

Profil 7:

Digitale Festschrift für **GERHARD MINNAMEIER**



**Jule HANGEN¹, Patricia KÖPFER²,
Christin SIEGFRIED³ & Laura BAADE¹**

(¹Universität Frankfurt, ²Universität Hohenheim & ³Universität Göttingen)

Why (not) to Choose a Career in Academia – Theoretical Review of (Gender Related) Reasons

Online unter:

https://www.bwpat.de/profil7_minnameier/hangen_etal_profil7.pdf

in

bwp@ Profil 7 | Juni 2022

**Perspektiven wirtschafts- und berufspädagogischer sowie
wirtschaftsethischer Forschung**

Hrsg. v. **Rico Hermkes, Tim Bruns & Tim Bonowski**

www.bwpat.de | ISSN 1618-8543 | **bwp@** 2001–2022

bwp@

www.bwpat.de



Herausgeber von **bwp@** : Karin Büchter, Franz Gramlinger, H.-Hugo Kremer, Nicole Naeve-Stoß, Karl Wilbers & Lars Windelband

Berufs- und Wirtschaftspädagogik - online

Why (not) to Choose a Career in Academia – Theoretical Review of (Gender Related) Reasons

Abstract

Women are underrepresented in science, although formal barriers that strongly influenced women's academic careers in the 20th century no longer exist today. The declining proportion of women in the course of an academic career is also described as a “leaky pipeline”: On the way to a professorship, more and more women turn to a perspective other than academia, although initially many women begin their careers in the corresponding degree. This problem can be found (also across disciplines) at all German universities, and for multiple reasons such as (psychological) barriers resulting from (rather male) stereotypes in science, a lack of female role models, etc.

Until now, there has been a lack of focus on the various professional biographical stages of academic careers. Therefore, the aim of this paper is to elaborate and summarize reasons and obstacles on academic careers that can be derived from various theories and empirical findings and furthermore to develop a model that traces individual and organizational influencing factors and possible changes in the course of an academic career.

***Schlüsselwörter:** career decision making; gender; career in academia*

1 Introduction

From the perspective of business education, the requirements of vocational education and training are based on the demands of the working environment: increasing digitalization is accompanied by the requirements of knowledge and abilities that enable people to contribute to change actively and responsibly (Harteis/Goller/Fischer 2019). This leads to an increasing demand for people with higher (academic) qualifications who generate the required knowledge and educate future employees. To be up to this important task, the research landscape should reflect society and take different perspectives into consideration, which in turn can only be accomplished by a group of researchers that is itself diverse. In general, reasons for supporting diversity and equal opportunities include demographic change, formal requirements (Equal Treatment Act), social responsibility and competitive advantages (see Braun et al. 2015, 31f.). The aspect of social responsibility in universities and research institutions has a special impact: At universities, upcoming generations are not only shaped and educated by generating and passing on knowledge but also by encouraging personal development (Braun et al. 2015; Leicht-Scholten 2012). Due to ongoing gender inequality in academia, knowledge generation and transmission happens almost exclusively via science from a male perspective (Krais 2000). Consequences resulting from this predominantly male perspective are extensive. For example, issues that

affect women in particular (e.g., medical research, healthcare, consideration of hours invested in care tasks) tend to be neglected (Miller 2014). Against the backdrop of the persistent shortage of skilled workers, another problem becomes apparent: women tend to withdraw from the labor market. As a result, well-trained labor potential remains unused. Almost half (47%) of employed women worked part-time in 2018, but only 9% of men colleagues (Statistik der Bundesagentur für Arbeit 2021). At the same time, women are still underrepresented in management positions, although they are formally equally qualified as their male colleagues (Statistik der Bundesagentur für Arbeit 2021), which in turn increases the effect of gender inequalities, e.g., with regard to access to loans (An 2020), gender pay gap (about 18 % in 2021, adjusted gender pay gap was 6%, Statistisches Bundesamt 2022), respectively pension gap (28.8%, Cordova et al. 2021), as well as losses in innovations (Lorenzo et al. 2018), and business outcomes (International Labour Office 2019).

The aforementioned general underrepresentation of women in the labor market is also present in the context of science. Women in tenured professorships are still a minority (although formally the career path to professorship has been open to women for many years, Kraiss 2007), in most scientific disciplines (CEWS 2021, for economics see Auriol et al. 2022), the so-called “leaky pipeline” (diminishing share of women for higher positions, Müller/Speck 2016) is particularly evident. The high likelihood of leaving or having to leave the “leaky” career path at several points is structurally inherent in an academic career. Until the career goal of a (tenured) professorship is reached, several transitions have to be mastered (graduation and doctorate are followed by the postdoc phase, habilitation or junior professorship). While formal and personal obstacles exist in other professions, in that failure to advance in academia often results in being forced to drop out altogether. Structural factors, such as a lack of positions, poor payment and competition (Berweger/Keller 2005), as well as personal factors play a role in young scientists’ career choices. However, women’s and men’s decision-making processes seem to be different: women still disproportionately leave academic careers after graduation or after a successful doctorate (e.g., Best/Wangler/Schraudner 2016; Braun et al. 2015).

Although previous work has been able to identify numerous obstacles in women's academic careers (e.g., Bagès/Martinot 2011; Heilman/Haynes 2005; Heilman/Parks-Stamm 2007; Tischler 2020; Wimbauer 2012), the question which reasons become particularly salient at which point in their career remains unanswered. Where professional networks and support services may be influential at earlier career stages, job safety may become more relevant over time, as may aspects of family-friendliness of the workplace. Focusing on the situation in Germany, we examine decision determining factors at every career stage in academia, in order to gain a deeper understanding of their decision-making process. Resulting insights may eventually allow for targeted interventions and may be used to support women in the German research landscape more generally.

In this article, first we examine determinants of deciding (not) to pursue an academic career by – among others – drawing on human capital theory (Becker 1994) and social cognitive career theory (Lent/Brown 2013; Xu 2021). In addition, we take theories and observable phenomena into consideration that could explain the underrepresentation of women in science (e.g., social

identity theory, Tajfel/Turner 1979; queen bee phenomenon, Faniko/Ellemers/Derks 2021). Based on these theoretical considerations we derive a model that incorporates individual, social and organizational factors that have an effect, and, above all, maps possible changes of determinants in the course of career paths.

2 Approaches to (Gender Related) Career Choices

2.1 Human Capital Theory

According to the investment hypothesis underlying the human capital theory, educational activities are investments that generate both costs and returns (Becker 1994). Since the academic career path is characterized by different qualification stages, it can be regarded as a human capital investment decision. However, this investment decision is not – as with every job – made exclusively by the scientist but also includes the employers, since they are responsible for the decision to hire.

While for the scientist the decision to start and to pursue an academic career is an investment in human capital, from an employer's perspective offering an academic position to a scientist also includes considerations such as the extent to which the associated costs will be worthwhile e.g., through high publication output or prospects of attracting further research funding through third-party funding proposals. However, in the context of academia information deficits can be assumed to be mainly due to a lack of experience with female scientists, as there are basically fewer women working in science, so heuristics such as those of availability, representativeness, belief perseverance or herd behavior become necessary (Aren/Canikli 2018, see chapter 3.1 for a more detailed description of linked phenomena such as queen bee or role models). However, as long as these experiences with female scientists, which are necessary for a well-founded decision, cannot be gathered, it is not to be expected that the preference of men over women will change.

2.2 Habitus Theory

The habitus concept according to Bourdieu (1994) is opposed to the idea of goal-directed rational decisions and actions that can be derived from them (e.g., decision for or against an academic career). Instead, it assumes non-conscious decision-making processes that are the result of routines and habitualization (Bourdieu 1994, 730; Liebau 1987, 61f.). Individuals therefore have a specific (educational) habitus that influences their preferences for education. Thus, differences between women and men in terms of academic careers can result from different cultural, family, school and educational biographical experiences that have been “habitualized” and therefore have an influence in perceptual and decision-making behavior. Women and men are therefore born into social worlds in which they automatically acquire the existing schemes and categories themselves. Thus, the understanding of how genders are represented in the work context, e.g., that the academic context is more represented by men, is naturally reproduced, as internalized dispositions (see for the context of science, e.g., Stegmann 2005).

2.3 Career Choice Theories

Two types of approaches to career choice theories can be distinguished. On the one hand, there are theories that focus on the outcome of career choice and, on the other hand, those that deal with the process of decision-making. One of the best-known approaches of the first type is the Parsonian person-environment fit approach, in which the maximization of the match between interests, but also skills and abilities of the individual, and the requirements of the work environment are sought (Parsons 1909). Holland's (1997) normative RIASEC structure, prominent in the field of business education, is an operationalization of this approach (Xu 2021). The goal here is a "good career choice". However, it can be shown that Holland's structure does not apply to every individual (Xu 2021).

Process-oriented approaches, on the other hand, aim to describe how career decisions are made. These approaches consider uncertainties, transitions, and other challenges (Lent/Brown 2013). A dominant approach is Social Cognitive Career Theory (SCCT), which is derived from Bandura's (2001) general social cognitive framework and attempts to enhance and link existing theoretical approaches to career development. It aims to explain interest development, decision-making, performance and consistency in career contexts. SCCT states that people play an active role in their career development process in the context of environmental influences. Learning experiences shape self-efficacy expectations, control beliefs and outcome expectations (Lent/Brown 2013).

This theory can be used to illustrate that career choice is not a one-time event with a defined termination, but differs, for example, according to life stages (adolescent, young adult, middle age, early retirement, Gati/Kulcsar 2021). It is known the importance of different of decision-making factors (e.g., income, commuting time) when making career choices differs depending on one's life stage (Gati/Kulcsar 2021). In the present study, we consider the stages of the academic career as life stages.

Since women have significantly lower self-efficacy expectations than men (e.g., Inda et al. 2013), these serves us as well as control beliefs as internal factors. As is known from studies on SCCT, contextual support and barriers are perceived differently by women and men (Inda et al. 2013) and are also taken into consideration in our study.

2.4 Social Identity Theory

Based on the social identity theory (Tajfel/Turner 1979), people define themselves by their personal identity as well as their group memberships. Thus, one's identity and self-image may also result from belonging to social groups within organizations (Hogg/Terry 2001, 1). When salient, social identities can "impact on the group members' thoughts, feelings and actions" (Van Dick/Monzani 2017, 411). Furthermore, strong identification of members with their group is associated with better organizational outcomes and members seem to be more motivated to act in their group's collective interest (Haslam/Jetten/Waghorn 2007). Social identification should therefore be encouraged among organizations in general and academia in particular -

especially given the fact that a threat to social identity can have negative effects (see chapter 3.1.2 for queen bee phenomenon).

2.5 Stereotypes and Lack of Fit Model

Many models and theories dealing with gender-related career choices are based on the concept of (gender) stereotypes. Gender stereotypes can be divided into beliefs about what women or men are like (descriptive gender stereotypes) and what women or men should be like (prescriptive gender stereotypes). Bakan (1966) differentiated descriptive stereotypes about women and men into agency and communality, with communality as the characteristic female and agency as the characteristic male stereotype (Bakan 1966, e.g., see Evers/Sieverding 2014). Agency encompasses qualities such as determined, active, independent, assertive, bold and aggressive, while communality, in contrast, encompasses qualities such as empathic, warm-hearted, unselfish, friendly, nurturing and kind (Abele/Spurk 2011, 226; Heilman/Caleo 2018, 226f.; Heilman/Parks-Stamm 2007, 48).

Stereotype-based expectations can also lead to ambiguity about source of successful joint work. This results in disadvantages for women in work contexts that include male colleagues, as they are given less credit, and their colleagues are viewed as more competent (Heilman/Haynes 2005). In academia, a teamwork-heavy field where sources are rarely clearly assigned, women fall behind because their performances and competences are not being recognized.

One consequence of gender stereotypes is the lack of fit model (Heilman 1983) which describes the problem that women face when descriptive female stereotypes and presumed requirements of the workplace (for example in higher positions) meet. The lack of fit occurs when the job or position seems to require attributes that are consistent with male but not with female stereotypes. As a consequence, women face discrimination because this lack of fit in perception leads to negative expectations about their performances (Heilman/Caleo 2018, 726 f.). Their presumed lack of competency is assumed to result in failure (Heilman 2012, 122f.).

Traditionally male work, including academia, requires attributes that - according to gender stereotypes - women do not have. In a small study at Goethe University Frankfurt (Gierath 2021), students of economics described scientists as ambitious, competitive, determined/ persistent. These attributes are considered more masculine (beliefs about psychological characteristics associated with men and women: Williams/Best 1990) and academic careers (comparable with managerial careers) are therefore (more likely) to be associated with men. In contrast, gender stereotypes associated with women (e.g. being caring and kind) seem not to fit with the attributes of a scientist. This has an impact as women are disadvantaged in male-typed occupations because of their presumed lack of competency and their anticipated failure (Heilman/Parks-Stamm 2007).

3 Determinants of Career Choices in Academia

3.1 Gender-Specific Phenomena

3.1.1 Role Models

The underrepresentation of women in most academic fields (CEWS 2021) leads to a lack of female role models in universities. As described with the lack of fit model, this can lead to the perception (by women themselves but also by decision-makers at universities) that women are not suited for an academic career (Bagès/Martinot 2011; Lockwood 2006). The gendered understanding of roles is internalized and enacted (Eagly/Wood 2013). Consequently, fewer women aspire to academic careers. However, gender stereotypes are dynamic (Diekmann/Eagly 2000), which is why the appearance of female idols – or role models in the context of professional positions (Merton/Merton 1968) – is essential in academia. Following SCCT, role models can have a positive environmental influence on women's career decisions (e.g., Lent/Brown 2013). It is assumed that role models have “three distinct functions”: (a) acting as behavioral models, (b) representing the possible, and (c) being inspirational (Morgenroth/Ryan/Peters 2015; Lockwood 2006), while representing the possible to the following generations is of utmost importance. A perceived similarity between the observer and the role model is, however, essential. Role models would lead to more women choosing and succeeding in an academic career in the first place, and the existing vicious circle could be broken.

3.1.2 Queen Bee Phenomenon

A phenomenon that is often mentioned in connection with the low number of women in higher positions in male-dominated domains goes by the name “queen bee” (term introduced by Staines/Tavris/Jayarathne 1974). This term describes senior women in higher positions who reinforce gender inequality through their behavior. Instead of functioning as a role model for other women and fighting female discrimination actively, many women in higher positions deny the existence of possible discrimination, thereby mitigating pro-women policies (Baykal/Soyalp/Yeşil 2020, 166; Derks/Van Laar/Ellemers 2016, 457; Ellemers et al. 2004). Women showing queen bee behavior distance themselves from other women resulting in worse working environments for them (Baykal/Soyalp/Yeşil 2020, 176). For instance, they are more critical of younger women than of young men (Derks/Van Laar/Ellemers 2016). Queen bees are afraid of being seen as feminine. Therefore, they tend to emphasize traits of personality assigned to men in their self-presentation, and allegedly feminine characteristics are ascribed to other women as a countermeasure (Faniko/Ellemers/Derks 2021, 393f.). Hence, gender stereotypes are reinforced, gender inequalities are reproduced, ultimately legitimizing and perpetuating the gender hierarchy (Derks/Van Laar/Ellemers 2016).

This behavior is explained as a reaction to a threat to social identity (see above). Increased female gender discrimination and negative stereotypes in work environments make room for the following coping strategies: Distancing oneself from the group that threatens one's identity, and in lieu of improving personal outcomes and seeking inclusion in a higher status group

(“individual mobility”, Derks et al. 2011, 521). The queen bee phenomenon is thus not to be seen as the origin of gender discrimination and internalized stereotypes as a product thereof (Derks/Van Laar/Ellemers 2016, 457).

While queen bee behavior used to be considered a generational phenomenon (most visible among the generation of women born between 1921 and 1949, Derks/Van Laar/Ellemers 2016; Ellemers et al. 2004), a recent study shows that the phenomenon is still present in subsequent generations (Faniko/Ellemers/Derks 2021). Sexism and gender discrimination still seem to exist in universities and research institutions, since the influence of queen bee behavior still has an impact on students (Sterk/Meeussen/Van Laar 2018). Participants who had been exposed to queen bee(-type) behavior were angrier, sadder and more anxious than those who had not, regardless of the leader’s gender (Sterk/Meeussen/Van Laar 2018). Senior female faculty members describe themselves as more masculine than women in early career stages, therefore want to act accordingly with the male prototype of the successful academic and want to be distinguishable from other women. Also, they underestimate the commitment and ambition of early career female academics (Ellemers et al. 2004; Faniko/Ellemers/Derks 2021). Altogether, Faniko/Ellemers/Derks (2021) demand a more inclusive approach on the homogeneously male-dominated organizational culture in principle.

3.1.3 Effects of Networks and Mentoring on Academic Careers

Success in a scientific career is not only the result of individual performance, but recent research also considers that socialization within the scientific community plays a major role (Hendrix et al. 2016, 25). Networks (“informal relations connecting individuals and groups of individuals”, Weis/Lay 2019) are therefore seen as an important instrument on the path to a professorship or leading position (e.g., Zimmer/Krimmer/Stallmann 2006, 47).

According to Lang and Neyer (2004), the institute size and the network depth turn out to be the most important predictor for a professorship. Nickel et al. (2015, 383-384) point out a gender gap: In their survey, women attribute a significantly higher importance to the creation of academic networks than male attendees. At the same time, former junior professors rate networks as more important for career development than women who were habilitated the traditional way. Asking PhD candidates about their own networking activities in their department (network of friends and career advancement network), Sauer and colleagues (2014) showed that men, rather than women, are in touch with male supervisors and colleagues of higher status (especially in their network of friends). Women tend to have friendships with (female) colleagues on the same level but are more likely to engage in strategic position (e.g., role of gatekeeper).

The phenomenon of men in higher positions mainly surrounding themselves with other men and forming networks with them is called homosocial co-optation. It has its origin in the (conscious or unconscious) desire to be part of groups with people who are similar to you. For women this does not only lead to problems in networking (e.g., no introduction to networks at

conferences, Steinhausen 2017), but also results in disadvantages for women seeking employment because women are still underrepresented in leadership and decision-making positions (for an overview see Tischler 2020).

Networks are important at all stages of academic career but tend to have different roles and functions at times. For example, a mentoring relationship often marks the beginning of an academic's networking process. Mentoring can lead to both career advancement and benefit performance (Kirchmeyer 2005). The mentor (who often acts as a role model) can be (but does not have to be) a supervisor and supports the mentee by increasing his or her social capital (Budde/Doebert 2017, 133-136). Mentoring is thus described as a factor facilitating goal achievement (e.g., Abele 2003, 152) and an effective tool for the advancement of marginalized groups (e.g., women, people without academic background). At later career stages, established networks are still impactful, e.g., when securing contacts to other research institutions or when eventually becoming a mentor oneself.

3.2 Institutional Factors and Dual-Career Couples

As working hours in academia are very flexible, it is often expected that researchers are just as flexible in terms of accessibility (Althaber/Hess/Pfahl 2011). Their willingness to meet this expectation results from the uncertainty researchers face because their employments are usually limited in time and last until the aspired degree is finished only in the rarest of cases: On average, PhD candidates' contracts expire after two years, whereas those of post-docs last for an average of 28 months. Moreover, 98% of young researchers under 35 (excluding professors) have short-term contracts. For 77% of them, this percentage remains high even between the ages of 35 and 45 (Konsortium Bundesbericht wissenschaftlicher Nachwuchs 2021, 10). In conclusion, pursuing an academic career for a long period of time is characterized by uncertain employment prospects. In addition, scientific employees face high demands in terms of mobility (Althaber/Hess/Pfahl 2011). This is consistent with other studies' findings that investigate the mobility of highly qualified employees such as researchers. For example, 46% of young researchers with a doctorate study abroad while 14% of doctoral students do so (Netz/Schirmer 2017). In general, highly qualified employees are more mobile, however, there are gender differences and women are less mobile than their male counterparts (Schneider et al. 2008, 123). This (self-imposed) demand for mobility is already evident at the beginning of lower degrees, as 35% of students from all over Germany leave their state or region to study elsewhere (Middendorff et al. 2017, 31).

Besides these institutional factors, dual-career couples face significant challenges in coordinating everyday life (Abele/Volmer 2011, 176), especially when both partners seek individual fulfilment in either the private or the professional life. Being part of a dual-career couple and having stable female employment and careers are prominent especially in western countries (Berghammer/Verwiebe 2015). Complex challenges resulting from time restrictions intensify when children and related family responsibilities accumulate (Flood/Genadek 2016). Prevailing institutional expectations, namely that career goals and leadership mean a commitment beyond full-time employment (Moen/Roehling 2005), add to this challenge.

In response to the demands associated with work as a scientist, women who pursue a career in academia (may) abstain from having children or postpone it until they reach their aspired positions or do not consider them at risk any longer (Althaber/Hess/Pfahl 2011). The lack of role models (here: other couples) in terms of how to face, e.g., having to get organized within a limited time frame, also plays a role here (see chapter 3.1.1). Moreover, men (regardless of their qualifications) who want to reduce their professional commitment in favor of the family are even more disadvantaged than women in their professional development. Employers expect women, rather than men, to be less focused on their career goals because of family commitments (Wimbauer 2012). Although the proportion of fathers who took parental leave increased to 24.8 % in 2020 (e.g., from 20.9% in 2015), 75% of fathers taking paternity leave take do so for no more than two months (Statistisches Bundesamt 2020). Conversely, the majority of parental leave is still taken by women, which leads to new tension, especially for women. On the one hand, they want to and are expected to carve a career; on the other hand, they have to make time for family and children as they are still considered to be in charge (Wimbauer/Teschlade/Motakef 2012).

4 Summary and Need for Consideration by Academic Career Stages

In the preceding chapters we considered determinants of deciding (not) to pursue an academic career. These theories, models and (gender-specific) phenomena, as well as institutional factors and life events, are summarized in figure 1. Theories such as Human Capital Theory (chapter 2.1) but also Social Identity Theory (chapter 2.4) have an (indirect) influence on institutional factors, life events but also on gender-specific phenomena such as queen bee phenomenon (chapter 3.1.2) and therefore do not stand separately from these but rather as an influential layer around the other factors.

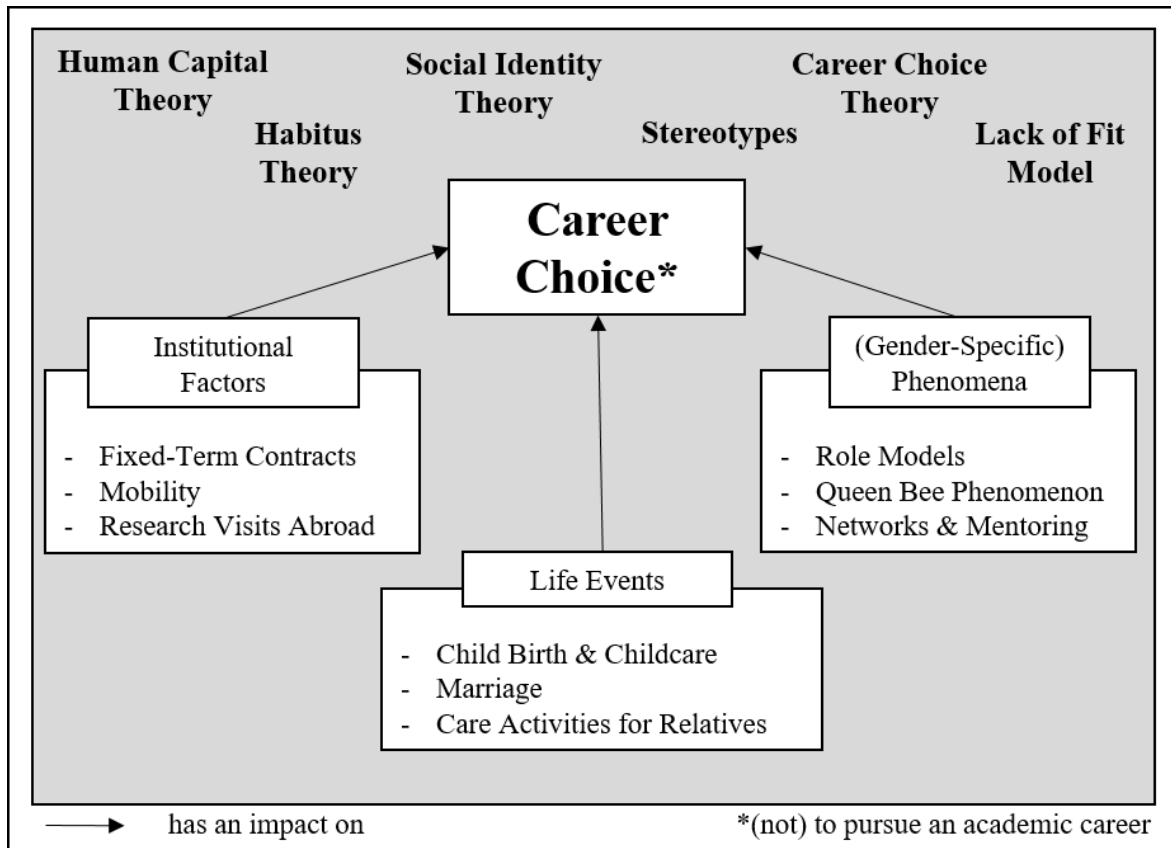


Figure 1: Summary of Theories and Determinants of Career Choices in Academia

Nevertheless, this summary of important determinants does not take into account that the determinants become salient at different times or at different career stages. In order to answer the overall research question (Which reasons become particularly salient at which point in an academic career?) a model would be useful instead, that not only incorporates individual, social and organizational factors that have an effect, but also maps possible changes of determinants being salient in the course of career paths.

Consequently, formulating a dynamic model of factors influencing academic careers, requires identifying which (private or business related) incidents influence such careers. A heat-map was chosen to show that not every academic career is carved out the same way or follows the same pattern. Nevertheless, the authors believe that certain factors are more important at certain points in time. On the one hand, these factors are influenced by biological age, and by prevailing conditions during academic education on the other. The heat map's entries are drawn from the previous chapters, but also from the following German population statistics to link biological age and career stages as well as biological age and life events.

Age and academic stages:

According to a survey of more than 240 universities in Germany in 2016, German students are on average 24.7 years old (Middendorff et al. 2017, 24). PhD students are on average 30 years old (Statistisches Bundesamt 2021a, 12). On average, women complete their doctorate faster than men (4.3 years vs. 4.9 years). Excluding doctorates in the field of human medicine, the

average doctorate takes 5.7 years (Konsortium Bundesbericht wissenschaftlicher Nachwuchs 2021, 12). On average, women finalize their habilitation at 41.6 years and are to that effect only slightly older than men (41.1 years) on completion (Statistisches Bundesamt 2012, 343; Statistisches Bundesamt 2021b). The average age at appointment to professorship is 41 (Statistisches Bundesamt 2013).

Age and life events:

About half of the students (48%) are not married but in a permanent relationship, 6% are married and 46% are not in a committed partnership (Middendorff et al. 2017, 24). The average age of marriage in Germany in 2020 was 34.9 for men and 32.4 for women (Statistisches Bundesamt 2021c; for a differentiation of the different age groups at marriage, see Bundesinstitut für Bevölkerungsforschung 2022). Only a small proportion (6%) of German students have at least one child (students with at least one child are on average 35 years old, Middendorff et al. 2017, 25). Women with an academic degree become first-time mothers at the age of 31 on average (non-academic women: 28; Statistisches Bundesamt 2013). In addition, 36.4% of these women have their first child at the age of 35 and 28% abstain from motherhood entirely (Bujard/Diabaté 2016). Regardless of gender approximately every sixth PhD candidate and every second person with a PhD has children, whereas university graduates in Germany at the same age who do not work in academia are more likely to start a family. However, there is a gender gap: In both the doctoral and post-doctoral phases, men are slightly more likely to have children than women (Konsortium Bundesbericht wissenschaftlicher Nachwuchs 2021, 14). Caring for relatives becomes increasingly common with age: only 4% of Germans under 40 take care of relatives, compared with 10% between 40 and 54 and 13% between 55 and 64 (Ehrlich/Kelle 2019).

5 Factors Influencing Career Paths in Academia

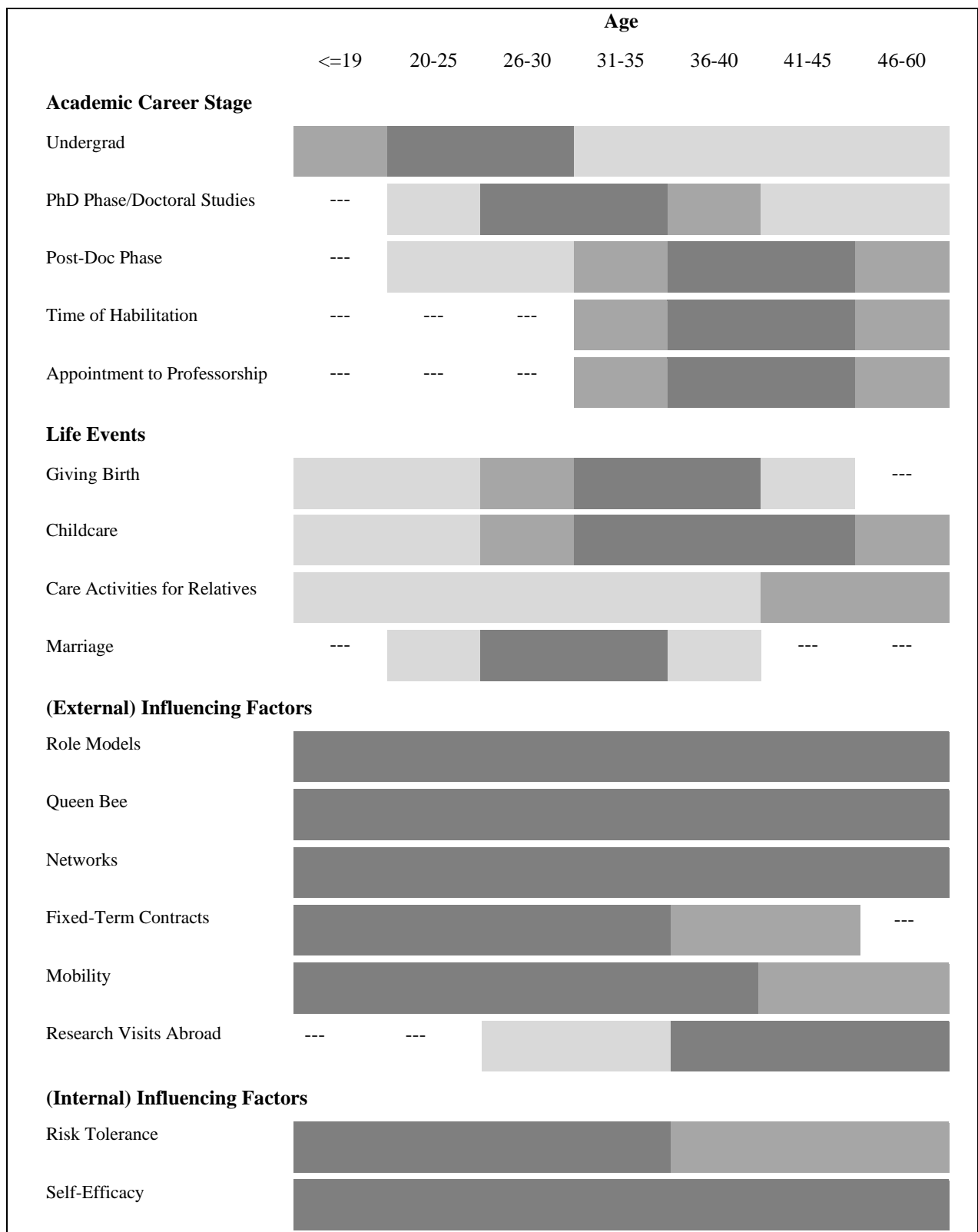


Figure 2: Factors influencing career paths in academia

Note: Darker colors mark a higher probability of occurrence, only cells with sufficient data are colored (otherwise “---” was used).

The preceding determinants summarized in the heat map (figure 2) point out that certain life events are particularly relevant at certain career stages. For instance, as a large proportion of female academics have their first child after their 35th birthday, child-raising becomes the focus of attention in the late thirties. Therefore, having children is more likely in the post-doc phase. Further, research stays abroad are especially undertaken in the post-doc phase and possibly overlap with births and/or childcare periods, which can be additionally challenging for dual-career couples.

In contrast, phenomena such as queen bee or role models have an impact across all career stages. While having a role model in the scientific community is most important in early stages, later it is important to act as a role model for junior colleagues (e.g., by being a mentor in a mentoring relationship). Especially women in early stages suffer from other queen bees but can turn into them further along the line.

With regard to internal (psychological) factors, risk tolerance is required for those who are burdened with job contracts that are limited in time. However, once a person is tenured, risk tolerance plays less of a role. Nevertheless, high self-efficacy expectations remain important throughout the career, as these are consistently asked for in a male-dominated field such as academia.

6 Discussion and Further Research

In order to answer the question which reasons become particularly salient at which point in the academic career, the aim of this article was to summarize frequently used theoretical approaches and phenomena to explain the low proportion of women in academia and to systematize them along the career path in academia. It has become clear that some factors, such as childcare or research visits abroad, become significant later in the academic career than general mobility issues. While scientists (and especially women) need to be informed early on about the possibilities and support available to reconcile career and family, efforts should be made primarily in the post-doc phase to provide good support for families.

At the same time, phenomena such as queen bee, role models and networks have an impact on academic careers already from the beginning (and remain important). This in turn suggests that a turn away from academia because of missing networks and having to deal with problems concerning queen bee phenomena is to be expected at a very early stage and that countermeasures need to be taken at a correspondingly early stage. Targeted interventions for scientists in early stages should therefore concentrate on building networks and especially forming networks for women in order to overcome the existing inferior conditions for women. The cooperation of women of all status groups should also be in the focus. While men tend to be more supportive of each other, women in leadership positions also need to realize that they can play a significant role in determining the future of young women.

Finally, two points stick out: Firstly, external and internal factors vary between life phases and are therefore not equally relevant at every career stage. Secondly, reasons for and against an

academic career do not exist in a one-size-fits-all manner, but have to be investigated in interaction with external and individual factors. While common career choice model approaches assume that humans decide on a consistently rational basis (e.g., Lent/Brown, 2020), especially for academia these approaches would be too limited and would not do justice to the complex and dynamic requirements and conditions.

In order to close these gaps and to depict domain specificity (e.g., network structures, the scientific community per se, as well as the presence or absence of role models), the interaction between external and internal influencing factors, and life events, qualitative research is particularly useful (Keegan 2009; Saunders/Lewis/Thornhill 2009). In order to gain differentiated insights into which of the identified factors influence women and men in what ways at different stages of their academic careers, their experiences and perceptions have to be taken into account. Further down the line, targeted interventions to support women in their careers could be developed. Considering these dynamic and highly individual factors requires a longitudinal approach to examine the entire decision-making process throughout the academic career.

References

Abele, A. E. (2003): Beruf - kein Problem, Karriere - schon schwieriger: Berufslaufbahnen von Akademikerinnen und Akademikern im Vergleich. In: Frauen und Männer in Akademischen Professionen. Berufsverläufe und Berufserfolg, 157–182.

Abele, A. E./Spurk, D. (2011): The dual impact of gender and the influence of timing of parenthood on men's and women's career development: Longitudinal findings. In: International Journal of Behavioral Development, 35, H. 3, 225–232.
<https://doi.org/10.1177/0165025411398181>

Althaber, A/Hess, J./Pfahl, L. (2011): Karriere mit Kind in der Wissenschaft: Egalitärer Anspruch und tradierte Wirklichkeit der familiären Betreuungsarrangements. Von erfolgreichen Frauen und ihren Partnern. In: Rusconi, A./Solga, H. (Eds.): Gemeinsam Karriere machen. Op-laden, 83–116.

Abele, A.E. /Volmer, J. (2011): Dual-Career Couples: Specific Challenges for Work-Life Integration. In: Kaiser, S./Ringlstetter, M./Eikhof, D./Pina e Cunha, M. (Eds.): Creating Balance? Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-16199-5_10

An, J. (2020): Is there an employee-based gender gap in informal financial markets? International evidence. In: Journal of Corporate Finance, 65.
<https://doi.org/10.1016/j.jcorpfin.2020.101737>

Aren, S./Canikli, S. (2018): Typology of behavioural biases and heuristics. 14th International Strategic Management Conference.

Auriol, E./Friebel, G./Weinberger, A./Wilhelm, S. (2022): Underrepresentation of women in the economics profession more pronounced in the United States compared to heterogeneous Europe. Proceedings of the National Academy of Sciences, 119, 16, e2118853119.

Bagès, C./Martinot, D. (2011): What is the best model for girls and boys faced with a standardized mathematics evaluation situation: A hardworking role model or a gifted role model? In: British Journal of Social Psychology, 50, H. 3, 536–543. <https://doi.org/10.1111/j.2044->

Bakan, D. (1966): The test of significance in psychological research. In: *Psychological Bulletin*, 66, H. 6, 423–437.

Bandura, A. (2001): Social cognitive theory: An agentic perspective. In: *Annual Review of Psychology*, 52, H. 1, 1-26.

Baykal, E./Soyalp, E./Yeşil, R. (2020): Queen bee syndrome: a modern dilemma of working women and its effects on turnover intentions. In: *Strategic Outlook for Innovative Work Behaviours*. Cham, 165-178.

Becker, G. S. (1994): *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 3rd Ed. Chicago, IL.

Berweger, S./Keller, C. (2005): Prädiktoren der akademischen Laufbahnintention: Ergebnisse einer geschlechtervergleichenden Befragung von Doktorandinnen und Doktoranden auf dem Hintergrund der sozial-kognitiven Laufbahntheorie. In: *Zeitschrift für Pädagogische Psychologie*, 19, H. 3, 145–158. <https://doi.org/10.1024/1010-0652.19.3.145>

Berghammer, C./Verwiebe, R. (2015): Die Verbreitung des Doppelerklärer- und Doppelbetreuermodells in fünf Ländern Europas. In: *Wirtschaft- und Sozialwissenschaftliches Institut, Mitteilungen 2015, Ausgabe 02*, 116-124.

Best, K./Wangler, J./Schraudner, M. (2016): Ausstieg statt Aufstieg? Geschlechtsspezifische Motive des wissenschaftlichen Nachwuchses für den Ausstieg aus der Wissenschaft. In: *Beiträge Zur Hochschulforschung*, 38, H. 3, 52–73. <https://www.bzh.bayern.de/uploads/media/3-2016-Best-Wangler-Schraudner.pdf%0D>

Bourdieu, P. (1994): *Die feinen Unterschiede: Kritik der gesellschaftlichen Urteilskraft*. Frankfurt am Main.

Braun, S./Hentschel, T./Peus, C./Frey, D. (2015): Chancengleichheit durch professionelle Personalauswahl in der Wissenschaft. In: Peus, C. et al. (Eds.): *Personalauswahl in der Wissenschaft*, 29–48. <https://doi.org/10.1007/978-3-662-48112-7>

Budde, M./Doebert, G. (2017): Modul Networking. Proaktives Netzwerken in Mentoring-Programmen als Handlungsprinzip. In: Petersen, R. et al. (Eds.): *Praxishandbuch Mentoring in der Wissenschaft*, 129-149. DOI 10.1007/978-3-658-14268-1_12.

Bujard, M./Diabaté, S. (2016): Wie stark nehmen Kinderlosigkeit und späte Geburten zu?: Neue demografische Trends und ihre Ursachen. In: *Gynakologe*, 49, H. 5, 393–404. <https://doi.org/10.1007/s00129-016-3875-4>

Bundesinstitut für Bevölkerungsforschung (2022): Heiratsziffer in ausgewählten Altersgruppen nach Geschlecht in Deutschland (1990-2018). Retrieved from https://www.bib.bund.de/DE/Fakten/Fakt/L112-Heiratsziffer-Geschlecht-Alter-ab-1990.html;jsessionid=69CB065DCDF7AD593639E34453DCB3DB.1_cid389?nn=9994350

CEWS (2021): Frauen- und Männeranteile im Qualifikationsverlauf: Analyse idealtypischer Karriereverläufe: Studienbeginn (2001) bis Berufung (2018-2020). Retrieved from <https://www.gesis.org/cews/portfolio/digitale-angebote/statistiken/thematische-suche/detailanzeige/article/frauen-und-maenneranteile-im-qualifikationsverlauf-analyse->

[idealtypischer-karriereverlaeuft-studienbeginn-bis-berufung](#)

- Cordova, K./Grabka, M. M./Sierminska, E. (2021): Pension wealth and the gender wealth gap, SOEPpapers on Multidisciplinary Panel Data Research, No. 1141, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin.
- Derks/Van Laar, C./Ellemers, N./De Groot, K. (2011): Gender-bias primes elicit queen-bee responses among senior policewomen. In: *Psychological Science*, 22, H. 10, 1243-1249.
- Derks, B./Van Laar, C./Ellemers, N. (2016): The queen bee phenomenon: Why women leaders distance themselves from junior women. In: *The Leadership Quarterly*, 27, H. 3, 456-469.
- Diekmann, A. B./Eagly, A. H. (2000): Stereotypes as dynamic constructs: Women and men of the past, present, and future. In: *Personality and Social Psychology Bulletin*, 26, H. 10, 1171–1188. <https://doi.org/10.1177/0146167200262001>
- Eagly, A. H./Wood, W. (2013): The Nature-Nurture Debates: 25 Years of Challenges in Understanding the Psychology of Gender. In: *Perspectives on Psychological Science*, 8, H. 3, 340–357. <https://doi.org/10.1177/1745691613484767>
- Ehrlich, U./Kelle, N. (2019): Hilfe- und Pflegetätigkeiten im Lebensverlauf: Wer pflegt, für wen, wo und wie? In: *Zeitschrift für Sozialreform*, 65, 1–9.
- Ellemers, N./Van den Heuvel, H./De Gilder, D./Maass, A./Bonvini, A. (2004): The underrepresentation of women in science: Differential commitment or the queen bee syndrome? In: *British Journal of Social Psychology*, 43, H. 3, 315-338.
- Evers, A./Sieverding, M. (2014): Why do highly qualified women (still) earn less? Gender differences in long-term predictors of career success. In: *Psychology of Women Quarterly*, 38, H. 1, 93–106. <https://doi.org/10.1177/0361684313498071>
- Faniko, K./Ellemers, N./Derks, B. (2021): The Queen Bee phenomenon in Academia 15 years after: Does it still exist, and if so, why? In: *British Journal of Social Psychology*, 60, H. 2, 383–399. <https://doi.org/10.1111/bjso.12408>
- Flood, S. M./Genadek, K. R. (2016): Time for each other: Work and family constraints among couples. In: *Journal of Marriage and Family*, 78, H. 1, 142-164. <https://doi.org/10.1111/jomf.12255>
- Gati, I./Kulcsár, V. (2021): Making better career decisions: From challenges to opportunities. In: *Journal of Vocational Behavior*, 126, 103545.
- Gierath, E. (2021): Picture a Scientist- Vorstellung von Studierenden zur wissenschaftlichen Karriere [Unpublished bachelor's thesis]. Goethe University Frankfurt am Main.
- Harteis, C./Goller, M./Fischer, C. (2019): Die Auswirkungen der Digitalisierung auf die Bedeutung beruflicher Qualifikation aus betrieblicher Sicht. In: Seifried, J./Beck, K./Ertelt, B.-J./Frey, A. (Eds.): *Beruf, Beruflichkeit, Employability*, Bielefeld, 239-253.
- Haslam, S. A./Jetten, J./Waghorn, C. (2009): Social identification, stress and citizenship in teams: A five-phase longitudinal study. In: *Stress and Health*, 25, H. 1, 21–30. <https://doi.org/10.1002/smi.1221>.

- Heilman, M. E. (1983): Sex bias in work settings: The lack of fit model. In: *Research in Organizational Behavior*, 5, 269–298.
- Heilman, M. E. (2012): Gender stereotypes and workplace bias. In: *Research in Organizational Behavior*, 32, 113–135. <https://doi.org/10.1016/j.riob.2012.11.003>
- Heilman, M. E./Caleo, S. (2018): Combatting gender discrimination: A lack of fit framework. In: *Group Processes and Intergroup Relations*, 21, H. 5, 725–744. <https://doi.org/10.1177/1368430218761587>
- Heilman, M. E./Haynes, M. C. (2005): No credit where credit is due: Attributional rationalization of women's success in male-female teams. In: *Journal of Applied Psychology*, 90, H. 5, 905–916. <https://doi.org/10.1037/0021-9010.90.5.905>
- Heilman, M. E./Parks-Stamm, E. J. (2007): Gender stereotypes in the workplace: Obstacles to women's career progress. In: *Advances in Group Processes*, 24, H. 7, 47–77. [https://doi.org/10.1016/S0882-6145\(07\)24003-2](https://doi.org/10.1016/S0882-6145(07)24003-2)
- Hendrix, U./Hilgemann, M./Kortendiek, B./Niegel, J. (2016): Auf dem Weg zur Professur: Netzwerke und ihre Bedeutung für Wissenschaftskarrieren aus einer Geschlechterperspektive. In: *Netzwerke. Im Schnittpunkt von Organisation, Wissen und Geschlecht*, 25–54.
- Hogg, M. A./Terry, D. J. (2001): Social identity theory and organizational processes. In: Hogg, A. M./Terry, D. J. (Eds.): *Social Identity Processes in Organizational Contexts*, 1–12. New York.
- Holland, J. F. (1997): *Making Vocational Choices: A Theory of Vocational Personalities and Work Environments* (3rd ed.). Psychological Assessment Resources.
- Inda, M./Rodríguez, C./Peña, J. V. (2013): Gender differences in applying social cognitive career theory in engineering students. In: *Journal of Vocational Behavior*, 83, 346–355.
- International Labour Office (2019): *Women in Business and Management: The Business Case For Change*. Geneva.
- Keegan, S. (2009): *Qualitative Research: Good Decision Making Through Understanding People, Cultures and Markets – Market Research In Practice Series*. o. O.
- Kirchmeyer, C. (2005): The effects of mentoring on academic careers over time: Testing performance and political perspectives. In: *Human Relations*, 58, H. 5, 637–660. <https://doi.org/10.1177/0018726705055966>
- Konsortium Bundesbericht wissenschaftlicher Nachwuchs (2021): *Bundesbericht Wissenschaftlicher Nachwuchs 2021. Statistische Daten und Forschungsbefunde zu Promovierenden und Promovierten in Deutschland. Wichtige Ergebnisse im Überblick*. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj8ibr17sX3AhVO16QKHdpAC78QFnoECBIQAQ&url=https%3A%2F%2Fwww.buwin.de%2Fdateien%2Fbuwin-2021.pdf&usg=AOvVaw3OI_yaBxCqbrw5wXtpcDNN
- Krais, B. (Ed.) (2000): *Wissenschaftskultur und Geschlechterordnung: Über die verborgenen Mechanismen männlicher Dominanz in der akademischen Welt*. Frankfurt, New York.
- Krais, B. (2007): *Wissenschaft und Geschlecht: Zur Situation von Wissenschaftlerinnen*. In: *Genre, Sciences Et Recherche: Regards Franco-Allemands*, 79.

- Lang, F. R./Neyer, F. J. (2004): Kooperationsnetzwerke und Karrieren an deutschen Hochschulen. Der Weg zur Professur am Beispiel des Faches Psychologie. In: Kölner Zeitschrift für Soziologie und Sozialpsychologie, 56, 520–538.
- Leicht-Scholten, C. (2012): Diversity Management an Deutschen Hochschulen. In H. (HRK) (Ed.): Chancen erkennen – Vielfalt gestalten. Konzepte und gute Praxis für Studium und Lehre. Bonn.
- Lent, R. W./Brown, S. D. (2013): Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. In: Journal of Counseling Psychology, 60, H. 4, 557–568. <https://doi.org/10.1037/a0033446>
- Lent, R. W./Brown, S. D. (2020): Career decision making, fast and slow: Toward an integrative model of intervention for sustainable career choice. In: Journal of Vocational Behavior, 120, 103448.
- Liebau, E. (1987): Gesellschaftliches Subjekt und Erziehung. Zur pädagogischen Bedeutung der Sozialisierungstheorien von Pierre Bourdieu und Ulrich Oevermann. Weinheim.
- Lockwood, P. (2006): “Someone like me can be successful”: Do college students need same-gender role models? In: Psychology of Women Quarterly, 30, H. 1, 36–46. <https://doi.org/10.1111/j.1471-6402.2006.00260.x>
- Lorenzo, R./Voigt, N./Tsusaka, M./Krentz, M./Abouzahr, K. (2018): How Diverse Leadership Teams Boost Innovation. Retrieved from <https://www.bcg.com/publications/2018/how-diverse-leadership-teams-boost-innovation>
- Merton, R. K./Merton, R. C. (1968): Social theory and social structure. New York.
- Middendorff, E./Apolinarski, B./Poskowsky, J./Kandulla, M./Naumann, H./Buck, D. (2017): Die wirtschaftliche und soziale Lage der Studierenden in Deutschland 2012. 20. Sozialerhebung des Deutschen Studentenwerks, durchgeführt durch das HIS-Institut für Hochschulforschung, 1–196. Retrieved from http://www.sozialerhebung.de/download/21/Soz21_hauptbericht.pdf%0Ahttp://www.sozialerhebung.de/download/20/soz20_hauptbericht_gesamt.pdf
- Morgenroth, T./Ryan, M. K./Peters, K. (2015): The motivational theory of role modeling: How role models influence role aspirants’ goals. In: Review of General Psychology, 19, H. 4, 465–483. <https://doi.org/10.1037/gpr0000059>
- Moen, P./Roehling, P. (2005): The Career Mystique. Cracks in the American Dream. Lanham.
- Miller V. M. (2014): Why are sex and gender important to basic physiology and translational and individualized medicine? In: American Journal of Physiology - Heart and Circulatory Physiology, 306, H. 6, H781–H788. doi:10.1152/ajpheart.00994.2013
- Müller, A./Speck, S. (2001): And the winner is... The male academy oder: Die ungleichen Auswirkungen universitärer Prekarität. In: sub|urban. Zeitschrift für kritische Stadtforschung, 4, H. 2/3, 203–212.
- Netz, N./Schirmer, H. (2017): Internationale Mobilität von wissenschaftlichem Nachwuchs (Begleitstudie B6). Studien im Rahmen des Bundesberichts Wissenschaftlicher Nachwuchs (BuWiN) 2017. Retrieved from <http://creativecommons.org/licenses/by-sa/3.0/>.

Nickel, S./Püttmann, V./Duong, S. (2015): Karrierewege im Vergleich – aus Sicht ehemaliger Postdocs. In: Die Juniorprofessur, 293–402. <https://doi.org/doi.org/10.5771/9783845264431-2932013>

Parsons, F. (1909): Choosing a Vocation. Houghton.

Petersen, R./Budde, M./Simone, P./Gitta, B. (2017): Praxishandbuch Mentoring in der Wissenschaft. Wiesbaden. <https://doi.org/10.1007/978-3-658-14268-1>

Sauer, N. C./Kauffeld, S./Spurk, D. (2014): Männer, Frauen und ihre Art zu netzwerken. In: PERSONALquarterly, 2, 18–23.

Saunders, M./Lewis, P./Thornhill, A. (2012): Research Methods for Business Students. Harlow [u.a.].

Schneider, N. F./Ruppenthal, S./Lück, D./Rüger, H./Dauber, A. (2008): Germany – A Country of Locally Attached But Highly Mobile People. Mobile Living Across Europe. Relevance And Diversity of Job-Related Spatial Mobility in Six European Countries. Opladen, 105-147.

Staines, G./Tavris, C./Jayaratne, T. E. (1974): The queen bee syndrome. In: Psychology Today, 7, 55–60. <https://doi.org/10.1037/e400562009-003>

Statistik der Bundesagentur für Arbeit (2021): Berichte: Blickpunkt Arbeitsmarkt – Die Arbeitsmarktsituation von Frauen und Männern 2020. Nürnberg.

Statistisches Bundesamt (2012): Bildung und Kultur. Personal an Hochschulen. Statistisches Bundesamt, Wiesbaden, 49(0). Retrieved from <http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Content/Publikationen/Fachveroeffentlichungen/BildungForschungKultur/Hochschulen/PersonalHochschulen2110440107004.property=file.pdf%5Cnhttps://www.destatis.de/DE/Publikationen/Thematische>

Statistisches Bundesamt (2013): Zeitpunkt der Familiengründung. Retrieved from <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Geburten/Tabellen/alter-geburt-bildung.html>

Statistisches Bundesamt (2020): Elterngeld 2020: Väteranteil steigt auf knapp 25 %. Retrieved from https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/03/PD21_146_22922.html

Statistisches Bundesamt (2021a): Bildung und Kultur Statistik der Promovierenden. Retrieved from https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Hochschulen/Publikationen/Downloads-Hochschulen/promovierendenstatistik-5213501189004.pdf;jsessionid=1E80B718BE1C05007F226E4E2D821D26.live712?__blob=publicationFile

Statistisches Bundesamt (2021b): Mehr Habilitationen von Frauen im Jahr 2020. Retrieved from https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/07/PD21_319_213.html

Statistisches Bundesamt (2021c): Daten zu den Eheschließungen und dem durchschnittlichen Heiratsalter Lediger. Retrieved from <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Eheschliessungen-Ehescheidungen-Lebenspartnerschaften/Tabellen/eheschliessungen-heiratsalter.html>

Statistisches Bundesamt (2022): Gender Pay Gap 2021: Frauen verdienen pro Stunde weiterhin 18 % weniger als Männer. Retrieved from

https://www.destatis.de/DE/Presse/Pressemitteilungen/2022/03/PD22_088_621.html

Stegmann, S. (2005): "...got the look!" - Wissenschaft und Outfit: Eine kulturwissenschaftliche Studie über Effekte von Habitus, Fachkultur und Geschlecht. Münster.

Steinhausen, J. (2017): "Mind the gap". Mentoring für Frauen in der Statuspassage Studium-Promotion. In: Petersen, R./Budde, M./Brocke, P./Doebert, G./Rudack, H./Wolf, H. (Hrsg.): Praxishandbuch Mentoring in der Wissenschaft. Wiesbaden.

Sterk, N./Meeussen, L./Van Laar, C. (2018): Perpetuating inequality: Junior women do not see queen bee behavior as negative but are nonetheless negatively affected by it. In: *Frontiers in Psychology*, 9, 1690. <https://doi.org/10.3389/fpsyg.2018.01690>

Tajfel, H./Turner, J. C. (1979): An integrative theory of intergroup conflict. In: Austin, W. G. /Worchel, S. (Eds.): *The Social Psychology of Intergroup Relations*. Monterey, 33-47.

Tischler, M. (2020): Vertrauen in die Wissenschaftskarriere. Eine empirische Studie zu den Qualifizierungswegen von Nachwuchswissenschaftlern. Wiesbaden.

van Dick, R./Monzani, L. (2017): Does it matter whether I am a happy and committed worker? The role of identification, commitment and job satisfaction for employee behaviour. In: *An Introduction to Work and Organizational Psychology*, 410–429.

Weis, L./Lay, A. (2019): Gender-specific networking: Mind the gap. In: *Women, Business and Leadership: Gender and Organisations*, 174–198. <https://doi.org/10.4337/9781786432711.00018>

Williams, J. E./Best, D. L. (1990): *Measuring sex stereotypes: A multinational study* (Rev. ed.). Beverly Hills.

Wimbauer, C. (2012): Wenn Arbeit Liebe ersetzt. Doppelkarriere-Paare zwischen Anerkennung und Ungleichheit. Frankfurt am Main, New York.

Wimbauer, C./Teschlade, J./Motakef, M. (2012): Gleichheit oder Geschlechterkampf? Kommentar zu Volksheim oder Shopping Mall von Wolfgang Streeck. In: *WestEnd. Neue Zeitschrift für Sozialforschung*, 9, H. 2, 180–193.

Xu, H. (2021): Career decision-making from a dual-process perspective: Looking back, looking forward. In: *Journal of Vocational Behavior*, 126. <https://doi.org/10.1016/j.jvb.2021.103556>

Zimmer, A./Krimmer, H./Stallman, F. (2006): Winners among Losers: Zur Feminisierung der deutschen Universitäten. In: *Beiträge zur Hochschulforschung*, 28, 30–57.

Zitieren dieses Beitrags

Hangen, J./Köpfer, P./Siegfried, C./Baade, L. (2022): Why (not) to Choose a Career in Academia – Theoretical Review of (Gender Related) Reasons. In: *bwp@ Profil 7: Perspektiven wirtschafts- und berufspädagogischer sowie wirtschaftsethischer Forschung*. Digitale Festschrift für Gerhard Minnameier zum 60. Geburtstag, hrsg. v. Hermkes, R./Bruns, T./ Bonowski, T., 1-21. Online: https://www.bwpat.de/profil7_minnameier/hangen_etal_profil7.pdf (12.06.2022).

Die Autorinnen



JULE HANGEN

Goethe Universität Frankfurt, Professur für Wirtschaftspädagogik, insbes. empirische Lehr-Lern-Forschung

Theodor-W.-Adorno-Platz 4, 60629 Frankfurt am Main

hangen@econ.uni-frankfurt.de

www.wiwi.uni-frankfurt.de/abteilungen/wipaed/professoren/wuttke/team/jule-hangen-msc.html



PATRICIA KÖPFER

Universität Hohenheim, Professur für Wirtschaftspädagogik, insbes. Theorie und Didaktik beruflicher Bildung

Fruwirthstr. 47, 70599 Stuttgart

patricia.koepfer@uni-hohenheim.de

<https://wipaed.uni-hohenheim.de/67393>



DR. CHRISTIN SIEGFRIED

Georg-Augustin-Universität Göttingen, Professur für Wirtschaftspädagogik mit dem Schwerpunkt Berufliches Lehren und Lernen

Platz der Göttinger Sieben 5, 37073 Göttingen

christin.siegfried@uni-goettingen.de

www.wiwi.uni-frankfurt.de/abteilungen/wipaed/professoren/wuttke/team/dr-christin-siegfried.html



LAURA BAADE

Goethe Universität Frankfurt, Professur für Wirtschaftspädagogik, insbes. empirische Lehr-Lern-Forschung

Theodor-W.-Adorno-Platz 4, 60629 Frankfurt am Main

lurabaade@stud.uni-frankfurt.de

<https://www.wiwi.uni-frankfurt.de/abteilungen/wipaed/home.html>