

Elisabeth Dütschke, Sabine Boerner*

Flexible Employment as a Unidirectional Career? Results from Field Experiments**

Although the number of flexible workers is constantly growing, little is known about career paths built up on flexible employment. In this article, we investigate the chances of former flexible workers to be employed in a permanent full-time position. In two field experiments, we asked for employers' evaluation of applicants with a flexible employment history. Results indicate that former part-time work is in fact perceived as a disadvantage for candidates when applying for a permanent full-time position while other types of flexible work (e.g., fixed term contracts, part-time work, and interorganizational mobility) are not. Implications of these results for individual careers and employers' understanding of personnel are discussed.

Key words: flexible employment, standard employment, contemporary careers, evaluation of CVs

* Elisabeth Dütschke, Prof. Dr. Sabine Boerner, beide Lehrstuhl für Management, insbes. Strategie und Führung, Universität Konstanz, Postfach 88, 78457 Konstanz, Germany. E-mail: elisabeth.duetschke@uni-konstanz.de, sabine.boerner@uni-konstanz.de.

** We would like to thank Florian Appel and Christian Schudy for their help in gathering the data as well as two anonymous reviewers for their helpful feedback.

Article received: August 28, 2008

Revised version accepted after double blind review: March 13, 2009.

Introduction

Since flexible employment arrangements like temporary work, project-based employment, and freelancing are continuously gaining importance (Connelly/Gallagher 2004), variety in employment is constantly growing. From an organizational point of view, this development challenges the traditional understanding of personnel. While, in the past, organizations mainly turned individuals into personnel using standard employment, today a vast majority of organizations uses some kind of flexible employment as an integral part of their staffing policy (e.g., Matusik/Hill 1998; Brewster/Mayne/Tregaskis 1997). In terms of working arrangements, the category ‘personnel’ is thus likely to become more and more diffuse and heterogeneous. The boundaries between those who are inside an organization and those who are not are getting blurred (Pfeffer/Baron 1988). On the individual level, variety in employment arrangements is reflected in the decline of the traditional organizational career; the number of workers spending at least some time of their career within flexible work arrangements is growing (Ashford/George/Blatt 2007).

Despite the ongoing diffusion of the traditional category ‘personnel’, standard employment is still the norm – within organizations as well as within individuals’ minds (Ashford/George/Blatt 2007; Currie/Tempest/Starkey 2006). The co-existence of standard and flexible forms of employment raises the issue of the permeability of the boundaries between the new and the traditional ways of working.

If the boundaries between standard employment and flexible employment are permeable, the rising variety in employment does not seem to indicate the ‘end of personnel’. Rather, this would imply that our traditional understanding of the category ‘personnel’ needs to be extended to individuals with various career pathways. In this case, individual careers will include periods of standard as well as flexible employment. If, however, the boundaries between standard employment and flexible employment are not permeable, the classical category of ‘personnel’ will be split up into two subgroups: a decreasing group of traditional personnel and a growing segment of individuals following alternative flexible career pathways.

Prior research on the permeability of career boundaries indicates that flexible employment may impede chances for future standard employment (Barker 1998; Oschmiansky/Oschmiansky 2003). Flexible employment is therefore often perceived as a one-way street leading into a unidirectional career (Barker 1998). However, studies investigating employment chances of individuals with similar qualifications and motivation are still rare.

By presenting results from two field experiments, our study aims at filling this gap. We gathered employers’ evaluations of fictitious applicants with a flexible employment history. We focused on three research questions: First, we analyzed if potential employers generally favor applicants with a standard career pathway over applicants with a non-standard employment history. Second, we investigated whether different types of flexible employment (i.e., type of work contract, interorganizational mobility, and number of weekly working hours) are evaluated differently. Third, we tried to identify possible reasons for these evaluations by analyzing ratings of applicants’ characteristics.

Our paper adds to the existing research in several ways. To begin with, it presents one of the first studies that empirically analyzes the permeability of the boundaries between new and old careers, – that is, between flexible and traditional employment – for equally qualified and motivated individuals. Second, it takes an unusual perspective by analyzing the impact of a career pathway in flexible employment on future career options from the point of view of the employer. Third, by conducting field experiments, we applied a rarely used research design which is highly suitable to avoid confounded variables (Spector 1981).

The paper is organized as follows: After reviewing the literature on flexible employment and contemporary careers, research questions are derived. Next, a theoretical framework for our study is provided drawing on signaling theory (Spence 1974) and path dependence theory (Rosenbaum 1979). Then the research design of the field experiments is explained. Thereafter, methodology and results are reported and discussed for the two experiments consecutively. Finally, we discuss our findings also pointing to the limitations of our study and draw conclusions for individual careers and the definition of personnel.

Literature review and research questions

Flexible employment (e.g., Brewster/Mayne/Tregaskis 1997), variety in employment (e.g., Guest 2004), and contingent work (e.g., Barker 1998) are commonly used terms to describe new employment arrangements. In contrast to traditional standard employment, new employment arrangements are characterized by both a limited time frame and weak mutual contractual and formal obligations (Polivka/Nardone. 1989; Quinlan/Bohle 2004).

From a careers' perspective, this phenomenon has been analyzed using terms like post-corporate career (Peiperl/Baruch 1997), boundaryless career (DeFillipi/Arthur 1996) and protean careers (Hall 1976). These concepts can be summarized as 'contemporary careers' which may be characterized as being responsive to "a) shifting boundaries in occupational, organizational, national and global work arrangements; b) higher uncertainty given the rapid generation of knowledge and the unpredictability of its effects; and c) greater individual agency" (Arthur 2008: 168). Our paper is related to research on contemporary careers as it focuses on the permeability of boundaries (e.g., Schein 1971) between traditional and contemporary careers.

Based on panel data, several studies analyzed the impact of flexible employment arrangements on future career pathways. Lauterbach and Sacher (2001) showed that individuals who started their career in a flexible work arrangement were less likely to take up standard employment later on. Similar effects for fixed term contracts were found in a study by Giesecke and Groß (2002), analyzing data from the SOEP¹. A research paper by Oschmiansky and Oschmiansky (2003) also came to similar conclusions based on data from the German microcensus. In sum, results from panel data seem to consistently indicate that former flexible employment is disadvantageous for getting into standard employment.

¹ SOEP – socio-economic panel; The SOEP is a wide-ranging representative longitudinal study of private German households.

However, this interpretation of the results is subject to two limitations. First, we do not know if the subjects under study were actually looking for standard employment. Research from the field of flexible employment arrangements has shown that between 20 and 45 percent of flexible workers voluntarily chose flexible employment (e.g., Guest 2004). Second, relying on panel data, the studies cited above are not able to identify the reasons why former flexible workers may have lower chances for standard employment. Panel data does not cover all the aspects of personal characteristics and skills that may be relevant in an organization's recruiting process (e.g., personality traits, communication skills, or networking abilities). Lower chances for standard employment may be due to workers' characteristics, albeit independent of their former employment. However, it is also possible that employers' evaluations of candidates with a career pathway in flexible employment are negatively biased. Hence, panel studies do not allow to draw conclusions about the permeability of boundaries between flexible and traditional career pathways.

Research analyzing the permeability of career boundaries, i.e., the impact of a prior flexible employment on individual future employment chances is still rare (cp. Kalleberg 2000; King/Burke/Pemberton 2005). As far as we know, only two published studies investigate the influence of former flexible employment on individual chances for future standard employment without using panel data.

King/Burke/Pemberton (2005) analyzed data from a British recruitment agency which places IT professionals. They found that previous placement of a candidate was the strongest predictor for future placement and that a high number of former employers decreased the chances for a permanent position. In contrast, human capital variables, e.g., job experience and skills, turned out to be less important for a placement in a permanent position.

Barker (1998) analyzed the impact of fixed term contracts on career options in the academic field in the US using descriptions of fictitious scientists. 112 deans and department chair persons from universities rated these descriptions regarding the probability of hiring the candidate for a permanent faculty position. The fictitious applicants differed in years of adjunct work experience which turned out to be negatively correlated to the chances of being employed. Moreover, respondents also indicated that they intended to ask more invasive questions about a candidate's background if the applicant had spent more time in temporary positions.

To sum up, both King/Burke/Pemberton (2005) and Barker (1998) found evidence that employers prefer applicants with a standard career pathway if they have to staff a permanent position. However, it is necessary to analyze if results from academia in the US and the IT-sector in Great Britain are transferable to other sectors and branches as well as other employment arrangements.

Given the limitations of the studies cited above, we pose three research questions: First, do employers generally prefer applicants with a standard career pathway when they have to staff a permanent position? Second, do employers' evaluations of candidates vary according to the type of former flexible employment? Third, what are possible reasons for employers' evaluations of candidates? As prior research to these questions is scarce we do not formulate hypotheses beforehand. However, in the fol-

lowing section a theoretical framework is provided as guidance for the interpretation of the empirical results.

Theoretical framework

Theoretically, employment decisions can best be conceptualized by building on signaling theory and path dependencies. Signaling theory was developed by Spence (1973, 1974, 2002) to describe employment decisions as market situations where information is asymmetrically distributed and decisions have to be made under uncertainty. Employers need to identify those individuals in the market that will show the highest level of performance. However, future performance on the job cannot be observed or predicted in advance. Thus, employers have to interpret signals, i.e., the information at hand (e.g., education and former work experience) as a basis for their hiring decision (cf. Bhattacharjee/Krishna/Karve 2001). However, these signals do not necessarily provide relevant or valid information on future performance (Spence 1974; Heil/Robertson 1991). Employers therefore extend the information actually provided by signals to predict applicants' future performance (Spence 2002; Burkert/Seibert 2007).

Looking at the empirical results cited above in terms of signaling theory, employers seem to utilize a candidate's former occupational status as a signal in their employment decision. They interpret candidates' former occupational status as conveying information about future work-performance.

The problem under study can also be analyzed against the background of path dependencies (Rosenbaum 1979). Path dependency models assume that further career progress is influenced by an individual's career history, especially by early failures and successes. These early career events are supposed to determine a certain career pathway thereby defining boundaries between career pathways which are difficult to cross. In terms of path dependencies, flexible employment arrangements may be seen as a kind of failure, thus restricting career options (Valcour/Ladge 2008). An individual starting his or her career in a flexible employment arrangement would thus be very likely to continue on this kind of career pathway.

Signaling theory and path dependencies are related as some authors interpret the early career events introduced by path dependence theory as signals as defined by signaling theory (Brüderl/Diekmann/Preisendörfer 1991; Valcour/Ladge 2008). They assume that career successes or failures act as signals for employers regarding the performance capability of an individual. If prior flexible employment acts as a signal for lower work performance, path dependency theory may be used to explain how it restricts future career options.

However, neither of the two theories is able to explain why employers may tend to negatively evaluate prior flexible employment. A possible explanation for this evaluation may lie in employers' normative expectations (cp. Barker 1998; King/Burke/Pemberton 2005). Traditionally, the typical employee has been staying with an organization for a work-lifetime (Sullivan 1999). In contrast, individuals with a flexible employment history have been following a career path that is different from the personal experience of many employers. Although flexible employment is getting more common in contemporary careers, the traditional career probably still defines what is considered to be 'normal' or 'usual'. A career pathway built on flexible work arrange-

ments may thus violate employers' expectations about a 'normal' career and, therefore, lead to negative evaluations.

Research design

In order to find answers to the research questions stated above we chose to conduct field experiments. Field experiments are especially suited for our purposes as they allow to control for undesired effects (e.g., confounding variables, cp. Spector 1981). We thus further developed the research design used by Barker (1998) and created fictitious CVs that were given to HR-managers for evaluation.

Our first research question is whether employers prefer applicants with a career pathway in standard employment to equally qualified candidates with a career pathway in flexible employment arrangements. Building on the empirical studies cited above (King/Burke/Pemberton 2005; Barker 1998), we assume that the answer to this first question may be yes. We thus compare candidates with a standard career pathway to those with a career in flexible employment.

Research question 2 asks for differences in employers' evaluations according to the candidates' former types of flexible employment arrangements. Hence the type of former flexible employment within the fictitious CVs varies. Our study focuses on three forms of flexible employment and their respective combinations: interorganizational mobility (former career within one or several organizations), amount of weekly working hours (part-time versus to full-time work), type of work contract (temporary vs. fixed-term vs. permanent contract).

Former *interorganizational mobility* was included into the study design because it is a central element of contemporary career concepts: The idea of "job opportunities that go beyond the boundaries of single employment settings" (DeFillippi/Arthur 1996: 116) is inherent to contemporary careers. Individuals are thought to easily cross organizational boundaries. Several studies found that individuals, especially men, may be able to increase their salaries through interorganizational mobility. Adverse effects have been found for both women and members of minority groups (e.g., Valcour/Ladge 2008).

A reduced number of *working hours* is also a central idea of contemporary career concepts (e.g., Arthur/Rousseau 1996). The reasons for reducing work-time are numerous, e.g., family obligations, non-work interests or high unemployment rates. The percentage of part-time workers is high throughout the Western hemisphere (Kalleberg 2000). In general, part-time workers earn less per hour than full-time workers (e.g., Groot/Schippers/Siegers 1990; Kalleberg 2000).

With regard to *contract type* we analyzed permanent contracts compared to both fixed term contracts and temporary work arrangements. Part-time work and fixed term contracts are the most common forms of flexible employment (e.g., Hoffmann/Walwei 2001; Quinlan/Bohle 2004). Fixed term workers usually earn less than workers with a permanent contract (Keller 2008). In a temporary work arrangement the worker is employed by a temporary work agency and sent out to work at the agency's client's site and under the client's direction. Wages for temporary work are usually lower than for standard work arrangements (Kalleberg 2000).

In our study, we want to find out more about the reasons for employers' preferences for former flexible work arrangements (research question 3). Research has shown that recruiters draw inferences about dispositional traits and abilities solely based on a candidate's CV (e.g., Brown/Campion 1994; Cole/Feild/Stafford 2005). Accordingly, we asked for employers' perceptions of applicants' characteristics.

In line with research on recruitment and personnel selection (e.g., Klimecki/Gmür 2001; Torrington/Hall/Taylor 2008), employers were asked to rate the following characteristics of the applicants: professional skills, problem solving capacity, motivation, flexibility, and probability of permanence. Whereas the first three criteria are widely used in personnel selection, flexibility and probability of permanence were included as characteristics related to flexible employment. Probability of permanence refers to the expectation that an individual will stay with an organization for an extended period of time. When looking at a candidate who has frequently changed positions and / or organizations in the past, employers may fear that this applicant is not willing to stay with the organization. Flexibility, in contrast, is a characteristic that could be perceived as an advantage of applicants who have been pursuing a flexible employment career.

Study 1

The purpose of study 1 was to test the research design and to achieve first results regarding the three research questions.

Methodology

For the field-experiment, we used a 2x2x2 design (see Fig. 1). We developed eight CVs of fictitious applicants differing in interorganizational mobility (i.e., having worked for the same organization vs. several organizations), in type of work contract (i.e., fixed-term vs. permanent), and in working hours (i.e., part-time vs. full-time). Part-time work was described as 70 % of regular working hours. The study design included all possible combinations of these three factors. One of the fictitious candidates matched the standards of a traditional employee (CV 6, Fig. 1). Variation of gender was included as a control variable, doubling the number of CVs from eight to 16.

Figure 1: Experimental design. Study 1

		Interorganizational mobility				
		Same organization		Several organizations		
		Working hours	Part-time	Full-time	Part-time	Full-time
Type of work-contract	Fixed term		CV1	CV2	CV3	CV4
	Permanent		CV5	CV6	CV7	CV8

Each CV included demographic information about the candidate (e.g., age), a short description of the former career (e.g., former type of employment, work-tasks, and education) and a reference to additional skills (e.g., computer literacy). Apart from their former career path and gender, applicants were described to be similar in every other aspect: All fictitious applicants were 32 years old, holding a university degree in economics and having work experiences from three different positions in sales departments.

The imaginary job the candidates applied for was a permanent full-time position in the sales and distribution department at the respondent's company. To secure credibility and external validity of our research design, we discussed the job description and the CVs with HR-managers for the sales department of a major German company in advance.

We randomly chose a number of companies from a list of Germany's biggest enterprises². HR-managers from these companies were contacted by telephone; if they agreed to take part in the study the documents were sent to them via mail. The CVs were accompanied by questionnaires and a cover letter stating the general purpose of the research project. However, no explicit reference was made to flexible employment arrangements. Each HR-manager received a random sample of four of the 16 CVs and was asked to rate each of the four candidates on a separate questionnaire. Since 18 HR-managers took part in the study and each rated four CVs, the overall data set contained 72 cases.

The questionnaire consisted of seven items. *Chances for standard employment* were measured using ratings of (1) the probability of inviting the applicant for a job interview and, (2) the probability that the applicant will be employed by the manager's company.

Furthermore, the managers were asked to rate *applicant's characteristics* regarding (3) professional skills, (4) problem solving capacity, (5) motivation, and (6) flexibility as well as (7) the probability that the applicant will stay with the company for an extended period of time (=permanence). All items were rated on a five-point Likert-scale with high values indicating a positive rating and low values a negative rating.

Results

Preliminary analyses. For means and standard deviations of all dependent variables see Table 1.

Table 1: Means and standard deviations for dependent variables. Study 1 and 2

		Study 1		Study 2	
		Mean	SD	Mean	SD
Chances for employment	Interview	3.40	1.13	3.47	.94
	Employment	2.89	.91	3.22	.90
Ratings of applicant's characteristics	Professional skills	3.91	.58	4.09	.51
	Problem solving capacity	3.89	.59	3.79	.52
	Motivation	3.81	.82	3.66	.74
	Potential for development	-	-	3.68	.64
	Flexibility	3.97	.60	-	-
	Flexibility regarding time	-	-	3.59	.87
	Geographic flexibility	-	-	4.21	.74
Task flexibility	-	-	3.98	.51	
Permanence		3.36	1.01	3.18	.94

Note. Study 1 n=72; study 2 n=245. Ratings on 5-point Likert-scale (5=very likely ... 1=very unlikely).

² The list contained Germany's biggest enterprises by turnover and was provided by the Frankfurter Allgemeine Zeitung (FAZ), 5th of July, 2005.

The predictive validity of the HR-managers' ratings of applicants' characteristics was tested using regression analyses (see Tab. 2). The two variables measuring chances for standard employment, that is, the probability for an interview and the probability for employment, were regressed on the evaluations of candidates' professional skills, problem solving capacity, motivation, flexibility, and permanence. Variables measuring applicants' characteristics were able to explain 40 % ($R=.63$, $p<.001$) of the variance of the probability of being invited for an interview and 48 % ($R=.70$, $p<.001$) of the variance of the probability of being employed. Applying a level of significance of $p<0.1$, professional skills, flexibility, and permanence significantly predicted the probability of being invited for an interview, whereas problem solving and motivation did not turn out to be significant. All independent variables were predictive of the probability of being employed; however, unexpectedly, problem solving capacity was negatively related to the probability of being employed.

Table 2: Regression analyses for chances for employment on applicants' characteristics. Study 1

Dependent variable	Interview	Employment
Professional skills	.26*	.28*
Problem solving capacity	-.05	-.21#
Motivation	-.06	.22#
Flexibility	.32**	.21*
Permanence	.44**	.44*
F (d.f.)	8.6** (5)	12.4** (5)
R ²	.40	.48

Note. Standardized Betas. Study 1 n=72.

Ratings on 5-point Likert-scale (5=very likely ... 1=very unlikely).

$p<.1$, * $p<.05$, ** $p<.01$

Research questions. To answer research question 1, we conducted a t-Test for independent samples to compare the ratings for candidates with a flexible employment career path to the ratings of the candidate with the traditional career (CV 6, see Fig.1). There was no significant difference between the two groups concerning the probability of being invited for an interview (see Tab. 3). However, the probability to be employed for a traditional job was significantly lower for someone with a flexible employment career pathway than for a candidate with a traditional career (see Tab. 3).

Table 3: T-Test for chances for standard employment. Study 1

Probability of ...		N	Mean	SD	T	Sig.
... inviting applicant for an interview	Boundaryless	62	3.35	1.10	-0.892	0.376
	Traditional	10	3.70	1.33		
... employment	Boundaryless	62	2.79	.83	-2.354	0.021 **
	Traditional	10	3.50	1.17		

Note. N – number of evaluations; Ratings on 5-point Likert-scale (5=very likely ... 1=very unlikely);

* $p<0.05$, ** $p<0.01$

To answer research questions 2 and 3, we applied multivariate analysis of variance including the entire set of dependent and independent variables under study. Effects that turned out to be significant in the first step were then further analyzed using univariate analyses of variance. This two-step procedure allows to avoid exploitation of the alpha error (Bray/Maxwell 1985) and simultaneously analyzes the data for answers to research questions 2 and 3. To control for firm-specific effects, raters were included as a covariate. The covariate was found to have significant small to middle sized effects³ on all dependent variables besides problem-solving capacity.

Multivariate analysis detected significant main effects for interorganizational mobility ($F=4.2$, $p<.01$, partial $\epsilon^2=.38$) and working hours ($F=2.6$, $p<.05$, partial $\epsilon^2=.28$). However, no significant effects were found for gender ($F=.41$, $p=.89$, partial $\epsilon^2=.06$) and type of work contract ($F=.64$, $p=.72$, partial $\epsilon^2=.08$).

Univariate analyses revealed that the effect of interorganizational mobility was due to a significant middle-sized effect on ratings of permanence (partial $\epsilon^2=.25$, see Tab. 4). The effect of working hours was due to significantly lower ratings of part-time workers on several variables (see Tab. 4): the probability of inviting an applicant for an interview (partial $\epsilon^2=.08$), the probability of actual employment (partial $\epsilon^2=.16$), professional skills (partial $\epsilon^2=.07$), problem solving capacity (partial $\epsilon^2=.07$), and flexibility (partial $\epsilon^2=.14$). All differences found for working hours were of small effect size.

Table 4: Significant results from univariate analyses of variance. Main effects. Study 1

			n	M	SE	F	ϵ^2
Interorganizational mobility	Permanence	One org.	40	3.77	.14	18.5 **	.25
		Several	32	2.84	.16		
Working hours	Interview	Part-time	39	3.08	.16	5.0 *	.08
		Full-time	33	3.63	.19		
	Employment	Part-time	39	2.55	.13	10.1 **	.16
		Full-time	33	3.20	.15		
	Professional skills	Part-time	39	3.77	.09	4.3 *	.07
		Full-time	33	4.05	.10		
	Problem-solving capacity	Part-time	39	3.72	.10	4.3 *	.07
		Full-time	33	4.03	.11		
Flexibility	Part-time	39	3.81	.09	9.3 **	.14	
	Full-time	33	4.21	.10			

Note. N – number of evaluations; Ratings on 5-point Likert-scale (5=very likely ... 1=very unlikely); * $p<.05$, ** $p<.01$

Multivariate analysis also revealed a significant overall interaction effect between interorganizational mobility and working hours. However, this effect was not supported by the results from univariate analyses and will therefore not be interpreted further on. No other significant interaction effect was found in the data-set.

³ Effect sizes were classified following Cohen (1988).

Discussion

In our first research question, we asked whether employers favor candidates with a traditional career history over candidates with a flexible work history. Our analysis revealed a significant difference between traditional and flexible employees, indicating that HR-managers seemed to favor candidates with a standard CV.

In research question 2 we wanted to know if all kinds of flexible employment arrangements are evaluated in the same way. Our data showed that former part-timers were rated significantly lower than former full-timers. However, we did not find an effect of type of work-contract or interorganizational mobility on chances for standard employment. Thus, the evaluation of former flexible employment varied according to the type of flexible employment arrangement.

Third, we asked for the reasons for employers' evaluations by analyzing the characteristics ascribed to the fictitious candidates. Results on ascribed characteristics were similar to those on chances for standard employment. HR-managers rated former part-time workers lower than former full-time workers on several characteristics: HR-managers expected former part-timers to be less professionally skilled, to have a lower problem solving capacity, and to be less flexible. Although effect sizes were small, results coherently point to the direction that former part-time work may limit career options for full-time employment.

Additionally, individuals who have been working for several organizations in the past were not expected to stay with the organization for an extended period of time. However, in our sample, this did not reduce their chances for standard employment.

Interestingly, our analyses did not reveal any interactional effects: We did not find effects for combinations of the employment arrangements under study, e.g., part-time workers holding a fixed term contract.

Our first study was also intended to test the newly developed research design. Regression analyses showed that the items measuring applicants' characteristics – except problem solving capacity – were positively related to the items measuring chances for standard employment. In sum, we thus assume that the items included tap on characteristics which are relevant in staffing decisions. We also received positive feedback from our respondents, indicating sufficient face validity of our design. We therefore conclude that our design is applicable and useful.

Obviously, the generalizability of our results is limited. We surveyed only a small number of HR-managers from major German companies, and we analyzed only some types of flexible employment arrangements. In order to enhance the scope of our findings and to confirm our results we conducted a second study.

Study 2

In study 2 we refined our research design and enlarged our sample size. The study focused on research questions 2 and 3: Are different types of flexible employment evaluated differentially by employers? What are the reasons for this effect?

Methodology

In this study, we used a 2x3-design (see Fig. 2). Again, working hours (i.e., part-time 70 % vs. full-time) and type of work contract varied within the fictitious CVs. As we had not found differences between former permanent and former fixed-term employment in the first study, we added temporary employment as an additional variation of work contract. Again, we included gender as a control variable doubling the number of CVs from six to 12.

Figure 2: Experimental design. Study 2

		Working hours	
		Part-time	Full-time
Type of work-contract	Fixed term	CV1	CV2
	Temporary	CV3	CV4
	Permanent	CV5	CV6

In order to limit the number of CVs, we excluded interorganizational mobility from the list of independent variables, therefore describing all applicants as having been working for several organizations in the past.

The fictitious CVs were very similar to those used in study 1. The position the candidates applied for was described to be a permanent full-time position as HR-manager.

To enhance the generalizability of our study we enlarged our sample in size. Furthermore, besides HR-managers from major companies, we also surveyed HR-managers from middle-sized companies. This added another independent variable to the research design. Compared to major companies, middle-sized companies provide fewer possibilities to pursue a long-lasting or even lifelong career within them (cf. Rosenfeld 1992). Hence, someone working in a company of smaller size may have comparatively fewer possibilities for upward or vertical movements (Schein 1971) on the career ladder. Thus, the normative power of the traditional career might be weaker within smaller companies.

The companies contacted were again randomly taken from business directories⁴, excluding companies already surveyed in study 1. 49 HR-managers took part; each of them received five CVs, resulting in 245 cases in the data set. 25 of the HR-managers were working for middle-sized companies, 24 for major companies.

The questionnaire used in study 2 was very similar to the one used in study 1. HR-managers were asked to rate each applicant's chances for standard employment on two items and each applicants' personal characteristics. However, we made two changes to the personal characteristics section. First, we further specified the candidate's flexibility by dividing it into three items: flexibility regarding time, geographic

⁴ We used directories provided by Hoppenstedt Holding GmbH (www.hoppenstedt.de). Middle-sized companies were defined to have 50 to 249 employees and a turnover below 50 million € p.a. The directory of major companies contained Germany's 250 biggest companies by number of employees.

flexibility, and task flexibility. Second, we added an item asking for the candidate's potential for development. These alterations were made to describe the applicants more precisely.

Results

Means and standard deviations for all study variables are presented in Table 1. Like in study 1, data was analyzed using the two-step procedure including multi- and univariate analyses of variance, simultaneously analyzing research questions 2 and 3. The individual rater was added as a covariate. The covariate turned out to have a significant middle-sized effect on the evaluations of problem-solving capacity.

Multivariate analysis detected significant main effects for organization size ($F=4.1$, $p<.01$, partial $\epsilon^2=.16$), type of work contract ($F=3.0$, $p<.01$, partial $\epsilon^2=.13$), and working hours ($F=17.8$, $p<.01$, partial $\epsilon^2=.46$). The main effect for gender just missed the $p<.05$ -level of significance ($F=1.8$, $p=.05$, partial $\epsilon^2=.08$). As for interaction effects, a significant interaction between gender and type of work contract was found in the multivariate analysis ($F=2.0$, $p<.05$, partial $\epsilon^2=.09$). Effects were further analyzed using univariate analysis of variance (see Tab. 5).

Table 5: Significant results from univariate analyses of variance. Main effects. Study 2

			n	M	SE	F	ϵ^2
Organization size	Motivation	Major	125	3.53	.06	5.1 *	.02
		Middle-size	120	3.78	.06		
	Task flexibility	Major	125	3.94	.05	15.3 **	.07
		Middle-size	120	4.03	.05		
Type of work contract	Interview	Permanent	83	3.42	.10	4.1 *	.04
		Fixed-term	83	3.68	.10		
		Temporary	79	3.31	.10		
	Employment	Permanent	83	3.15	.09	4.9 **	.04
		Fixed-term	83	3.44	.09		
		Temporary	79	3.05	.09		
	Professional skills	Permanent	83	4.20	.06	3.5 *	.03
		Fixed-term	83	4.05	.06		
Temporary		79	4.00	.06			
Working hours	Interview	Part-time	125	3.13	.08	37.9 **	.15
		Full-time	120	3.81	.08		
	Employment	Part-time	125	2.88	.07	40.3 **	.16
		Full-time	120	3.55	.08		
	Motivation	Part-time	125	3.53	.06	7.7 **	.03
		Full-time	120	3.78	.06		
	Potential for development.	Part-time	125	3.55	.06	11.1 **	.05
		Full-time	120	3.82	.06		
	Flexibility regarding time	Part-time	125	3.08	.06	127.8 **	.37
		Full-time	120	4.12	.06		
	Permanence	Part-time	125	3.04	.08	5.2 *	.02
		Full-time	120	3.29	.08		

Note. N – number of evaluations; Ratings on 5-point Likert-scale (5=very likely ... 1=very unlikely); * $p<.05$, ** $p<.01$

First of all, HR-managers from major companies indicated lower ratings of candidates' motivation (partial $\epsilon^2=.02$) and task flexibility (partial $\epsilon^2=.07$) than their colleagues from middle-sized companies (see Tab. 5). However, both effects were very small and no interaction effects of former career pathway and organization size were found.

Next, we found several significant effects for type of work contract. The data presented in Table 5 was further analyzed using pairwise comparisons leading to the following results: Compared to former permanent and to former temporary employees, individuals who had been working on a fixed term contract were more likely to be invited for an interview and to be employed. Temporary employees scored lowest on chances for employment, however, not significantly different from permanent employees. Furthermore, former temporary workers were perceived to have lower professional skills than former permanent employees. We also found a significant main effect for permanence; however, this effect cannot be interpreted because of a significant disordinal interaction effect of contract type and gender.

Univariate analyses revealed that this interaction effect results from different evaluations of problem solving capacity ($F=3.5$, $p<.05$, partial $\epsilon^2=.03$) and permanence ($F=5.7$, $p<.01$, partial $\epsilon^2=.05$); however, effect sizes are small. Women who had formerly been working as temporary workers were ascribed lower levels of problem solving capacity than women with another contract type and than men. Men who had been holding a permanent contract were rated lower on permanence than men with a temporary or fixed term contract and than women.

For working hours we found several highly significant small to middle sized effects (see Tab. 5). Former part-timers had lower chances of being invited for an interview (partial $\epsilon^2=.15$) and of being employed (partial $\epsilon^2=.16$). They were ascribed lower levels of motivation (partial $\epsilon^2=.03$), a lower potential for development (partial $\epsilon^2=.05$) and a lower probability of permanence (partial $\epsilon^2=.02$). Additionally, HR-managers rated them very much lower than full-timers on flexibility regarding time (partial $\epsilon^2=.37$).

Discussion

In study 2, in order to answer research question 2, we analyzed again, whether different types of former flexible employment arrangements are evaluated differently. We found that former fixed term workers had higher chances for standard employment than both temporary and permanent workers. Additionally, like in study 1, former part-timers had lower chances for standard employment than former full-timers.

In research question 3 we asked about the reasons for employers' preferences analyzing characteristics ascribed to candidates. We found effects in ratings of characteristics for both type of work contract and working hours. Former temporary workers received lower ratings on professional skills than former permanent employees. However, ratings for fixed-term workers differed from neither of them significantly.

Thus, former temporary employment seemed to be a disadvantage when applying for standard employment. However, having been working on a fixed term contract appeared to be advantageous compared to a permanent contract. In this context, it is important to note that all applicants in this study were described to have been working for several organizations in the past. Perhaps HR-managers had a tendency to disap-

prove of candidates who repeatedly changed organizations although holding permanent contracts and therefore rated them similar to temporary workers. Again, although these differences were found to be significant, effect sizes were very small, thus not indicating substantial differences in practice.

Compared to former full-time workers, former part-time workers were rated slightly lower on several characteristics (motivation, potential for development, permanence) and very much lower on flexibility regarding time. This result suggests that possible employers interpret former part-time work as signaling time consuming personal obligations or interests that will persist in the future – although no such information was conveyed within the CVs.

Whereas main effects for gender did not reach significance, we found two interaction effects of gender and type of work contract on problem-solving capacity and permanence, respectively. Effects were difficult to interpret and effect size was small. However, they clearly warrant further research on this topic.

We did not find interaction effects between flexible employment variables and organization size. Hence, in our sample, major companies did not differ from middle-sized companies regarding the evaluation of candidates with a flexible employment career pathway.

Discussion and limitations

Our study focused on the impact of prior flexible employment on future chances for standard employment. We explored this impact through gathering employers' perceptions of candidates following a career pathway that does not adhere to the traditional standard career.

We focused on three research questions. First, we asked whether employers generally prefer applicants with a standard career pathway. In line with prior research, results from study 1 indicated that, for a permanent position, employers favor candidates with a standard career over those with a non-standard career.

In our second question, we asked whether employers' evaluations of former flexible employment vary according to the type of employment. In both studies, former part-timers had lower chances of being invited for an interview and of being employed than former full-timers. However, for other types of flexible employment, we did not find similar negative effects on chances for standard employment.

In our first study, the type of work contract did not have an influence on chances for standard employment. Concluding that today's employers may be already used to former fixed-term employment, we extended the scope of this variable to temporary work in the second study. Now we found slight differences; however, effect sizes were very small, suggesting that these differences probably do not have a strong impact on applicants' employment chances. Furthermore, as shown in study 1, we did not find significant effects on chances for standard employment for interorganizational mobility.

According to our third research question, we further analyzed possible reasons for employers' evaluations of prior career history by investigating their ratings of characteristics ascribed to the fictitious candidates. Results on ratings of the applicants' characteristics were in line with results on their chances for standard employment.

Applicants who received lower ratings for chances for employment were also rated more negatively in the characteristics' section. However, most of the effect sizes were small and results were not consistent across the two studies. In both studies, the flexibility of former part-timers was rated lower than the flexibility of former full-timers. Specifying the general concept of flexibility from study 1 using three items in study 2, we found that part-timers were expected to be less flexible than full-timers regarding time.

The negative evaluation of former part-time work is especially meaningful as the part-timers in our study were characterized as individuals who had been working for a significant amount of time in the past, namely, 70 % of the regular working hours. At the same time, we did not give reasons in the CV why an applicant had been working within a certain work arrangement in the past. So it was left on the behalf of the respondents to draw inferences about the background of an applicant. Possibly, part-time work would have been evaluated differently if we had stated reasons like family duties. However, we did not find gender differences for part-time and full-time workers although, like in many Western countries, part-time work is much more common for women than for men in Germany (cp. Kalleberg 2000).

The research design was newly developed for the purpose of this study. Using field experiments, we gathered ratings from individuals who are actually involved in everyday personnel selection. As respondents did not know the precise purpose of the study – and were not able to infer it from the material provided – the ratings were probably close to estimations in real-live situations securing high external validity. The experimental design also allowed controlling for confounding variables (Spector 1981); an issue which cannot be avoided in panel studies.

However, there are clearly some limitations to our study. First of all, we used simplified versions of candidates' CVs, including neither photographs, letters of recommendation nor certificates supporting the CV-data. Information about the candidate was thus reduced to few variables, limiting the external validity of our results.

Another limitation of our study is the usage of single-item-measures. This is especially important for ratings of ascribed personal characteristics. Thus, the reliability of our measurement might be reduced. However, Wanous, Reichers, and Hudy (1997) were able to show that single-item measures may even be more robust than scale measures, and they conclude that single-item measures are acceptable if situational constraints indicate their usage (cp. Wanous/Hudy 2001; Ginns/Barrie 2004). In our study, as mentioned above, respondents had to evaluate the fictitious applicants based on very limited information. We therefore assumed that a very detailed questionnaire would have been confusing for them and might have lead to a high rate of missing values.

Furthermore, the generalizability of our results is limited to the context under study (i.e., German companies of middle to major size, positions in sales and HR-departments for highly qualified workers, selected types of flexible employment). However, comparing middle-sized and major German companies, we did not find an effect of organizational size. Thus, it seems reasonable to claim some generalizability for our study. However, on a national level, the rate of flexible employment in a country is closely related to legal regulations, the national labor market, and the general

economic situation (Hoffmann/Walwei 2001). Thus, substantial differences in the diffusion of flexible work may exist between industries and countries (Hoffmann/Walwei 2001; Rosenfeld 1992). These differences certainly impact employers' normative expectations and thus their evaluation of a career history in flexible employment.

Furthermore, the fictitious candidates applied for a job in the sales- and the HR-department – two organizational areas where flexible work has not been used very often up to now (e.g., Ertel/Pröll 2004). This study focus may have had an influence on the results obtained. Similar arguments may be found regarding less educated candidates. Finally, there exists a vast variety of combinations of flexible work arrangements in individual careers – we only analyzed some of the most common types. As we found differential results for the types included results cannot be generalized to other types.

Conclusion

Despite the limitations listed above some conclusions for research and practice can be drawn from our studies. Whereas employers' evaluations of the effects of interorganizational mobility and type of work contract on future career options were equal or close to their ratings of a standard career path, we found considerable differences between former part-time and full-time employment. Taking together the results on part-time work, our research generally suggests that employers tend to have negative expectations about the working behavior of former part-timers. In the recruiting process, former part-time work seems to be used as a signal that triggers unfavorable inferences about a candidate. One inference that employers seem to draw is about the candidate's flexibility regarding time. This points to the direction that possible employers may be afraid that former part-timers may not be available for work when they need them, e.g., for working over-time or for meetings at unusual times. Additionally, employers may assume from a career pathway in part-time work that an individual is less interested in work and has less career commitment (cp. Valcour/Ladge 2008). Another possible reason for the negative rating of part-timers may be that working a reduced number of hours per week is obviously associated with a reduced amount of work experience.

Our data suggests that – regarding consequences for the individual career – flexible employment does not necessarily lead to a unidirectional career. The boundaries between flexible and traditional employment are permeable. However, this is not true for every kind of former flexible employment. Employers seem to accept fixed-term and temporary employment as well as interorganizational mobility, not considering it as violating normative expectations. However, part-time work appears to be a negative signal that may cause path dependencies making it difficult for individuals to leave this path again.

Moreover, we did not find any positive effects of a flexible career pathway on employers' ratings of the fictitious candidates. Former flexible employment did neither raise the chances for standard employment nor was it connected to more positive evaluations on any of the applicants' characteristics included. Thus, individuals who aim for an organizational career on the long run are better advised to start with an organizational career from the beginning to provide appropriate signals.

Since we found a high degree of permeability between traditional and contemporary careers, employers seem to have extended their classical understanding of 'personnel' to the new diversity of careers and the variety in employment. However, in line with the traditional conceptualization of personnel, the new standard employee is preferably working full-time. We therefore conclude that the rising variety in employment does not imply an 'end of personnel', but a limited re-definition of this category.

References

- Arthur, M. B. (2008): Examining contemporary careers: A call for interdisciplinary inquiry. In: *Human Relations*, 61(2): 163-186.
- Arthur, M. B./Rousseau, D. M. (1996): Introduction: The Boundaryless Career as a New Employment Principle. In: M. B. Arthur/D. M. Rousseau (Eds.): *The Boundaryless Career*. New York: Oxford University Press: 3-20.
- Ashford, S. J./George, E./Blatt, R. (2007): Old Assumptions, new work: The opportunities and challenges of research on nonstandard employment. In: J. P. Walsh/A. P. Brief (Eds.): *Academy of Management Annals* (Vol. 1). Mahwah, NJ: Lawrence Erlbaum: 79-134
- Barker, K. (1998): Toiling for Piece-Rates and Accumulating Deficits: Contingent Work in Higher Education. In: K. Barker/K. Christensen (Eds.): *Contingent Work*. American Employment Relations in Transition. Ithaca: Cornell University Press: 195-220.
- Bhattacharjee, D./Krishna, K./Karve, A. (2001): Work Experience and MBA Starting Salaries. In: *Economic and Political Weekly*, 36(11), 4369-4374.
- Bray, J.H./Maxwell S.E. (1985): *Multivariate analysis of variance*. Beverly Hills: Sage Publications.
- Brewster, C./Mayne, L./Tregaskis, O. (1997): Flexible working in Europe. In: *Journal of World Business*, 32(2): 133-151.
- Brown, B. K./Campion, M. A. (1994): Biodata Phenomenology: Recruiters' Perceptions and Use of Biographical Information in Resume Screening. In: *Journal of Applied Psychology*, 79(6): 897-908.
- Brüderl, J./Diekmann, A./Preisendörfer, P. (1991): Patterns of Intraorganizational Mobility: Tournament Models, Path Dependency, and Early Promotion Effects. In: *Social Science Research*, 20: 197-216.
- Burkert, C./Seibert, H. (2007): Labour market outcomes after vocational training in Germany. Equal opportunities for migrants and natives? IAB Discussion Paper, 31. Nürnberg.
- Cohen, J. (1988): *Statistical power analysis for the behavioral sciences*. Hillsdale: Erlbaum.
- Cole, M. S./Feild, H. S./Stafford, J. O. (2005): Validity of Resumé Reviewers' Inferences Concerning Applicant Personality Based on Resumé Evaluation. In: *International Journal of Selection and Assessment*, 13(4): 321-324.
- Connelly, C. E./Gallagher, D. G. (2004): Emerging Trends in Contingent Work Research. In: *Journal of Management*, 30(6): 959-983.
- Currie, G./Tempest, S./Starkey, K. (2006): New careers for old? Organizational and individual responses to changing boundaries. In: *International Journal of Human Resource Management*, 17(4): 755-774.
- DeFillippi, R. J./Arthur, M. B. (1996): Boundaryless contexts and careers: a competency-based perspective. In: M. B. Arthur/D. M. Rousseau (Eds.): *The boundaryless career*. New York: Oxford University Press: 116-132.
- Ertel, M./Pröll, U. (2004): Arbeitssituation und Gesundheit von "neuen Selbständigen" im Dienstleistungssektor. In: *Arbeit*, 13(1): 3-15.
- Giesecke, J./Groß, M. (2002): Befristete Beschäftigung: Chance oder Risiko? In: *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 54(1): 85-108.
- Ginns, P./Barrie, S. (2004): Reliability of single-item rating of quality in higher education: a replication. In: *Psychological Reports*, 95: 1023-1030.
- Groot, L. F. M./Schippers, J. T./Siegers, J. J. (1990): The Effect of Unemployment, Temporary Withdrawals and Part-Time Work on Workers' Wage Rates. In: *European Sociological Review*, 6(3): 257-273.
- Guest, D. (2004): Flexible employment contracts, the psychological contract and employee outcomes: an analysis and review of the evidence. In: *International Journal of Management Reviews*, 5/6(1): 1-19.
- Hall, D. T. (1976): *Careers in organizations*. Santa Monica: Goodyear.

- Heil, O./Robertson, T. S. (1991): Toward a Theory of Competitive Market Signaling: A Research Agenda. In: *Strategic Management Journal*, 12(6): 403-418.
- Hoffmann, E./Walwei, U. (2001): Erwerbsformen in Deutschland: Abschied von der Normalarbeit. In: *Personalführung*, 34(4): 54-66.
- Kalleberg, A. L. (2000): Nonstandard Employment Relations: Part-time, Temporary and Contract Work. In: *Annual Review of Sociology*, 26(1): 341-365.
- King, Z./Burke, S./Pemberton, J. (2005): The 'bounded' career: An empirical study of human capital, career mobility and employment outcomes in a mediated labour market. In: *Human Relations*, 58(8): 981-1007.
- Keller, B. (2008): Einführung in die Arbeitspolitik. Arbeitsbeziehungen und Arbeitsmarkt in sozialwissenschaftlicher Perspektive. München: Oldenburg.
- Klimecki, R./Gmür, N. (2001): Personalmanagement. Stuttgart: Lucius & Lucius.
- Lauterbach, W./Sacher, M. (2001): Erwerbseinstieg und erste Erwerbsjahre. In: *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 53(2): 258-282.
- Matusik, S. F./Hill, C. W. (1998): The utilization of contingent work, knowledge creation, and competitive advantage. In: *Academy of Management Review*, 23(4): 680-697.
- Oschmiansky, H./Oschmiansky, F. (2003): Erwerbsformen im Wandel: Integration oder Ausgrenzung durch atypische Beschäftigung? Berlin und die Bundesrepublik Deutschland im Vergleich. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Peiperl, M./Baruch, Y. (1997): Back to square zero: The post-corporate career. In: *Organization Dynamics*, 25(4): 7-22.
- Pfeffer, J./Baron, J. N. (1988): Taking workers back out: recent trends in the structuring of employment. In: *Research in Organizational Behavior*, 10: 257-303.
- Polivka, A. E./Nardone, T. (1989): On the definition of "contingent work". In: *Monthly Labor Review*, 112(12): 9-16.
- Quinlan, M./Bohle, P. (2004): Contingent Work and Occupational Safety. In: J. Barling/M. R. Frone (Eds.): *The Psychology of Workplace Safety*. Washington: American Psychological Association: 81-105.
- Rosenbaum, J. E. (1979): Tournament Mobility: Career Patterns in a Corporation. In: *Administrative Science Quarterly*, 24(2): 220-241.
- Rosenfeld, R. A. (1992): Job mobility and career processes. In: *Annual Review of Sociology*, 18(1): 39-61.
- Schein, E. H. (1971): The individual, the organization, and the career: A conceptual scheme. *The Journal of Applied Behavioral Science*, 7(4): 401-426.
- Spector, P. E. (1981): *Research Designs*. Newbury Park: Sage.
- Spence, A. M. (1974): *Market Signaling: Informational Transfer in Hiring and Related Screening Processes*. Cambridge: Harvard University Press.
- Spence, M. (1973): Job Market Signaling. In: *The Quarterly Journal of Economics*, 87(3): 355-374.
- Spence, M. (2002): Signaling in Retrospect and the Informational Structure of Markets. In: *The American Economic Review*, 92(3): 434-459.
- Torrington, D./Hall, L./Taylor S. (2008): *Human Resource Management*. Harlow: Prentice Hall.
- Sullivan, S. E. (1999): The Changing Nature of Careers: A Review and Research Agenda. In: *Journal of Management*, 25(3): 457-484.
- Valcour, M./Ladge, J. (2008): Family and career path characteristics as predictors of women's objective and subjective career success: Integration traditional and proteam career explanations. In: *Journal of Vocational Behavior*, 73: 300-309.
- Wanous, J. P./Hudy, M. J. (2001): Single-Item Reliability: A Replication and Extension. In: *Organizational Research Methods*, 4(4): 361-375.
- Wanous, J. P./Reichers, A. E./Hudy, M. J. (1997): Overall Job Satisfaction: How Good Are Single-Item Measures? In: *Journal of Applied Psychology*, 82(2): 247-252.