	52	53
Women	43	43	49

Source: German Aging Survey 1996 (n=1719, 1779, 1350); percentages are weighted to account for sample stratification

Table 3: Childlessness due to medical problems (in % of all childless marriages of the respective cohort)

	Marriage Cohort	
	1970	1980
Beginning of marriage	13.3 (67)	2.1% (97)
At date of interview	62.6 (67)	20.6% (97)

Quelle: Nave-Herz 1988: S. 41; in brackets: number of cases; no information on selection of cases and representativity available.

Table 4: Six Elements of the Theoretical Construct "Intergenerational Solidarity"

Dimension of Solidarity	Nominal Definitions
Association	"Frequency and patterns of interaction in various types of activities in which family members engage"
Affect	"Type and degree of positive sentiments held about family members, and the degree of reciprocity of these sentiments"
Consensus	"Degree of agreement on values, attitudes, and beliefs among family members"
Function	"Degree of helping and exchanges of resources"
Norms	"Strength of commitment to performance of familial roles and to meeting familial obligations (familism)"
Structure	"Opportunity structure of intergenerational relationships reflected in number, type, and geographic proximity of family member"

Source: Based on Table 1 in Bengtson & Roberts (1991:857)

Table 5: Number of childless individuals and parents in the German Aging Survey (AS)

	AS 1996 (Wave I)	AS 2002 (Wave II)	**Sum**
Parent	4249	2691	**6940**
Childless[1]	589	391	**980**
Missing	0	2	**2**
Sum	4838	3084	**7922**

1 All respondents who never had biological children nor adoptive, foster, stepchildren, etc., are defined as childless. All respondents who have (had) at least one biological child are defined as parents. Other respondents are excluded from the analysis.

Table 6: Results of weighted logistic regression, dependent variable: perceived cognitive support potential, "If you needed advice from somebody, would you know of a somebody to ask?" (Yes=1, No=0)

	M1		M2		M3		M4		M5	
Variable	β	$e^β$	β	$e^β$	β	$e^β$	β	$e^β$	β	$e^β$
Intercept	0.46	1.58	0.05	1.05	-0.21	0.81	-0.17	0.84	-0.12	0.89
Childless (CL)	*-0.3*	*0.74*	*-0.30*	*0.74*	*-0.29*	*0.75*	*-0.30*	*0.74*	-1.06	0.35
Sex: Female	*0.59*	*1.8*	*0.59*	*1.80*	*0.59*	*1.8*	*0.50*	*1.65*	*0.52*	*1.68*
Study: AS2	*0.21*	*1.23*	*0.20*	*1.22*	*0.20*	*1.22*	*0.20*	*1.22*	*0.21*	*1.23*
Age	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Has Partner: Yes	*0.83*	*2.29*	*0.81*	*2.25*	*0.81*	*2.25*	*0.80*	*2.23*	*0.89*	*2.44*
Househ. Size[1] (Range: 1-16)	*0.12*	*1.13*	*0.12*	*1.13*	*0.12*	*1.13*	0.10	1.11	0.07	1.07
Netw.size (Range: 0-8)[2]	*0.22*	*1.25*	*0.22*	*1.25*	*0.46*	*1.58*	*0.47*	*1.60*	*0.41*	*1.51*
Health Good (Ref: Bad)			*0.38*	*1.46*	*0.36*	*1.43*	*0.38*	*1.46*	*0.35*	*1.42*
Health Middle (Ref: Bad)			*0.31*	*1.36*	*0.29*	*1.34*	*0.32*	*1.38*	*0.29*	*1.34*
Netw.size^2					*-0.03*	*0.97*	*-0.03*	*0.97*	*-0.03*	*0.97*
Empl.status: Homemaker							0.45	1.57	0.47	1.6
Empl.status: Part-time							-0.04	0.96	-0.03	0.97
Casmin 2ab (Ref: 1)							0.00	1.00	-0.01	0.99
Casmin 2c (Ref: 1)							-0.22	0.80	-0.25	0.78
Casmin 3 (Ref: 1)							0.04	1.04	0.03	1.03
Highest SES							0.00	1.00	0.00	1.00
Never employed							-0.10	0.90	-0.10	0.90
CL:Age									-0.01	0.99
CL:Has Partner									*-0.59*	*0.55*
CL:Housh. Size									*0.73*	*2.08*
CL:Sex Female									0.01	1.01
CL:Netw. Size									0.18	1.20
LogLikelihood (Model)	-2295.55		-2291.83		-2279.68		-2136.38		-2124.85	
LogLikelihood (Null)	-2617.32		-2617.32		-2617.32		-2617.32		-2617.32	
G2	643.54		650.98		675.27		961.87		984.95	
Pseudo R² (McFadden)	0.12		0.12		0.13		0.18		0.19	
Pseudo R² (M. Lik.hood)	0.08		0.08		0.08		0.12		0.13	
Pseudo R² (Cragg/Uhler)	0.16		0.16		0.17		0.24		0.25	
AIC	4609.1		4603.66		4581.37		4308.77		4295.69	
N (excluded/total)	182/7922		188/7922		188/7922		717/7922		717/7922	

[1] Household size, including respondent, thus the minimum value of one.

2 Respondents were asked to name up to eight people in their personal network who are important to them and with whom they regularly interact. Thus the range of network members has an upper bound of eight.

Note: Highlighted values are statistically significant on the .05 level.

Table 7: Results of Weighted Logistic Regressions, Dependent Variable: Perceived Emotional Support ("If you needed to be consoled or cheered-up, would you know of a somebody?") (Yes=1, No=0)

Variable (Ref. group)	M1 β	M1 e^β	M2 β	M2 e^β	M3 β	M3 e^β	M4 β	M4 e^β	M5 β	M5 e^β
(Intercept)	1.19	3.29	0.71	2.03	0.41	1.51	0.46	1.58	0.41	1.51
Childless(CL) (Parent)	-0.23	0.79	-0.23	0.79	-0.23	0.79	-0.26	0.77	-0.34	0.71
Female (Male)	0.42	1.52	0.42	1.52	0.41	1.51	0.36	1.43	0.32	1.38
Study: AS2 (AS1)	-0.08	0.92	-0.08	0.92	-0.08	0.92	-0.07	0.93	-0.08	0.92
Age	-0.01	0.99	-0.01	0.99	-0.01	0.99	-0.01	0.99	-0.01	0.99
Partner (No partner)	1.04	2.83	1.01	2.75	1.02	2.77	1.02	2.77	0.96	2.61
Housh.size¹ (Range: 1-16)	0.02	1.02	0.02	1.02	0.03	1.03	0.01	1.01	0.00	1.00
Netw.size (Range: 0-8)	0.24	1.27	0.23	1.26	0.52	1.68	0.53	1.70	0.50	1.65
Health: Good (Bad)			0.43	1.54	0.41	1.51	0.42	1.52	0.40	1.49
Health: Medium (Bad)			0.32	1.38	0.29	1.34	0.30	1.35	0.27	1.31
Netw.size²					-0.04	0.96	-0.04	0.96	-0.04	0.96
Homemaker (Full-time)							0.15	1.16	0.17	1.19
Part-time (Full-time)							-0.12	0.89	-0.08	0.92
Casmin 2ab (1abc)							0.05	1.05	0.04	1.04
Casmin 2c (1abc)							0.34	1.40	0.35	1.42
Casmin 3ab (1abc)							-0.06	0.94	-0.06	0.94
Highest SES (Range: 0-90)							0.00	1.00	0.00	1.00
Never employed (ever)							-0.08	0.92	-0.09	0.91
CL*Age									-0.02	0.98
CL*Partner									-0.02	0.98
CL*Hous									0.57	1.77
CL*Female									0.23	1.26
CL*Netw.size									0.08	1.08
LogLikelihood (Model)	-2311.56		-2305.66		-2291.81		-2158.72		-2147.72	
LogLikelihood (Null)	-2686.16		-2686.16		-2686.16		-2686.16		-2686.16	
G2	749.2		761.01		788.71		1054.88		1076.89	
Pseudo R² (McFadden)	0.14		0.14		0.15		0.20		0.20	
Pseudo R² (M. Lik.hood)	0.09		0.09		0.1		0.14		0.14	
Pseudo R² (Cragg/Uhler)	0.18		0.19		0.19		0.26		0.26	
AIC	4639.13		4631.31		4605.61		4353.44		4341.43	
N (excluded/total)	184/7922		190/7922		190/7922		719/7922		719/7922	

¹ Household size, including respondent, thus the minimum value of one.

Note: Highlighted values indicate statistical significance on the .05 level

Table 8: Results of Weighted Logistic Regressions, Dependent Variable: Need for more cognitive support (Don't need more = 1, Need more = 0)

	M1		M2		M3		M4		M5	
Variable (Ref. group)	β	e^β	β	e^β	β	e^β	β	e^β	β	e^β
(Intercept)	*1.50*	*4.48*	-0.24	0.79	-0.41	0.66	*-1.16*	*0.31*	*-1.15*	*0.32*
Childless (Parent)	-0.13	0.88	-0.13	0.88	-0.12	0.89	-0.04	0.96	-0.05	0.95
Female (Male)	*-0.36*	*0.70*	*-0.40*	*0.67*	*-0.40*	*0.67*	*-0.29*	*0.75*	*-0.30*	*0.74*
Study AS2 (AS1)	*0.32*	*1.38*	*0.30*	*1.35*	*0.29*	*1.34*	*0.30*	*1.35*	*0.30*	*1.35*
Age (Range: 40-85)	0.01	1.01	*0.02*	*1.02*	*0.02*	*1.02*	*0.02*	*1.02*	*0.02*	*1.02*
Partner (No partner)	*0.55*	*1.73*	*0.48*	*1.62*	*0.48*	*1.62*	*0.51*	*1.67*	*0.55*	*1.73*
Housh.size[1] ()	0.04	1.04	0.04	1.04	0.04	1.04	0.06	1.06	0.05	1.05
Netw.size	*0.08*	*1.08*	*0.07*	*1.07*	*0.20*	*1.22*	*0.19*	*1.21*	*0.20*	*1.22*
Health Good (Bad)			*1.62*	*5.05*	*1.61*	*5.00*	*1.54*	*4.66*	*1.55*	*4.71*
Health Medium (Bad)			*0.87*	*2.39*	*0.86*	*2.36*	*0.82*	*2.27*	*0.83*	*2.29*
Netw.size^2					*-0.02*	*0.98*	-0.01	0.99	-0.01	0.99
Homemaker (Full-time)							0.51	1.67	*0.51*	*1.67*
Part-time (Full-time)							*-0.45*	*0.64*	*-0.45*	*0.64*
Casmin 2ab (1)							0.16	1.17	0.16	1.17
Casmin 2c (1)							-0.39	0.68	-0.39	0.68
Casmin 3 (1)							*-0.46*	*0.63*	*-0.46*	*0.63*
Highest SES (Range: 0-90)							*0.01*	*1.01*	*0.01*	*1.01*
Never employed							-0.35	0.70	-0.36	0.70
CL:Age									0.00	1.00
CL:Has Partner									-0.15	0.86
CL:Housh.size									0.05	1.05
CL:Female									0.06	1.06
CL:Netw.size									-0.04	0.96
LogLikelihood (Model)	-1926.46		-1841.05		-1839.6		-1713.86		-1713.38	
LogLikelihood (Null)	-2018.18		-2018.18		-2018.18		-2018.18		-2018.18	
G2	183.44		354.26		357.17		608.64		609.59	
Pseudo R² (McFadden)	0.05		0.09		0.09		0.15		0.15	
Pseudo R² (M. Lik.hood)	0.02		0.05		0.05		0.08		0.08	
Pseudo R² (Cragg/Uhler)	0.06		0.11		0.11		0.19		0.19	
AIC	3868.92		3702.1		3701.19		3463.71		3472.77	
N (excluded/total)	443/7922		449/7922		449/7922		961/7922		961/7922	

[1] Household size, including respondent, thus the minimum value of one.

Note: Highlighted values indicate statistical significance on the .05 level

Table 9: Weighted logistic regression, dependent variable: need for more emotional support (Don't need more = 1, Need more = 0)

Name	M1 β	M1 e^β	M2 β	M2 e^β	M3 β	M3 e^β	M4 β	M4 e^β	M5 β	M5 e^β	M6 β	M6 e^β
(Intercept)	*0.96*	*2.61*	*-0.85*	*0.43*	*-0.94*	*0.39*	*-1.53*	*0.22*	*-1.54*	*0.21*	*-1.39*	*0.25*
Childless	-0.02	0.98	-0.03	0.97	-0.02	0.98	0.06	1.06	0.28	1.32	-0.62	0.54
Female (Male)	*-0.50*	*0.61*	*-0.54*	*0.58*	*-0.54*	*0.58*	*-0.46*	*0.63*	*-0.54*	*0.58*	*-0.60*	*0.55*
Study:AS2(AS1)	*0.31*	*1.36*	*0.30*	*1.35*	*0.30*	*1.35*	*0.26*	*1.30*	*0.25*	*1.28*	*0.26*	*1.30*
Age	*0.01*	*1.01*	*0.02*	*1.02*	*0.02*	*1.02*	*0.03*	*1.03*	*0.03*	*1.03*	*0.03*	*1.03*
Has Partner	*0.67*	*1.95*	*0.61*	*1.84*	*0.61*	*1.84*	*0.69*	*1.99*	*0.75*	*2.12*	*0.74*	*2.10*
Housh.size[1]	0.02	1.02	0.01	1.01	0.02	1.02	0.02	1.02	0.01	1.01	0.01	1.01
Net.size	*0.06*	*1.06*	*0.04*	*1.04*	*0.11*	*1.12*	0.08	1.08	0.07	1.07	0.07	1.07
Health: Good			*1.69*	*5.42*	*1.69*	*5.42*	*1.66*	*5.26*	*1.67*	*5.31*	*1.67*	*5.31*
Health: Middle			*0.90*	*2.46*	*0.90*	*2.46*	*0.85*	*2.34*	*0.86*	*2.36*	*0.86*	*2.36*
Net.size^2					-0.01	0.99	0.00	1.00	0.00	1.00	0.00	1.00
Homemaker(Ref:Full-time)							0.18	1.20	0.19	1.21	0.18	1.20
Part-time(Ref: Full-time)							*-0.27*	*0.76*	-0.24	0.79	-0.10	0.90
Casmin 2ab (1)							0.08	1.08	0.08	1.08	0.02	1.02
Casmin 2c (1)							0.37	1.45	0.36	1.43	0.35	1.42
Casmin 3 (1)							-0.13	0.88	-0.12	0.89	-0.14	0.87
Highest SES							0.01	1.01	0.01	1.01	0.00	1.00
never.employed							-0.25	0.78	-0.27	0.76	-0.24	0.79
CL:age									-0.01	0.99	0.00	1.00
CL:partneryes									-0.38	0.68	-0.32	0.73
CL:hh.no									0.07	1.07	0.12	1.13
CL:sexW									*0.49*	*1.63*	*0.67*	*1.95*
CL:net.size									0.03	1.03	0.01	1.01
CL:Homemaker											-0.03	0.97
CL:Part-time											*-1.14*	*0.32*
CL:Casmin 2ab											0.39	1.48
CL:Casmin 2c											0.07	1.07
CL:Casmin 3											0.20	1.22
CL:Highest SES											0.01	1.01
CL:never.employed											-0.25	0.78
LogLikelihood (Model)	-2553.53		-2420.68		-2419.59		-2253.65		-2250.57		-2245.06	
LogLikelihood (Null)	-2696.29		-2696.29		-2696.29		-2696.29		-2696.29		-2696.29	
G2	285.52		551.23		553.4		885.28		891.45		902.48	
Pseudo R² (McFadden)	0.05		0.1		0.1		0.16		0.17		0.17	
Pseudo R² (M. Lik.hood)	0.04		0.07		0.07		0.12		0.12		0.12	
Pseudo R² (Cragg/Uhler)	0.07		0.14		0.14		0.22		0.22		0.23	
AIC	5123.07		4861.36		4861.19		4543.31		4547.14		4550.11	
N (excluded /total)	420/7922		426/7922		426/7922		936/7922		936/7922		936/7922	

[1] Household size, including respondent, thus the minimum value of one.

Note: Highlighted values indicate statistical significance on the .05 level

Table 10: Weighted logistic regression, dependent variable: need for more instrumental support (Don't need more = 1, Need more = 0)

	M1		M2		M3		M4		M5		M6	
Name	β	e^β	β	e^β	β	e^β	β	e^β	β	e^β	β	e^β
(Intercept)	*3.28*	*26.58*	*1.64*	*5.16*	*1.54*	*4.66*	*1.98*	*7.24*	*1.74*	*5.70*	*1.99*	*7.32*
Childless (CL)	-0.19	0.83	-0.19	0.83	-0.18	0.84	-0.05	0.95	0.93	2.53	-0.39	0.68
Sex: Female	*-0.66*	*0.52*	*-0.70*	*0.50*	*-0.70*	*0.50*	*-0.70*	*0.50*	*-0.72*	*0.49*	*-0.77*	*0.46*
Study: AS2	0.04	1.04	0.03	1.03	0.03	1.03	0.06	1.06	0.06	1.06	0.06	1.06
Age	*-0.01*	*0.99*	0.00	1.00	0.00	1.00	-0.01	0.99	0.00	1.00	0.00	1.00
Has Partner	*0.58*	*1.79*	*0.52*	*1.68*	*0.52*	*1.68*	*0.51*	*1.67*	*0.68*	*1.97*	*0.68*	*1.97*
Housh.size[1]	*-0.14*	*0.87*	*-0.14*	*0.87*	*-0.14*	*0.87*	*-0.11*	*0.90*	*-0.13*	*0.88*	-0.13	0.88
Net.size	0.00	1.03	0.02	1.02	0.09	1.09	0.08	1.08	0.05	1.05	0.05	1.05
Health: Good			*1.56*	*4.76*	*1.55*	*4.71*	*1.63*	*5.10*	*1.64*	*5.16*	*1.64*	*5.16*
Health: Middle			*1.02*	*2.77*	*1.01*	*2.75*	*1.07*	*2.92*	*1.07*	*2.92*	*1.08*	*2.94*
Net.size^2					-0.01	0.99	-0.01	0.99	0.00	1.00	0.00	1.00
Homemaker (Full-time)							-0.16	0.85	-0.13	0.88	-0.17	0.84
Part-time (Full-time)							-0.23	0.79	-0.20	0.82	-0.08	0.92
Casmin 2ab (1)							-0.22	0.80	*-0.23*	*0.79*	*-0.31*	*0.73*
Casmin 2c (1)							-0.33	0.72	-0.35	0.70	*-0.49*	*0.61*
Casmin 3 (1)							*-0.59*	*0.55*	*-0.59*	*0.55*	*-0.57*	*0.57*
Highest SES							0.00	1.00	0.00	1.00	-0.01	0.99
never.employed							-0.37	0.69	-0.41	0.66	-0.34	0.71
CL:age									-0.02	0.98	-0.01	0.99
CL:partneryes									*-0.94*	*0.39*	*-0.92*	*0.40*
CL:hh.no									0.24	1.27	0.33	1.39
CL:sexW									0.24	1.27	0.34	1.40
CL:net.size									0.07	1.07	0.03	1.03
CL:emp.statusHM											0.23	1.26
CL:emp.statusPT											*-0.88*	*0.41*
CL:casm2ab											0.68	1.97
CL:casm2c											1.01	2.75
CL:casm3											-0.04	0.96
CL:ses.max											0.02	1.02
CL:never.employed											-0.44	0.64
LogLikelihood (Model)	-2259.47		-2165.43		-2164.5		-1996.82		-1987.01		-1979.29	
LogLikelihood (Null)	-2406.51		-2406.51		-2406.51		-2406.51		-2406.51		-2406.51	
G2	294.09		482.17		484.02		819.39		839.01		854.43	
Pseudo R^2 (McFadden)	0.06		0.1		0.1		0.17		0.17		0.18	
Pseudo R^2 (M. Lik.hood)	0.04		0.06		0.06		0.11		0.11		0.11	
Pseudo R^2 (Cragg/Uhler)	0.08		0.13		0.13		0.22		0.23		0.23	
AIC	4534.93		4350.85		4351		4029.63		4020.01		4018.59	
N (excluded/total)	391/7922		397/7922		397/7922		908/7922		908/7922		908/7922	

[1] Household size, including respondent, thus the minimum value of one.
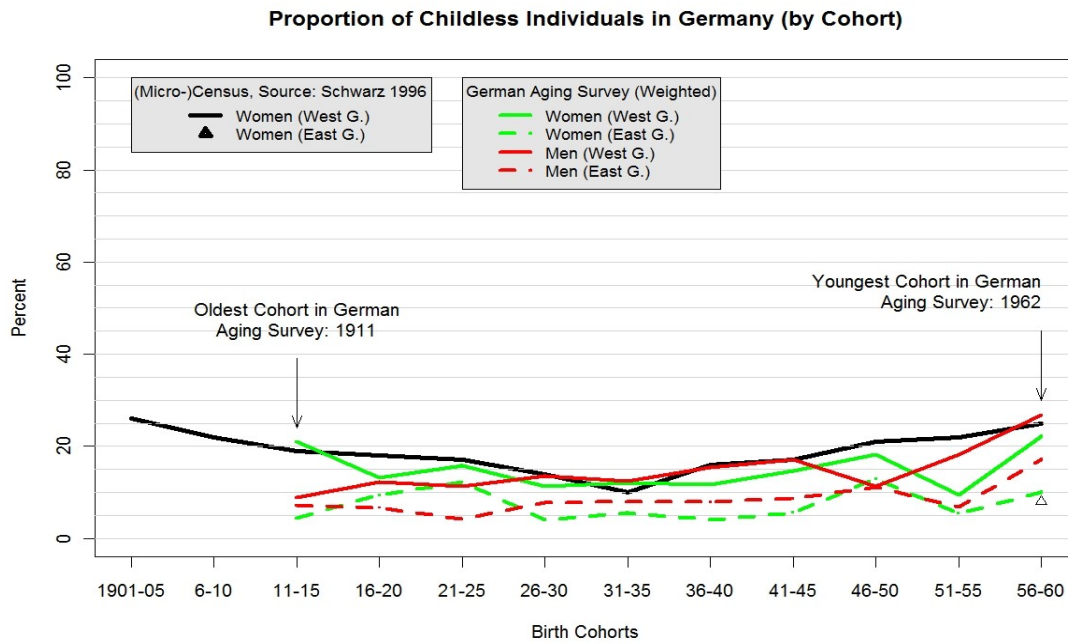Note: Highlighted values indicate statistical significance on the .05 level

6 Figures

Figure 1: Proportion of Childless Individuals in Germany