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Motivation and Selection Processes in a Biographical Transition: A Psychological Mixed Methods Study on the Transition Into Fatherhood

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Abstract

This article addresses the question of how developmental psychology could benefit from mixed methods research to better explain individual differences in biographical transitions. An event history analysis of 117 young men's transitions to first-time parenthood is integrated with a qualitative analysis of in-depth interviews on parenthood aspirations that were conducted with 12 childless participants from the same survey. The juxtaposition of both (sub)sampling and results shows, on the one hand, that men's causal motivated actions to enter into fatherhood can be concluded by combining both qualitative and quantitative interpretations. On the other hand, causal effects on the transition to first-time fatherhood due to partnership selectivity can be concluded from quantitative factors that do not have a qualitative equivalent.

Keywords

biographical transitions, fatherhood, event history analysis, problem-centered interviews, triangulation by juxtaposition

Understanding individuals' trajectories through modern biographies continues to be a challenge that has both theoretical and practical implications (Buchmann, 1989; Mills & Blossfeld, 2006). Research from a variety of disciplines deals with the analysis and interpretation of the timing, spacing, and extent of status transitions or ''turning points'' in people's life courses (Peterson, 1996; Reitzle & Vondracek, 2000). One of the most significant of these transitions is that into parenthood (Dykstra & Hagestad 2007; Morgan & King, 2001). This transition is especially perplexing for social scientists who try to explain why some people within a given population have (multiple) children relatively early, others postpone parenthood and have only a few children or end up not having children at all, whereas still others opt for a child-free lifestyle right from the beginning of adulthood. Research has not yet been successful in establishing a solid and broadly

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accepted base of concepts, knowledge, or key methodologies to deal with these questions (cf. de Bruijn, 1999; Herter-Eschweiler, 1998; Hobcraft, 2006; Huinink & Schröder, 2008; McAllister & Clarke, 1998).

Within the disciplines of social and developmental psychology, this question of *differential fertility*[1] has only been addressed occasionally throughout the last four decades, beginning with Fawcett's volume in 1973. It has been expanded upon sporadically and somewhat incoherently since then (e.g., by Eaves, Martin, Heath, Hewitt, & Neale, 1990; Jokela, Kivimäki, Elovainio, & Keltikangas-Järvinen, 2009; Miller & Pasta, 1994; Schneewind, 2000; von Rosenstiel, Nerdinger, Oppitz, Spieß, & Stengel, 1986). One of the reasons why psychologists have often distanced themselves from this topic may be the sheer range of individual-level factors that would need to be considered in a comprehensive explanatory framework. To illustrate this problem, a by no means exhaustive list of such factors would entail a person's (and his or her partner's) fecundity; contraceptive knowledge and practice; interest in sexuality or sex drive; history and quality of romantic partnerships; life and family goals, attitudes, and values; own experiences in childhood; current financial and living situation; career aspirations; social network influence; and cultural milieu or subcultural embedment. Empirically tracing these and other highly intimate factors during the relevant stages of couple formation, couple commitment, and dyadic decision making is often beyond the feasibility of research efforts. Despite using a mixed methods approach, this study cannot possibly address the full range of these questions. Still, it inquires into and empirically links two psychological mechanisms that have been shown to be crucial for parenthood transitions in separate research efforts: (a) the impact of individual goal setting and motivated behavior (Miller & Pasta, 1995; Schneewind, 2000) and (b) the phenomenon of partnership selectivity (Bokek-Cohen, Peres, & Kanazawa, 2008; Feingold, 1992; Lehnart & Neyer, 2006).

In this study, we have an empirical focus on men's transitions to fatherhood. Without question, it would be both necessary and interesting to also analyze women's transitions to first-time motherhood and combine this with the findings on men in order to gain understanding of *couples'* transitions to parenthood. The demand for such research, however, will certainly lead well beyond a single study. We argue that it is still a valid approach to derive hypotheses about a social phenomenon by inquiring into one type of actor. Moreover, it has been criticized that there is a particular dearth in research on men's involvement in family planning issues (Forste, 2002; Maul, 2007). Not long ago, research even saw the desire for having children as being exclusive to women (Kühler, 1989). Only in the last decade or so have men been viewed as active social beings in the family arena (Marsiglio, 1998). To generate hypotheses to fill this gap of knowledge about men's involvement in family planning, the present mixed methods research holds a predominantly inductive drive (following Morse, Niehaus, Wolfe, & Wilkins, 2006).

As the first premise of this study, we assume that men also undergo their own subjective and perhaps idiosyncratic *motivational and intentional processes* that lead them to (or keep them from experiencing) fatherhood. In a second premise, we imply that the entry into fatherhood is not only a question of deliberate aspiration for men but is also shaped by *selection processes.* The literature proposes that two such processes are proximate determinants of family formation, namely (a) mate selection by female partners within a given marriage market (Bokek-Cohen et al., 2008) and (b) the stability of romantic partnerships according to individual personality characteristics (Lehnart & Neyer, 2006).

In what way can a mixed methods approach help disentangle such different processes involved in the transition to fatherhood? We believe that the integration of quantitative and qualitative approaches is a particularly valuable strategy in a psychological study, if and when (a) we assume that the phenomenon encompasses aspects of deliberate individual agency as well as (arguably nonconscious) selectivity and (b) we do not know which of these aspects plays a more predominant role. As we have seen, both assumptions hold true for the transition to fatherhood.

In this study, we will follow an approach that is conceptually similar to the *parallel mixed* analysis as described by Tashakkori and Teddlie (1998, p. 128), to the *concurrent* or *convergence triangulation* strategy by Creswell (2003, p. 217) and Creswell and Plano Clark (2007, p. 62), and to the framework of *complementary triangulation* as described by Erzberger and Kelle (2003). From these elaborate methodological proposals, we draw several insights. Most centrally, we acknowledge the fundamentally opposing character of qualitative and quantitative methods. Thus, we grant each approach its genuine reconstruction of truth and reality (see also Gürtler & Huber, 2006, p. 326). As we are interested in explaining why some types of childless men enter into fatherhood earlier than others, we regard the particular strength of a quantitative method in the ability to provide ''a more efficient way of forging connections and gleaning underlying patterns, which might take an age to produce when relying solely on ethnographic methods'' (Bryman, 1988, p. 142). In contrast, a qualitative approach uncovers the structure of people's own awareness of life and lays out which personal goals and intentions shape the individual desires for fathering one's own child in a given context (cf. Harré, 2004).

The methodological tenet we follow in this version of a parallel/concurrent and complementary triangulation of sample and results consists of two methodological propositions. First, we assume that motivational processes involved in a biographical transition (i.e., to fatherhood) can be derived from the mutual correspondence between qualitative findings and quantitative results (QUAL $\cap$ QUAN). Second, the selection processes involved in a transition (i.e., to fatherhood) can be determined through the quantitative factors that are, and only if they are, unrelated to the qualitative findings (QUAN $\setminus$ QUAL).[2]

By means of a systematic subjection of quantitative findings to the question of which ones are also part of men's conscious striving for fatherhood, we address a question that naturally leads beyond a monomethod quantitative approach. Similarly, through a subjection of qualitative findings to the question of which of them are prospectively conducive to having a first child, we address a question that naturally leads beyond the scope of a monomethod qualitative study. Furthermore, the approach exceeds the standard idea of complementary triangulation because it approximates a satisfactory causal explanation of behavior in terms of Hedström and Swedberg (1998). They proposed that to causally explain a phenomenon in the social sciences we need a method that incorporates knowledge both on factors that determine behavior and the mechanisms or processes through which they are implemented. We suggest that our proposal presents a way of doing just this. Figure 1 summarizes the general design of the approach within the context of this study.

Whereas the methodological claims we have made so far are general and possibly far-reaching for a psychological study, the empirical focus of this article is quite specific. First, the geographical location of this study is eastern Germany. As it is well documented that the mechanisms under question are deeply linked to gender-specific cultural scripts (Bernardi, Klðrner, & von der Lippe, 2008; , Eagly, Wood, & Diekman, 2000), details of the present empirical findings are undoubtedly relative to this context; a context that has been characterized by rapid societal change and a turnover of formerly valid biographical scripts (Huinink & Kreyenfeld, 2006; Mayer, 2006). Second, this is a study on childless men's transitions to first-time fatherhood. The literature shows that this limitation is relevant because the experience of parenthood itself exerts a strong impact on various psychological domains (Cowan et al., 1985; Jokela et al., 2009). This excludes a retrospective study due to expected hindsight or self-serving biases that parents might be subjected to. Moreover, one has to distinguish childbearing of different parities. For instance, some childbearing motives for a second, third, fourth child, and so on are clearly connected to the first child, such as wanting to provide the first-born with a sibling or to repeat positive experiences with the first-born by having a second child. Again, the focus of this study is a narrow one and only allows conclusions on first-time fatherhood.

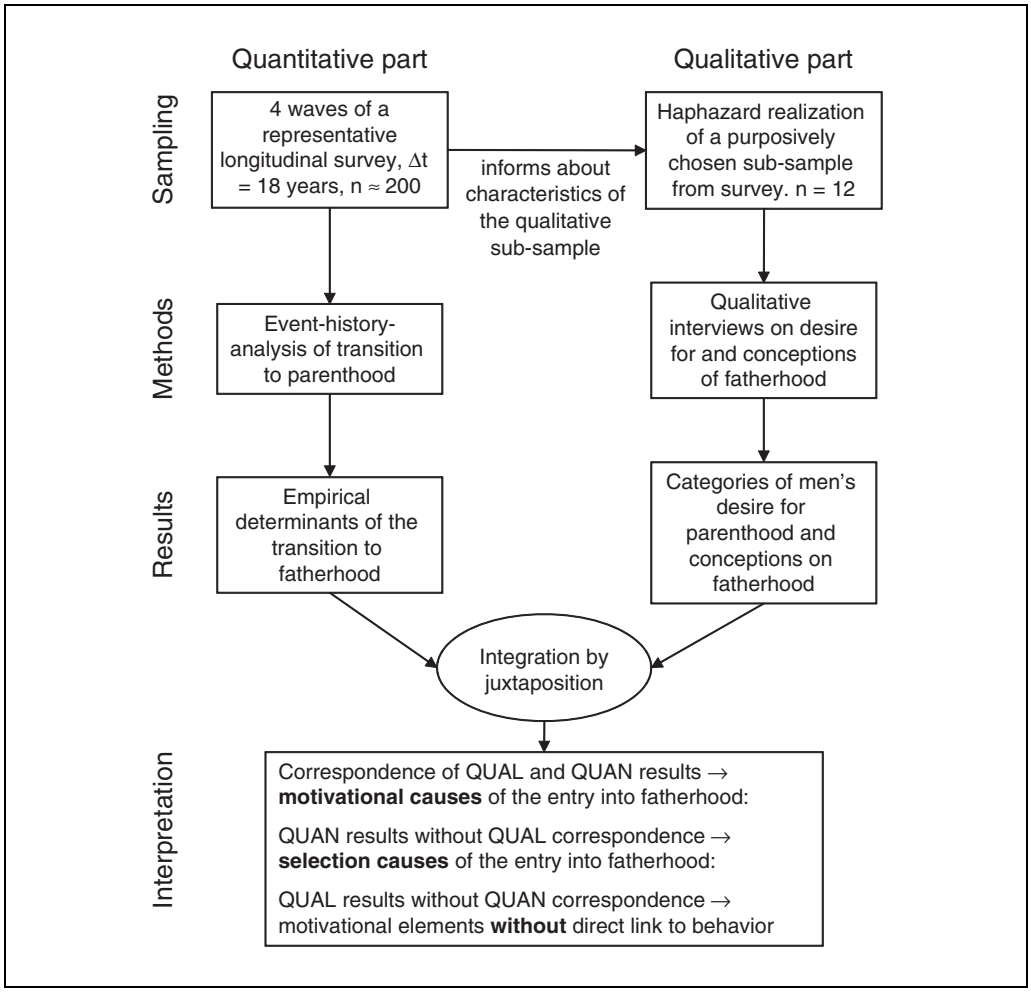

Figure 1. The general design of this study
Note: Please read the small "→" in the lowest box as "interpreted as." This paper focuses on the first two out of the three interpretations

Methods

Participants and Design

The participants in this study are from the Rostock Longitudinal Study (ROLS; see Reis, 1997), which began as a cross-sectional survey in 1970-1971 with newborns sampled from Rostock obstetrics wards.[3] It then transformed into a prospective study including 294 children in 1972 (age = 2 years) with follow-ups taking place when participants were 6 years old ($n = 279$), 10 years old ($n = 268$), 14 years old ($n = 247$), 20 years old ($n = 199$), and 25 years old ($n = 212$). The proportion of male and female participants was nearly equal throughout the entire course of the study, fluctuating somewhat around the 50% threshold ($\pm 2\%$). Information on the childbearing history of the participants was collected by an additional telephone interview performed by the author in 2002-2003 when participants were 32 years of age ($n = 206$). In an evaluation of the study-population characteristics of the 25-year wave, Reis (1997, p. 51)

found that the development of the study sample followed the trend of the (former) German Democratic Republic and thus, can be considered to be representative of the eastern German birth cohorts of 1970-1971.

For the purpose of additional qualitative in-depth interviews, 80 male participants from the study—those whose current place of residence was known at that time—were contacted by mail outside of the normal schedule of the survey in 2001-2002 and asked for their participation in a personal interview on ''family and children issues.'' Each participant was offered an expense allowance of 25. A total of 25 men replied positively to the letter, which is a satisfactory response rate of 31%. Of these 25 men, 20 in-depth interviews actually took place.

For the qualitative analysis we draw exclusively on the subsample of childless men because, as we explained above, we focus on the processes that are conducive to having a first child. The number of childless men in the qualitative sample was 14. From these, we included 12 interviews in the final in-depth analysis.[4] The majority of these interviewees were skilled workers ($n = 8$), full-time employees ($n = 6$), and men cohabiting with a female partner ($n = 7$). The cohort's homogenous age was close to 31 years ($M = 30.9$).

We will now examine this subsample in a first integration step (*sampling triangulation*, cf. Flick, 2004). We compare characteristics of the 12 interviewees as were recorded when the subjects were 25 years old to the full male subsample of the longitudinal wave. This procedure shows that the qualitative interviewees were, by and large, average participants of the representative survey, with only a few relevant exceptions.[5]

Prospective data show similarities between the interviewees and the rest of the male survey subsample in the domains of intelligence and personality such as emotional stability, well-being, self-actualization, autonomy, self-efficacy, a general feeling of competence, and general meaningfulness in life (all $|t| \leq 1.24$, $p > .20$). In terms of their social backgrounds and resources, we find statistical normality in factors such as the age of leaving the parental home, work status, or the number of siblings, friends, and acquaintances (all $|t| \leq 1.17$, $p > .20$). In addition, the functional levels of interviewees' social relations with peers and with their families of origin as well as their ability to cope with stress and daily hassles are no different from other participants of the study (all $|t| \leq 1.04$, $p \geq .30$).

However, there is some statistical deviance in that the subsampled men show greater pessimism and more relationship problems in the 6 years before the interview. They reported a significantly reduced feeling of social and job success complemented by an external locus of action control (all $|t| \geq 1.60$, $p \leq .11$). They also showed lower optimism, self-acceptance, and talent in sports (all $|t| \geq 1.80$, $p \leq .10$). Moreover, we observe a significantly reduced functioning and support in the domain of partnership which was echoed by a low dispositional capacity for love (all $|t| \geq 1.98$, $p \leq .06$).

From this sample triangulation, we conclude that the interview partners represent a normal subsample of the representative survey with regard to personal endowment and social background. Six years prior to the interview, however, they were characterized by a specific feeling of social failure, less optimism, and stronger negative experiences within partnerships. This conclusion is mirrored by the fact that 4 out of 12 subjects were unemployed, and 5 out of 12 did not have a steady partner at the time of the interview.

Measures/Interview Procedure

Given the lack of a coherent theoretical framework on psychological determinants of fertility behavior, the quantitative part of this study draws on the integrative model of childbearing behavior proposed by social demographer de Bruijn in 1999. His comprehensive review of the specialized literature concludes and recommends that an explanation of differential

childbearing behavior across and within regional settings should always take three different forces into account. For the sake of brevity, we rephrase these forces here as *social-structural*, *intraindividual*, and *interindividual* determinants which are seen as being intertwined throughout the processes of a person's socialization, choices, and behavior.

We draw on this framework and hypothesize that individual differences in social-structural characteristics (such as sex, education, occupational status, life-course organization), in intrapersonal covariates (such as personality, dispositional adaptation styles, optimism, desires, and fears), as well as in interpersonal covariates (such as resources in partnership, in family of origin, or in peer relations, and the quality of these relationships) contribute to the explanation of differential family formation behavior. The selection of these covariates for the statistical analysis is guided by the goal of achieving the best possible operationalization of de Bruijn's model from the available data. As we proceed, we incorporate some of the core claims of the framework, namely, accounting for social-structural data as a proxy of the ''structured information environment'' (de Bruijn, 1999, p. 184) individuals live in; for intrapersonal data paying heed to ''room for the impact of personality characteristics'' (p. 185) in individualized life-course regimes; and for interindividual information referring to the ''social embedment'' (p. 180) of individuals in an environment of social relations.

We therefore select both psychological and nonpsychological covariates from the age 20- and 25-year-wave of the study to predict the transition to parenthood in subsequent years (prospective hazard regression). Altogether, 111 first births had occurred up to the phone interviews in 2002-2003 out of which more than one third ($n = 39$) was fathered by male subjects. Some respondents reported having children by the age of 25 already, but did not participate in the phone interview, these numbers refer to a total number of 241 individuals (117 men), observed at least once. The different drop-out time-points in a longitudinal study are known as ''censoring'' of data, and the methods selected can easily deal with this phenomenon (Yamaguchi & Jin, 1999). Table 1 gives a brief introduction into the quantitative data used. It is important to note that some of the covariates were measured twice (at ages 20 and 25 years), whereas others were only measured at age 20. In the former case, a change in value at age 25 was allowed (time-varying covariates). Some of the measures consisted of psychological standard scales such as the ''Trier Personality Inventory'' (Trierer Persönlichkeitsinventar, TPI; Becker, 1989), the ''Coping-with-Stress Questionnaire'' (Stressverarbeitungsfragebogen [SVF]; Janke, Erdmann, & Kallus, 1997), and the ''Questionnaire of Social Relations'' (Fragebogen Soziale Beziehungen [FSB]; Reis, 1995). All the scales are presented in Table 1. Others were composed of single Likert-type scale items (see Covariates 8, 9, and 12 in Table 1) or researchers ratings of subjects' responses to open-ended questions (such as ''what is the occupation of your father and mother?,'' Covariate 1 in Table 1; or ''what are your three most important desires and fears in life?,'' Covariates 10 and 11, also Table 1).

In the qualitative part of the study, we performed problem-centered interviews (PCIs), as elaborated by Witzel (1985, 2000). A PCI aims to reveal individuals' internalized structures of relevance on a topic as well as the internal symbolization of experiences, expectations, and emotions. It is only a roughly structured personal interview that puts strong emphasis on the dialogue between the interviewer and the interviewee. Hence, we used crude interview guidelines aimed at instigating narrations and responses on a total of 13 different themes that we derived from the literature on fatherhood. Of these 13 themes, 7 are of particular interest for the present analysis: respondents' current (or most recent) partnership situation; free fantasies about starting a family;[6] free fantasies about being a father; general opinions, convictions, or experiences regarding parenthood and family formation; the biographical development of the desire for having children; attitudes toward staying childless; and practical and nonmaterial support for fatherhood.

Table 1. Overview of Covariates Used in the Prospective Analysis

No.	Covariate	Origin/Construction	Data Level	Time Status	Mean/Mode	*SD*
1	Sex	Forced choice	Nominal	Fixed	0.49, male	—
2	Occupational status of parents	Rating at age 14	Ordinal	Fixed	7.33	1.86
3	Educational attainment	Years at school	Metric	Varying	9.64	1.78
4	Left home	Dummy (1 when left)	Nominal	Varying	20.00	—
5	Finished school	Dummy (1 when finished)	Nominal	Varying	17.00	—
6	Personality					
	Capacity for love	TPI, ages 20 + 25, z-value	Metric	Varying	0.00	0.95
	Mental health	TPI, ages 20 + 25, z-value	Metric	Varying	−0.01	0.95
	Physical health	TPI, ages 20 + 25, z-value	Metric	Varying	0.00	0.81
	Self-actualization	TPI, ages 20 + 25, z-value	Metric	Varying	0.01	0.87
	Action control	TPI, ages 20 + 25, z-value	Metric	Varying	−0.01	0.87
7	Coping styles					
	Social withdrawal	SVT, age 20, z-value	Metric	Fixed	0.00	0.73
	Active control	SVT, age 20, z-value	Metric	Fixed	0.01	0.73
	Rationalization	SVT, age 20, z-value	Metric	Fixed	0.00	0.73
	Easier alternatives	SVT, age 20, z-value	Metric	Fixed	−0.02	0.73
	Alcohol and drugs	SVT, age 20, z-value	Metric	Fixed	0.03	0.71
8	General optimism	Likert item, ages 20 + 25	Metric	Varying	3.08	0.57
9	Self-efficacy	Likert item, ages 20 + 25	Metric	Varying	4.54	0.31
10	Desire for intimacy	Rating at ages 20 + 25	Ordinal	Varying	0.34	0.60
11	Fear of losing intimacy	Rating at ages 20 + 25	Ordinal	Varying	0.22	0.49
12	Social resources					
	Partner	Likert item, ages 20 + 25	Metric	Varying	4.06	1.17
	Family	Likert item, ages 20 + 25	Metric	Varying	4.56	0.75
	Friends	Likert item, ages 20 + 25	Metric	Varying	4.48	0.67
13	Quality of relations					
	With family	FSB, ages 20 + 25, z-value	Metric	Varying	0.02	0.98
	With partner	FSB, ages 20 + 25, z-value	Metric	Varying	0.00	1.00

Note: TPI stands for factor scales of the 120-item Trier Personality Inventory, SVT for scales of the factorized 114-item Coping-with-Stress Questionnaire, and FSB for scales of the factorized 105-item Questionnaire of Social Relations (all the references are given in the text). z-values result from a standard z-transformation of normally distributed scales to make values comparable across time points. In case of time-varying covariates, the statistical parameters describe the collapsed time points.

Interview guidelines were, as the PCI method suggests, roughly preformulated and rather served as a ''transparency of the background'' (Witzel, 2000, para 7) to allow for ample thematic flexibility and respondents' subjectivity shaping the interview. Examples of prepared guideline questions are as follows: ''If you try to remember the time you first thought about having children of your own, if you ever did so, could you tell me when that was and how it continued from then on?,'' ''Imagine that you are a father. How would your life be changed by this?,'' or ''Imagine you will not have any children in the future. How would it be for you to stay childless?'' Answers were typically followed by general and specific explorations until the interviewer has the impression of having grasped the subjective meaning of the interviewee's response. Such explorations were, for instance, ''What exactly do you mean by this?'' or ''Could you tell me more about your thoughts and feelings about this issue?'' (see also Witzel, 2000, para 14 and 16; von der Lippe, 2004, p. 106). The interviews lasted between 70 and 150 minutes.

Data Treatment/Transcription

All quantitative data were prepared for a hazard regression (also termed *intensity regression* or *survival analysis*; Singer & Willett, 2003) to model the transition into parenthood of childless individuals over time. This method accounts for the timing of the transition and can easily deal with censored data (Yamaguchi & Jin, 1999). The aim of this procedure is to identify which covariate affects to what extent the individual transition risk (hazard) to fatherhood of the (continuously diminishing) sub-population of childless men up to the age of 31—controlling for all other covariates included into a model at the same time. All estimates were calculated as relative risks,[7] which translate easily into odds ratios (Singer & Willett, 2003, p. 388).[8] Most covariate categories were formed by a median split (i.e., high vs. low levels) and, if possible, also tercile splits (i.e., low vs. average vs. high levels).

Accounting for the wealth of data (and potential model-over-specification problems), we applied an iterative regression procedure in which initial small models are tested, then revised by the exclusion of nonsignificant covariates, and slowly built up toward more comprehensive ones. This process continued until further changes in the model failed to significantly improve the ratio of fit (using a log-likelihood ratio test; Singer & Willett, 2003, p. 385).

For the analysis of the qualitative data, each interview was tape-recorded and transcribed. The transcription did not follow any advanced, linguistic rules. The instructions were (a) to maintain the original wording of the interviewee (i.e, to refrain from correcting mistakes, slang, or dialect expressions), (b) to indicate pauses by noting the duration in seconds, and (c) to note audible para-verbal features in brackets (such as laughing, sighing, etc.). Analyses largely followed the theoretical coding technique (i.e., the well-known sequence of open, axial, and selective coding) as elaborated by Corbin and Strauss (2008). This allowed for an extensive inductive procedure as well as a deductive structuring element through the coding axes within the analysis (see results section).

Results

Quantitative Findings

Hazard regression models of the transition to parenthood reveal that the sexes differ largely in the statistical determinants. We not only report estimates for men here but also provide some hints on results for women. Although gender differences are not the topic of this article, it is sometimes necessary to understand which findings are specifically characteristic for *fatherhood* as opposed to those that are general precursors to parenthood for both sexes. Table 2 presents best estimates for the covariates extracted from the iterative procedure of the male subsample.[9] Risk estimates suggest that the propensity of entering into fatherhood earlier than others in life increases for those men who have attained relatively high social maturity, who have a socially desirable personality, who are not particularly expansive or self-controlled and who possess more partnership resources than friendship resources.

From the group of social-structural covariates,results for men's educational attainment show a (trendwise) proportionality of higher education with higher transition propensities. In contrast, a significant inverse relationship is observed among women. This is consistent with the literature which finds that for men in Germany, better education (and, consequently, better employment opportunities, higher income, and higher social status) promotes fatherhood (Tölke & Diewald, 2003). Moreover, having left one's parental home and having at least a 10th grade education are clear preconditions for fatherhood in this sample. The former significantly increases the statistical risk for fatherhood by the factor 3.0 and the latter estimate exceeds any numerical

Table 2. Significant Findings and Trends of Covariate Impacts for Transition to Fatherhood, in Comparison With the Transition to Motherhood

	Men		Women	
	Coefficient	*p*-Value	Coefficient	*p*-Value
Educational attainment				
Low	0.42	.50	10.03	.00***
Average	1.00	ref	1.00	ref
High	1.47	.62	0.51	.08*
Left parental home				
No	1.00	ref	1.00	ref
Yes	3.01	.07*	1.29	.60
Left education				
No	1.00	ref	1.00	ref
Yes	NA		4.16	.04**
Capacity for love				
Low	1.00	ref	1.00	ref
Average	1.44	.63	0.87	.74
High	1.31	.75	1.38	.48
Self-actualization				
Low	1.00	ref	1.00	ref
Average	0.44	.15†	1.79	.16†
High	0.67	.46	1.08	.87
Action control				
Low	1.00	ref	1.00	ref
Average	0.29	.04**	1.45	.26
High	0.66	.50	1.25	.51
Personal optimism				
Low	1.00	ref	1.00	ref
Average	3.27	.34	1.15	.77
High	2.15	.57	0.61	.35
Desire for intimacy				
Low	1.00	ref	1.00	ref
High	0.28	.12*	0.91	.79
Fear of losing intimacy				
Low	1.00	ref	1.00	ref
High	2.12	.34	1.40	.27
Coping by social withdrawal				
Low	1.00	ref	1.00	ref
Average	0.37	.33	1.08	.89
High	0.24	.26	1.86	.28
Resources partner				
Low	1.00	ref	1.00	ref
High	3.48	.01**	1.65	.05*
Quality of social relation with peers				
Low	1.00	ref	1.00	ref
High	0.52	.29	1.33	0.48

Note: All other covariates from Table 1 yielded zero or inconsistent estimates for men throughout all steps of the analysis. ref. = reference category of covariate; NA = not available.
†$p < .20$. *$p < .10$. **$p < .05$. ***$p < .01$.

estimation, indicating that virtually no male participant experienced fatherhood without having finished at least 10th grade education. If we recall which features are typically connected with

leaving the parental home and graduating from school/university (namely independence, self-sufficiency, maturity; cf. Graber & Dubas, 1996), we use the generic term of *social maturity* to describe these preconditions of fatherhood. These findings are specific because we control for many other variables (age, personality, resources, etc.) that may be linked to educational attainment and life-course events.

In terms of intrapersonal covariates (also Table 2), one part of the estimates promotes the idea that a positive, *socially desirable personality* increases the propensity of fatherhood. Male-specific trends of high Capacity for Love, Personal Optimism, and concern for Losing One's Intimate Relations as well as of low Social Withdrawal suggest that, in particular, lovable, optimistic, considerate, and active men are more prone to fatherhood than others. However, results of other potentially socially desirable traits such as Self-Actualization (i.e., expressiveness and autonomy) and Action Control (i.e., an internal locus of behavioral control) indicate that being at least averagely self-developing and self-reliant is detrimental to early fatherhood. In other words, less purposeful men and those who habitually do not take much control of their actions (i.e., prefer to let things happen) belong to the early fatherhood group.

A further finding is somewhat difficult to interpret. Men who express a high Desire for Intimate Relations show a reduced propensity of fatherhood. Perhaps, expressing the desire for having children is a characteristic of men for whom having a family is a particularly important life goal and who, for this reason, act carefully and consciously during their 20s by postponing parenthood. Conversely, it may also be true that men who express a strong desire for having children and a family may be those who believe they have the lowest chances for actually realizing this goal (i.e., they may be without a partner or feel lonely). We will return to these opposing interpretations with the integration of methods.

Finally, as seen in Table 2, significant estimates or trends on what we term *intrapersonal covariates* show that having strong resources in one's current partnership is a significant promoter of fatherhood, whereas a high quality of social relations with friends has an opposite effect on childless men. This finding is also gender specific since among women there is a fully inverse, nonsignificant trend in these covariates. This finding may point toward the well-known fact that male friendships are generally less family or affiliation-oriented compared with those of women (Asendorpf & Banse, 2000). In this way, the question of ''girlfriend versus friends'' may indeed have a rivaling character for men in their 20s.

Qualitative Findings

Following Witzel's (2000) proposal, the analysis of the PCIs starts with writing brief single-case descriptions for each interview. These descriptions serve as a fixed point for all consecutive interpretations; they maintain the logic of the individual case to ensure the validity of the following interpretations (not shown here in detail). For each full interview, we then follow a sentence-by-sentence and paragraph-by-paragraph open coding procedure that yields an ample and comparable analytical basis of several dozen codes and categories (e.g., ''child as source of joy,'' ''men as breadwinners,'' ''child maintains family succession'').

The subsequent step of axial coding has been modified from the proposal by Corbin and Strauss (2008). As we aim to understand fatherhood motivational processes from a pronounced psychological stance and in psychological terms, we replace the original axial coding paradigm of Corbin and Strauss (e.g., conditions, context, phenomenon, etc.) and draw on psychological concepts as coding axes. We refer to the psychological wisdom that a person's attitudes, values, motives, interests, goals, action beliefs, self-concept, social interactions, *and* gender role identity may contribute to the explanation of behavior (Asendorpf, 2007).

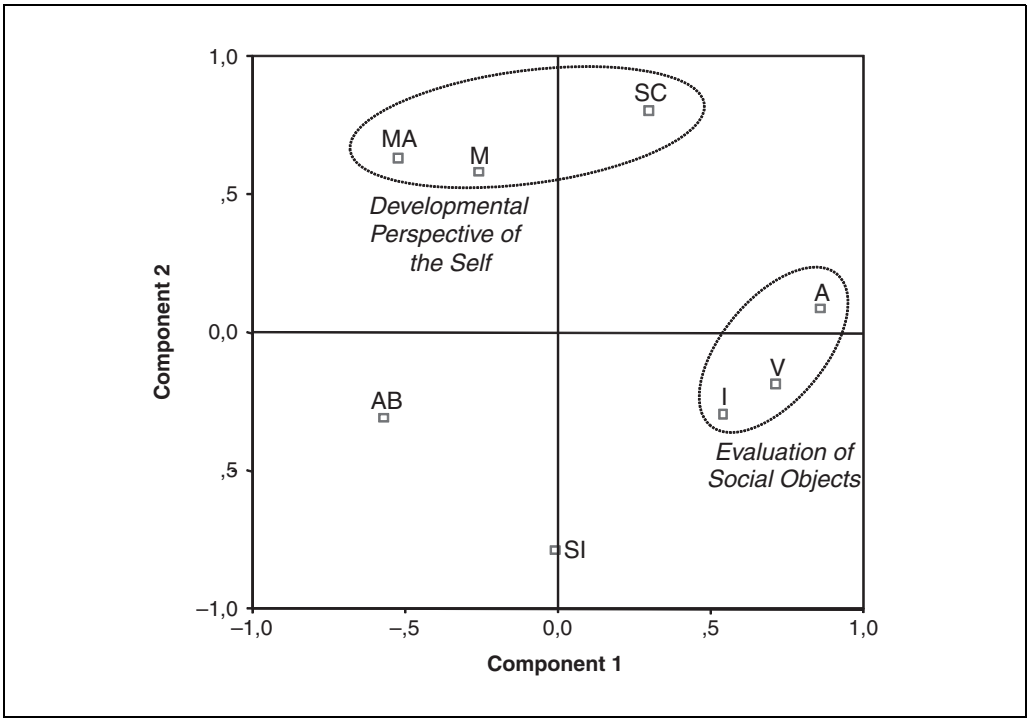

Figure 2. Component plot of the factor analysis assisting selective coding
Note: MA = masculinity/male identity; M = motives; SC = self-concept; A = attitudes; V = values; I = interests; SI = social interactions; AB = action believes. Extraction method: principal component analysis. Rotation method: varimax with Kaiser normalization.

We therefore co-code all open codes and categories in terms of these axes and reinterpret each individual case respectively. Consequently, we attain a comparison overview of which axes are relevant for understanding which single case (plus what they encompass in the single case, which is not shown here in detail). Finally, the categorization of interpretations is facilitated by a simple (case * axis – yes/no) contingency table indicating which axes are relevant for understanding which individual case. A nonparametrical factor analysis (see Figure 2; for a similar procedure see Kuiken & Miall, 2001) confirms the interpretation and supports the concluding step of selective coding in which we attain a crystallization of the central categories that span all cases (Corbin & Strauss, 2008).

These interpretative steps suggest two core categories (*selective codes*) for understanding men's stories of desire for having children and conceptions of fatherhood. We term the first category a *Developmental Perspective of the Self*. This perspective is chiefly constituted by the coherence of men's motives (e.g., the qualitative categories ''liveliness,'' ''company in old age,'' or ''togetherness''), their self-concepts (e.g., ''responsibility,'' ''individuality,'' or ''seriousness''), and conceptions of male identity (e.g., ''traditional masculinity'' or ''marginalized men''). It combines a man's perspective of what he is like today (self-concept), what would change for him personally by becoming a father (motives), and what kind of man he would become through his decision for or against fatherhood (male identity).

A second category, explaining men's desire for having children and their conceptions on fatherhood has been termed *Evaluations of Social Objects*. This category summarizes the coherence of attitudes (e.g., the qualitative categories ''positive evaluation of children's behavior'' or ''negative view on partial families''), values (e.g., ''completeness of family,'' ''naturalness of family

relations,'' or ''parental responsibility''), and interests (e.g., ''playing,'' ''instructing,'' or ''activities with kids''). It captures a man's view of the world around him: what family-related objects of perception or imagination he evaluates positively or negatively (attitudes), what broad classes of such objects he evaluates in what way (values), and which specific family-related behaviors he enjoys or dislikes (interests).

There are two remaining coding axes—action beliefs (e.g., qualitative categories ''passivity,'' ''imagination,'' or ''active search'') and social interactions (e.g., categories ''grandparents ask for grandchildren'' or ''observed difficulties of young parents'')—which do not cohere well with either of the two selective codes. They seem to constitute just the opposite of the two selective codes. Men who voice a developmental perspective of their selves with fatherhood systematically do not verbalize social influences on their motivation for and conceptions of it. Similarly, men who express positive evaluations of fatherhood related social objects systematically do not talk about their personal action beliefs and strategies. Although this is an interesting finding in itself, it leads beyond the scope of this article and will be omitted in the following sections.

To give an illustration of what the two selective categories capture, we provide brief descriptions of prototypical cases. For the Developmental Perspective of the Self, Mr. B serves as a good example.[10] He relates the question of starting a family directly to his self-concept because he currently sees himself at a ''turning point in life.'' He has always been an active ''music fan'' with ''loud music and making a racket'' but now has become more ''quiet and (developed) an adult character.'' Motives also play a crucial role in his consideration of fatherhood. He expects that with a child he would ''automatically develop a more responsible character'' and would achieve a more ''complete role, 100% self-actualization'' in society. In particular, he believes that for men's identity a lot of changes accompany the start of a family, as they are pushed to acquire a more irreproachable lifestyle and ''take responsibility for making a living for his family.'' In summary, the three axes of self-concept, motives, and male identity coincide for Mr. B in his positive Developmental Perspective of the Self as becoming the father of a family.

For the second category, Evaluation of Social Objects, Mr. F serves as a prototypical example. Mr. F has a particularly positive attitude toward ''family as such.'' He likes the idea of living together with a woman and having children with her. He particularly appreciates having ''passionate love'' and he rejects the idea of having such a relationship without children. He regards ''family in itself'' as a value because it fosters ''considerateness'' and ''thoughtfulness'' among people. Moreover, Mr. F expects to enjoy the practical side of fatherhood. He is very positive about ''dealing with children,'' ''demonstrating and explaining things to them,'' and ''going on holidays with the entire family.'' Mr. F's desire for parenthood is understandable via this web of attitudes, values, and interests, and thus via the Evaluation of Social Objects.

Integration of Results: Juxtaposition of Quantitative and Qualitative Findings

Up to this point, we have only been able to theorize that motivation and selection processes are constitutive for childless men's actual transitions to fatherhood. To substantiate these assumptions on empirical grounds we now conduct a full juxtaposition and analysis of intermethod correspondence. We first ask which quantitative determinants of childbearing also play a role in men's subjective motivation for it (i.e., in the qualitative results; see the following subsections 1 to 5). Then we inspect whether there is quantitative evidence that the content of the qualitative categories might also be statistically conducive for having a first child (see subsections 6 and 7).

1. In the quantitative analysis we conclude that estimates from the group of sociostructural covariates indicate that a certain degree of social maturity is required for men to enter into fatherhood. This conclusion was based on the statistical impacts of formal education, graduation, and having left parental home for the transition into fatherhood. When inspecting the qualitative

findings, however, we do not find a straightforward correspondence with this interpretation. Instead, men voice the importance of having left education for the transition to fatherhood in an indirect way by saying that *being employed* is crucial for starting a family. That is, men refer to their employment, but not educational status when considering fatherhood.

What, then, triggers the impact of formal education on fatherhood propensities found in the statistical analysis? From the interviews we observe that there may indeed be a mate selection process involved. Mr. B's statement serves as an example of this idea: Mr. B belongs to the lower education and income part of the sample and sees himself in a difficult position to accommodate the ''new,'' fun- and consumption-oriented lifestyles of women that he has observed since the fall of socialism.

> Somehow women have all changed in recent years . . . They don't like to hear that kind of thing, but they've only got money and going out and clothes on their mind . . . They all think very differently from how they thought in earlier times. They really want to step the pace right up, they want to have their own lives . . . They want to enjoy life, they want to speed it up. (Mr. B)

He also says that women tend to look for men who can afford and wish to join in them this ''modern'' consumer lifestyle. Based on the literature, we can expect that such self-actualizing, expansive female lifestyles typically diffuse from higher income and higher education strata to lower ones. This may explain the quantitative finding that higher education is negatively related to childbearing for women, but positively for men: Women may prefer men with a better education as partners for family formation. This would indeed point toward a mate selection effect based on men's *socioeconomic maturity* instead of the original, broader term of ''social maturity.'' We derive this conclusion from the qualitative accentuation of quantitative results.

2. Turning toward the quantitative findings on socially desirable male personality traits, we obtain mixed correspondence with the qualitative results. The accelerating effect of high Capacity for Love, high Personal Optimism, and low Social Withdrawal on the transition to fatherhood cannot be consistently substantiated as subjective motivational forces for men. Some men even suggest that these traits would *result* from fatherhood rather than act as a prerequisite for it. Mr. P, who is the quantitatively strongest Social Withdrawer of the qualitative subsample, however, sees himself being addressed by women with the expectation to be assertive and initiative taking in order to form a family. On the one hand, these observations suggest that women might choose partners who already possess these traits (mate selection effect). On the other hand, men who describe their self-concept as ''adult''—which is often phrased in terms of agreeableness, responsibility, and realistic optimism by the respondents—seem to include future fatherhood more readily into their developmental perspective of the self (qualitative category). We will return to this question again in Subsection 6.

The statistical effect of men's expressed concern for Losing Intimate Relations on transition rates is more unambiguously reflected in the qualitative data. A considerable part of men's desire for having children is linked to the fear of being alone, particularly in old age. Here we find statements that are among the emotionally strongest. We provide an instance from the quantitatively high-fear group to underpin this interpretation:

> I would say that in this anonymous world you're really lucky to find a woman with whom you even want to have a child. Sometimes I have real fears about that—really strong fears . . . I can explain all that only in very emotional terms. (Mr. Q)

Recalling the observation that the qualitative subsample is characterized by a disproportional share of men with difficulties in intimate relationships (see sampling triangulation above), we express the caveat that this finding may be particular to this study and should not be overly generalized.

3. Proceeding to the two remaining socially desirable personality traits that statistically impact transition rates (Action Control and Self-Actualization), the juxtaposition with qualitative insights substantiates a motivational interpretation of findings. For the case of the internal locus of behavioral control, we provide examples from interviews with a low internal controller (Mr. F) and then with an average internal controller (Mr. L). Mr. F clearly highlights a potential speeding effect that low internal action control may have on fatherhood. For him, it is perfectly fine if things ''just happen,'' as he refuses to deal with contraception:

> I do not use contraceptives on principle because, well, how is that expression, I find it unromantic to interrupt in order to apply some special protection measures . . . I also don't ask my sexual partners before if they take the pill or something else. (Mr. F)

In contrast, for the average level of Action Control we find the (socially expected) notions of planning and responsible contraceptive practice when it comes to sexual intercourse (Mr. L).

With respect to the results of men's Self-Actualization (expansiveness), we choose Mr. D (low Self-Actualization) and Mr. H (average Self-Actualization) as examples for inquiry into the underlying process. In the interview with Mr. D, it becomes obvious that he regards fatherhood primarily as an objectively given task in life which he is ready and willing to fulfill. He does not contrast this view with any other autonomous desires or self-actualization motives. This is, however, the case for the stronger self-actualizing Mr. H:

> But if I want to get ahead in the business field, it's better without a child, for example, and if that is very important to me, well, then I have to make a decision. Then, I would also say, well, . . . that's okay then, too [to forgo parenthood]. (Mr. H)

From this juxtaposition of results, we conclude that both personality traits of this subsection seem to capture important aspects of men's motivational process of childbearing decision making.

4. There is one more personality finding in the quantitative section which has been difficult to interpret, so far. To understand the reduction of childbearing propensities by an expressed Desire for Intimate Relations, we select two respondents from the quantitatively high-desire group illustrating two rivaling explanations. We have hypothesized above that men with a high Desire for Intimacy may be either more prone to act cautiously and responsibly in this domain by postponing childbearing in unstable times of social change, or they express these desires because they tend to be most in need of close relationships. The following quotations from the interviews support both views. Mr. A is a person who clearly aspires to start a family, but also points toward the responsibility of planning and postponing until the situation is favorable:

> Yes, I really had a planning period with my former girlfriend [for having a child]. But at this time, it was economically really impossible. We had to face a tough time of one and a half years or so that we first needed to get through . . . Basically I really want a child, but it needs to be born in a reasonable environment. (Mr. A)

In contrast, Mr. P would like to have children, but admits that there are rather egocentric reasons to do so, namely, to be less lonely and isolated:

> Well, I have always been too involved with my job. I now realize that I don't have any hobbies anymore . . . And when I start to think of what I can do nothing comes to my mind anymore because I never took care of my leisure time activities . . . And with a child, I would really maintain more contacts then . . . Well, having a child at some point is really important to me . . . With a child, there would be more excitement. (Mr. P)

Recalling the particularities of the qualitative subsample (see sampling triangulation above), we favor the former explanation (i.e., cautiousness and responsibility), believing that the latter

(i.e., compensation of loneliness) may be peculiar to the specific subsample of the qualitative study. Nevertheless, both are part of men's motivational process for fatherhood in this sample.

5. In reference to the interpersonal results from the quantitative study part, the findings of a positive impact of Partnership Resources and a negative impact of Good Relations with Friends on fatherhood rates are clearly reflected in the qualitative interviews. The relevance of not only having a partner but also having a *good* partnership for family formation is stressed in virtually every interview in our study. A quotation by Mr. A suffices for an illustration of this finding:

> It's not just to have a child, to bring it into the world, it is more about the relationship [with my partner] which determines all this. Yes, this is the most important thing . . . A harmonic, long-term one, or at least with the prospects of being a long-term one. (Mr. A)

For the postponing effect of a (quantitatively) good quality of Social Relations with friends, we select the two interviewees who showed the highest values on this variable (Mr. I and Mr B.). Indeed, both of them explicitly mention that their interests in going out with friends, social life, and parties collide with any consideration of family formation: Mr. I moved to a larger city to enjoy nightlife with friends there, and Mr. B used to visit music festivals with friends, he says ''it just never came up as a topic [having children]. Well, our life was also exciting enough without that.'' Once again, the methodological juxtaposition clarifies that partnership quality and peer relations are an integral part, albeit with reverse impacts, of men's motivational processes of forming aspirations to fatherhood.

6. Turning toward the inverse direction of the full juxtaposition of results, namely, the inquiry of qualitative findings from the stance of the quantitative findings, we recall that the first qualitative dimension of men's desire for starting a family (Developmental Perspective of the Self) comprises aspects of self-concept, motives, and male identity. Indeed, we find specifications of these aspects also in the quantitative study part. As we have already begun to discuss at the end of Subsection 2, we need to differentiate between aspects that are related to the present self-concept of men and those that point toward the future (motives and envisaged male identity). Considering the different statistical effects of Personal Optimism and Social Withdrawal on transition rates, we see that men who rate themselves as optimistic, self-reliant, and assertive (this has been termed the socially desirable part of the male gender role concept, cf. Athenstaedt, 2003) empirically experience a higher transition rate to first-time fatherhood than others. However, early fathers are not ''masculine'' in terms of Self-Actualization (autonomy, expansiveness) and internal Action Control, but instead show characteristics contrary to these. This juxtaposition indicates that this qualitative category requires specification: It is only a specific developmental perspective of the self that ultimately turns men's desire for children into an acceleration of family formation. Those who associate family formation with their self-reliant, mature, and adult self-concept—and simultaneously do not envisage expansive or overcontrolling developmental outcomes—are more prone to early fatherhood than others.

Additionally, we have seen in the qualitative study part that one specific element of the anticipated self-concept appears to be crucial for the understanding of the entire category: namely, the way in which men evaluate the option of childlessness for themselves. This finding is reflected by the quantitative result of men's concern of Losing Intimate Relations as a statistical trigger of fertility behavior. This correspondence substantiates the idea that men, whose Developmental Perspective of the Self rules out childlessness as an option, do indeed enter fatherhood earlier than others. In sum, the mutual juxtaposition differentiates between such elements of men's motivational process of fatherhood decision making, which empirically lead into the experience of fathering a child—and those who do not.

7. Also for the second qualitative category (Evaluation of Social Objects)—comprising attitudes, values, and interests—we observe two quantitative indications concerning its relevance

for the actual transition. First, statistical results confirm that the positive evaluation of a man's partnership indeed plays a crucial role in family formation. This evaluation (which goes beyond the mere question of having or not having a partner) is—both qualitatively and quantitatively—more relevant to men's motivation to fatherhood than support from any other potential source (family of origin, friends, etc.).

Second, quantitative results provide another subtlety to this qualitative category. We find that men who report a particularly high evaluation of the quality of their relationships with friends have a reduced risk of parenthood. We assume that this life domain is, in part, opposed to family and child-related issues for men in their 20s. This interpretation—now based on the correspondence with quantitative results—replicates the qualitative finding that an unequivocally positive attitude toward a variety of aspects of starting a family and having children is conducive to the personal motivation. Conversely, a stronger embedment in networks of friends is a sign of childless men's peer and leisure-time orientation, which has a detrimental effect on family formation. Again, the juxtaposition highlights which aspects of men's motivational process have an empirical impact on fatherhood propensities—and which do not.

Summary and General Discussion

The parallel/concurrent triangulation approach appears to be a useful tool for uncovering social mechanisms that propel individuals' courses through life. We have spelled this out with the empirical example of an analysis of young men's differential transitions to fatherhood in eastern Germany in the 1990s and revealed two different types of mechanisms and their respective factors.

First, we demonstrated that men also pass through a motivational process that causally leads them toward fatherhood or keeps them away from it. Thus, fatherhood is in the psychological sense a personal goal—a ''consciously accessible cognitive representation of states an individual wants to attain or avoid in the future'' (Freund & Riediger, 2006, p. 353)—guiding men's perception and behavior. Although this general conclusion might hardly be astonishing, the merit of methodological triangulation is to spell out and disentangle the factors that empirically drive this process and translate it into actual behavior. We showed that for men, motivational factors conducive to fathering a first child include the expression of a self-reliant and ''adult'' male identity; negative personal prospects connected with childlessness; the viewpoint that only a few autonomy-centered ambitions are incongruent with fatherhood, such as career limitations; a low concern with having control over or being able to plan their sexuality and reproduction; more positive attitudes toward their partnership than toward their network of friends; an expression of concern for their intimate relations without being overly self-conscious about the high value of having their own child. Inversely formulated, these factors explain why a motivational process can also lead a man to distance himself from entering into first-time fatherhood.

Second, we showed that not all mechanisms in the transition to fatherhood are consciously perceived and cognitively represented. We concluded that factors that have an empirical impact on the propensity of first-time fatherhood without being part of subjective considerations point to selectivity processes. Whether they indicate an underlying mate selection or partnership selectivity process cannot be concluded with certitude. From the perspective of the interviewed men, there seems to be a primacy of mate selection. The empirical factors promoting the transition to fatherhood are a high level of education and socially desirable personality traits, such as the capacity for love, optimism, and assertiveness. Again, the inverse of these factors explains why a man would not be chosen to become a partner for family formation or why he may not experience long-term partnership and therefore be less likely to experience fatherhood. Figure 3 summarizes these findings graphically.

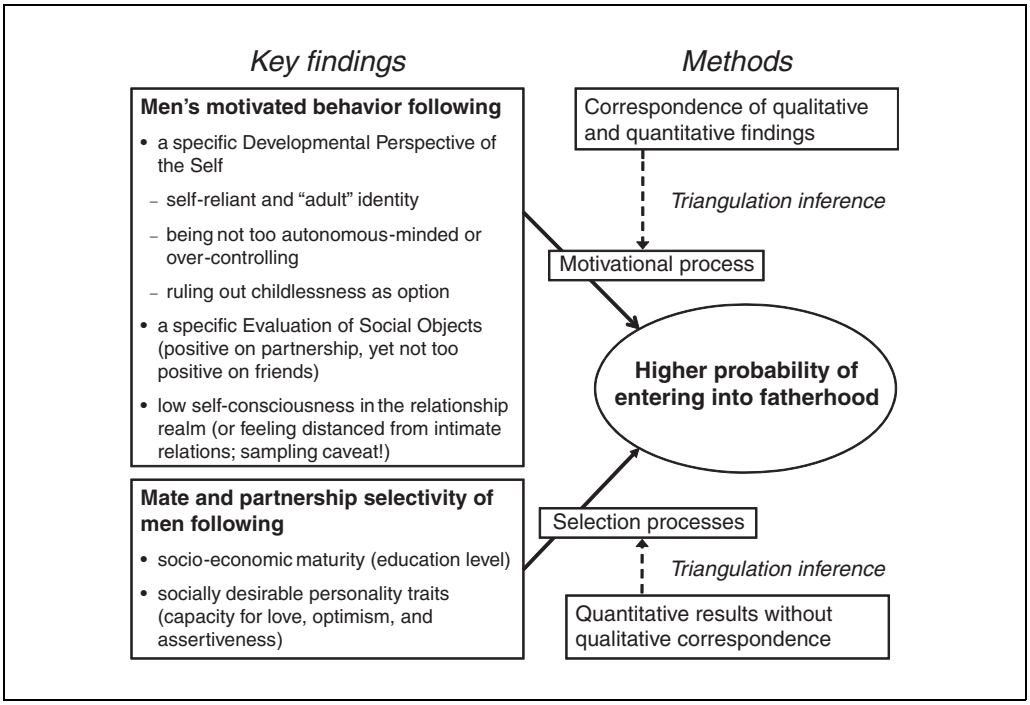

Figure 3. Summary figure of key findings and triangulative inference in this study.

These substantive results, albeit valuable for the theory and practice of psychological life-course research, generate a number of questions that we would like to discuss briefly. First, one might ask to what extent these findings could be contrasted or extended by conducting an identical study on women's transitions to first-time motherhood or even on couple's transition to first-time parenthood. We believe that in any of these cases it is reasonable to assume the existence of both a motivational process (i.e., goal setting and goal realization) and a selection process (i.e., decisive factors that are beyond the conscious control of the social actor). By which factors, however, these processes are fueled in the cases mentioned must remain highly speculative.

One such speculation would be to hypothesize that the positive evaluation of partnership by men as presented in Figure 3 would echo in the selectivity box in a respective model for women. That is, features that men perceive as positive in a partnership could signify that women who are capable of producing these features are, in turn, more often chosen as mates. Conversely, the selectivity box of Figure 3 might resonate with what women perceive as qualities of a partnership that is promising enough for them to want to enter into parenthood. It would be interesting to see to what extent the male and female positions in parenthood transitions represent mirror images of one another, or if they are mutually independent.

In a future study on couples, one could hypothesize that the joint motivation process toward parenthood is triggered by the number and content of planning conversations or the content and degree of overlapping developmental goals and values between partners. The selectivity side of the issue could include the (mostly unconscious) quality of dyadic coping that determines the longevity of a partnership (Bodenmann & Cina, 2005) or the psychodynamic processes in a partnership that determine their degree of psychogenic (in)fertility.

Another avenue for extending the substantive findings of this study could lead to the question of the extent to which the present results are relative to eastern German men's transition to first-time fatherhood. While we assume that both motivation and selectivity would play a crucial role in any extension of the study sample and context, it would be interesting to trace the precise change of patterns with each different approach. From our perspective, it could be hypothesized that, for instance, in a parallel study in western Germany the detrimental effect that autonomy, low optimism, and low assertiveness have on entry into fatherhood might be less in the foreground. It has been shown that these personality factors are especially pronounced in situations of societal upheaval (Heckhausen, 1994), suggesting that they may just reflect the particular demands that young adults in eastern Germany were subjected to in the 1990s. In more traditional or continuously evolving societal circumstances, they may bear less weight for the decision to enter into fatherhood or just be superimposed by other factors. Furthermore, it could be expected that in a western German comparative study men's educational levels shift from the selectivity to the motivational side of the transition to fatherhood. This would be in line with the results of a recent study, which showed that it is more common in western Germany than in eastern Germany to pay attention to the individual pay-offs of educational investments and to the economic losses associated with having children when deciding whether to become a parent or not (Bernardi et al., 2008).

We would now like to turn the discussion to the broader methodological implications of this study. First of all, the approaches of a parallel/concurrent triangulation, as proposed by Tashakkori and Teddlie (1998), Creswell (2003), and Creswell and Plano Clark (2007), have proven to be useful and powerful operationalizations for why and how to go about mixing methods. On the one hand, this study has presented a typical application of this ''traditional model of mixed methods'' and more specifically of the *convergence model* within the range of triangulation designs (Creswell & Plano Clark, 2007, p. 64). As its authors predicted, this approach lead us to ''valid and well-substantiated conclusions about a single phenomenon'' (p. 65), in this case on the social and psychological mechanisms that make some men enter fatherhood earlier than others. On the other hand, there are some distinctive features in our approach that bear innovative potential and may work to spark a stronger discussion about mixed methods in psychology than we see today.

First, we do not find the precise rationale for the methodological triangulation we performed reflected in the literature thus far. Our goal has not been to ''compare results or to validate, confirm, or corroborate'' (Creswell & Plano Clark, 2007, p. 65) results from different methods. Neither can we locate the rationale of this study in the extensive list of ''rationales and practices of mixed methods'' presented by Bryman (2008, pp. 92-93). We neither claim that our integration of quantitative and qualitative results has simply added up to a more comprehensive account of the area of inquiry (''Completeness'', p. 91); nor do we believe that while the quantitative strand (QUAN) revealed the structure, the qualitative part (QUAL) uncovered the process (''Process,'' p. 91); nor do we feel that we increase the ''Diversity of Views'' (p. 92) on the research question—to instance the three rationales of mixing methods from Bryman's list that are the conceptually closest ones to our approach. Instead, we posit that the rationale of our approach of juxtaposition and full analysis of correspondence of qualitative and quantitative findings has been one of *joint constitution of the research object*. So what does this mean?

The research objects of this study were the social and psychological mechanism underlying individual differences in the transition to fatherhood. We have followed Hedström and Swedberg's (1998) thought that uncovering a full mechanism requires the identification of both factors (i.e., structure) and processes. As psychologists, this framework led us to search for motivation and selectivity on the process side of the mechanism—and for individual characteristics on the factor side. The first result from what we call a *Joint Constitution* approach is that,

considered individually, none of the included methods would have been capable of uncovering a full mechanism on empirical grounds. The quantitative survey would have fallen short of empirical showings which underlying process causes the impact of a ''risk factor.'' The qualitative study would have been insufficient for deciding which component of what category ultimately determines the differences in behavior. To conclude (a) motivated action from the full mutual correspondence of qualitative and quantitative findings (QUAL ∩ QUAN) and (b) the effects of selectivity from quantitative findings that do not have a qualitative parallel (QUAN ∖ QUAL) is a contribution to the discussion of mixed methods that may be worth further consideration.[11]

This leads us, second, to another specific feature of our approach: namely, the methodological rigor by which we subjected every result from the one approach to the scrutiny of the respective other approach. This differs somewhat from the widespread practice used in many contemporary mixed methods studies in which the two methodologies are rather selectively ''combined.'' Many authors involved in the current debate have criticized the eclectic or metaphorical approaches in which the combination often occurs in order to mutually ''illuminate,'' ''support,'' or ''consolidate'' findings. By contrast, we performed a complete subjection of every part of the monomethod results to the inspection of the respective other method. In doing so, each method was used to provide a thorough and instructive review and specification of what the respective other method suggested.

On a more general level, we propose that especially social, developmental, or cultural psychology could benefit strongly from embarking more full-heartedly than it does today on the mixed methods debate. Every discipline that is interested in explaining and understanding individual behavior in its context has to disentangle the deliberate and proactive elements of behavior from the contextual or not consciously represented behavior. In this vein, we share the view of other researchers that motivation and selection are key forces in human development (Diewald, 2007; Woolley, 2009) and believe that these results provide convincing evidence that mixed methods are the state-of-the-art methodology to extricate both mechanisms within a phenomenon of interest. To a certain degree, the advocated intradisciplinary debate on mixed methods has recently begun in psychology (cf. Mayring, Huber, Gürtler, & Kiegelmann, 2007; Todd, Nerlich, McKeown, & Clarke, 2004). However, there is still a long way to go. We see this study as a contribution to the elaboration of what mixed methods could fundamentally mean for psychology and the efforts it could stimulate within the field.

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Notes

1. In the following, we apply the sociodemographic nomenclature referring to a person's fertility as the actual number of offspring, whereas fecundity stands for the degree of biological ability of having or fathering children.
2. The notation is borrowed from standard set theory, where $\cap$ denotes the intersection of two sets (in this case, the sets are quantitative and qualitative results), and $\setminus$ denotes the intersection of a set with the complement of a second set. Thus, QUAN $\setminus$ QUAL can also be denoted as QUAN $\cap$ QUAL^{C} (the complement of QUAL).
3. Rostock is a port city (Baltic Sea) of 200,000 inhabitants and the largest town of the northeastern, rural, and formerly socialist part of Germany.
4. One homosexual interviewee was excluded because he refused to think about having children at all with his partner for moral reasons. Another interviewee was excluded because he refused to let us take any notes during the interview because of ''explosive details'' in his story. Ultimately, 12 men constituted the haphazard realization of the purposively chosen subsample.
5. The subsequent results have been calculated by variance adjusted *t*-tests in case of metric scales. In case of ordinal data format, we applied the Mann–Whitney *U*-test. For categorical data, we applied a Pearson chi-square test.
6. The concept of ''free fantasies'' was inspired by Oettingen (1999).
7. When referring to the ''risk of fatherhood,'' we use the term in a statistical sense and not with the more negative connotation it has in everyday language.
8. A relative risk of 1.40 calculated for a variable category, for instance, would signify a 40% higher transition risk compared with that of the reference category.
9. A technical note: Model fit iteration steps are not directly comparable across the sexes (no nested samples). This is why we only report on significant estimates and indications of trends in the male subsample. The report of the respective best estimates for the female-subsample only serves to make the point about fatherhood more clear. We deal with significance levels rather freely because they depend heavily on sample size and ''it may be more important . . . to know whether the inclusion of a categorical covariate in its entirety contributes significantly to an improvement of the model than to know the significance indicators of each of its levels'' (Hoem, 2008, p. 439). This is why we also pay attention to trends up to $p = .20$—plus interesting differences between sexes. For a more comprehensive display of all findings plus intermediate steps, see von der Lippe, 2004.
10. In this and all following case examples, original quotations (in our translation) are in quotation marks; all names are pseudonyms.
11. While being conceptually close to Bryman's rationale of ''Process,'' it extends this one by also considering the intersection of methods and derives the process side of the inquiry not from qualitative findings alone, but rather from types of intermethod correspondence.

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