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# A Technical Career Path as Job Resource and as Predictor of Organizational Commitment

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## Abstract

The goal of this paper is to show the positive effects of a new developing technical career path for the organization and for employees. Therefore the Job Demands-Resources model (Bakker & Demerouti, 2007) was used. Specific job resources of the technical career path were investigated and job satisfaction was integrated into the model as a new outcome. The questionnaire data were gathered at a sample of high potentials from T-Systems, a German ICT-company. With Pearson's correlations and linear multiple regression analyses the data were analyzed. The results supported the general lines of the model. Two processes could clearly be distinguished: the motivational process starting with job resources and the health impairment process beginning at job demands. The new added element job satisfaction seemed to be an outcome of the motivational process, not of the energetic process. Development opportunities were the essential job resource for high potentials and correlated positively with organizational commitment and job satisfaction.

*Keywords:* Technical career path; Job demands-resources model; Burnout; Organizational commitment; Job satisfaction.

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## 1 Introduction

In positive psychology, researchers try to explain the positive states which make life better, happier, and healthier. It is a comparative new field in psychology that has flourished in the last decade (Seligman, Steen, Park, & Peterson, 2005). The time has come to bring together the old 'negative' psychology that concentrates on ill health with the newer 'positive' psychology focusing on human thriving (Hakanen, Schaufeli, & Ahola, 2008).

This investigation is based in the field of strategic human resource management (SHRM), "which is the process of linking the human resource function with the strategic objectives of the organization in order to improve performance" (Bratton, 2003). Thus, human resource (HR) policies and practices become linked with the strategic management process of the organization that, in turn leads to a HR strategy. This is supposed to add a sustainable competitive advantage to the organization and was found to have a positive influence on organizational and individual performance (Green, Wu, Whitten, & Medlin, 2006). The model used to test the added value of positive work characteristics is called job demands-resources model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) and is related to work psychology that focuses on how people do their work.

The job demands-resources model was used as theoretical base in this investigation. Karasek recognized early on in 1979 that mental strain could be reduced by special job resources without affecting the job demands that could plausibly be associated with organization output levels. The goal of this paper is to show the positive effects of the new developing technical career path for the organization and for employees. First, an introduction to the concerning issues resulting in the research hypotheses will be given. The methods of data gathering are described in the second part. The results of the analyses will be presented in the following section. Finally, the implications of the findings are discussed.

### 1.1 Technical Career Path ("*Fachkarriere*")

When you are a manager, it is clear which position you have to take to move up in the company. Your career path and the succession of the hierarchical positions are obvious. Typically, you are first a team leader, then a floorwalker, branch office manager etc., and you can finish in the managing board (Bohinc, 2008). This succession of positions is marked by an increase in salary, esteem, and power. In traditional organizations, when you want to get to the top you have to be a manager. This is a limited view on career development because the organization can lose good experts and gain mediocre executives (Bohinc, 2008). Not every expert is automatically a sound leader. It must be a main goal of a company to keep their high qualified specialists in expert positions, especially for organizations doing research, development, or marketing (Friedli, 2007). Secondly, not every specialist is willing to take on the responsibility of personnel and abandon the option of focusing on technical activities and

working in research projects (Hofmann, 2007). It would be more efficient to honor experts and use their expertise by offering them adequate professional growth opportunities, because the acquisition and development of new employees seems to involve a greater deal of expense than to commit existing employees to the company (Stock-Homburg, 2009).

Grzeda (1999) developed a series of propositions dealing with changes in managerial careers and noticed the change in “contemporary managerial career patterns in which blends of professional and entrepreneurial careers, skill development and skill marketing become the determinants of career success”. There is a trend to organize companies more and more horizontally due to slower economic growth and organizational change (Friedli, 2007). For this reason, there is a decrease in executive positions (Biehal, & Scheinecker, 2006; Bohinc, 2008; Malik, 2000; Thom, 2007). In 1992, Weiner, Remer, and Remer predicted that a logical consequence of “flatter” organizations is lateral rather than vertical mobility. Therefore big organizations have developed an alternative to the traditional management career: the technical career path, and the project career. The focus here is clearly on the first one (Friedli, 2007). It offers specialists, as opposed to the managers, opportunities for further development and acknowledgment. It is very important to offer the same material and immaterial promotions for specialists as offered for managers (Hofmann, 2007). Thus, specialists must become visible as experts within the organization without implicitly having personnel responsibility but can be just as acknowledged as the managers (Thom, 2007). A lot of companies have already so-called technical career paths (as IBM) and use them not only as an alternative hierarchical system but also for transferring knowledge within the organization (Borlinghaus, 2001).

Box 1. Description of the technical career path in this study.

Also within T-Systems, whose employees will be investigated in this study, a technical career path system has been implemented. Drawing on a global infrastructure of data centers and networks, T-Systems operates information and communication technology (ICT) systems for multinational corporations and public sector institutions. On this basis, Deutsche Telekom's corporate customers arm provides integrated solutions for the networked future of business and society. Deutsche Telekom is one of the world's leading telecommunications companies. Some 46,000 employees at T-Systems combine industry expertise and ICT innovations to add significant value to customers' core business all over the world. The corporate customers arm generated revenue of around EUR 9.3 billion in the 2008 financial year. The instrument of the technical career path at T-Systems is called “Go Ahead!” and consists of several elements. Competence profiles describe development paths for key positions of the organization containing five vertical development stages. The employees assess their development stage and, during the employee development discussion (EDD), they debate the result with their line manager and agree on development goals to reach within the next year. Qualification-programs (off-the-job, and on-the-job measures) help to realize these development goals. A special program is offered for high potentials and high performers within the company. The so-called Expert Career aims to reward their performance by awarding promotions without the responsibility of personnel but not exceeding technical guidance. The line manager identifies these high potentials and high performers during the EDD. Within the following management meetings, the nominated candidates are confirmed and then promoted to special programs. By this means, the employees are supported by their supervisor, get performance feedback, and development opportunities.

### 1.2 The Job Demands–Resources model

The model used in this investigation is called the Job Demands–Resources model (JD–R model; Bakker, & Demerouti, 2007; Demerouti et al., 2001) which divides work characteristics into job demands (e.g. workload) and job resources (e.g. personal growth, autonomy). *Job resources* refer to aspects of the job that are either/or: (1) functional in achieving work goals; (2) able to reduce job demands and the associated physiological and psychological costs; (3) capable of stimulating personal growth and development. They contain physical, psychological, social, or organizational factors. *Job demands* refer to the physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort and are consequently associated with certain physiological and/or psychological costs (Bakker, Demerouti, & Verbeke, 2004).

A proposition of the JD–R model is that high job demands may exhaust employees which could consequently lead to impairment of health (Bakker, Demerouti, & Euwema, 2005) and a reduction in in-role performance due to exhaustion (Bakker et al., 2004). Another consequence of high job demands could be cynicism which influences absence duration (Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003). On the other hand, a lack of job resources may reduce motivation (Bakker et al., 2005). Having few job resources can reduce extra-role performance due to disengagement (Bakker et al, 2004), drive up turnover intention (Schaufeli, & Bakker, 2004), and increase absence frequency (Bakker, Demerouti, Taris et al., 2003). Thus, these two types of work characteristics (demands and resources) evoke two different processes that lead once to impairment of health and otherwise to lack of motivation.

Karasek's demand-control model (DCM; 1979, 1982) attested that job resources (autonomy and social support) 'moderate' or 'buffer' the impact of job demands on stress reactions such as exhaustion, depression, absenteeism, pill consumption, and job dissatisfaction. Bakker et al. (2005) expanded this model by claiming that several *different* job resources (performance feedback, quality of the relationship with the supervisor etc.) can play the role of buffer for several *different* job demands, not only for work overload but also for emotional demands, physical demands, and work-home interference.

The beginning of the health impairment process leading to burnout was assumed to exist only in the human service sector (Maslach, & Schaufeli, 1993) but Demerouti et al. (2001) and Bakker, Demerouti, de Boer, & Schaufeli (2003) discovered that the model can be expanded to employees in different organizations confronted with different working environments.

The main components of the job demands-resources model will be explained in the following two sections.

### 1.2.1 *Burnout*

Maslach and Jackson (1986) defined burnout as a work-related stress syndrome that was originally observed among those who do 'people work'. Maslach, Jackson, and Leiter (1997) presume burnout as a syndrome of exhaustion, cynicism towards work, and reduced professional efficacy. Exhaustion refers to fatigue. Cynicism or depersonalization reflects a distant attitude towards one's work. Finally, professional efficacy encompasses aspects of occupational accomplishments (Schaufeli, & Bakker, 2004). Bakker, Demerouti, de Boer, and Schaufeli (2003) argue that exhaustion and cynicism are the core dimensions of burnout. For this reason, professional efficacy is excluded from this investigation. Exhaustion is presumed to be the result of high job demands and part of the health impairment process. On the contrary, cynicism is expected to be an outcome of lack of job resources and therefore part of the motivational process.

### 1.2.2 *Organizational Commitment and Job Satisfaction*

The JD-R model states further that high job resources have a positive effect on organizational commitment of the employee. Meyer and Allen (1991) considered commitment as a multidimensional concept made up of three components: affective, normative, and continuance commitment. Affective commitment refers to employees' emotional attachment to, identification with, and involvement in the organization. Normative commitment reflects a feeling of obligation to continue employment. Finally, continuance commitment refers to an awareness of the costs associated with leaving the organization or to the perceived number of employment alternatives and degree of sacrifice. Bakker, Demerouti, de Boer, and Schaufeli (2003) tested these three components of commitment within the job demands-resources model as moderators between job resources and absence frequency. All manifest variables loaded significantly on the intended latent factors, except normative commitment. Consequently, normative commitment has been omitted from this investigation while affective and continuance commitment remained.

Job satisfaction is defined as a positive emotional state resulting from work experience (Marks, Murray, Evans, Willig, Woodall, & Sykes, 2006). Chiu and Chen (2005) claimed that namely intrinsic job satisfaction is a mediator variable in the relationship between several job resources and organizational citizenship behavior. Thus, job satisfaction seems to have a connection with job characteristics. Schmidt (2007) detected a significant direct influence of affective commitment for job satisfaction. It is worth to test job satisfaction as an outcome element of the JD-R model. Job satisfaction and organization commitment have been associated with knowledge-worker retention, intrinsic motivation, improved customer relations and improved performance, as well as decreased incidences of burnout (Bell-Roundtree, 2004) and therefore are important job attitudes which can be influenced by human resources policies (Rayton, 2006).

### 1.3 The Present Study

There are different job demands and resources for every organization. This is the accomplishment of the job demands-resources model which expands the demand-control model developed by Karasek (1979) and the Effort-Reward Imbalance (ERI) model from Siegrist (1996). To find out which *job demands* are essential for any organization, explorative interviews with job incumbents from different layers of the organization are advised (Bakker, & Demerouti, 2007). Following an internship in the investigated organization in the human resources department for half a year it was possible to form a detailed picture of the issues playing a role within T-Systems, the organization this investigation took place. A substantial reorganization took place during this time which has just recently ended. T-Systems was split into two parts. One part merged with T-Home (another subcompany of 'Deutsche Telekom') while the other represents T-Systems, an independent company. The first job demand that was chosen is therefore *exposure to reorganization*. A lot of employees left the company because of personnel restructuring. That created *future job insecurity* for the employees. The same amount of work had to be done by a reduced number of people which lead to *work overload*, the last job demand included in this study.

*Job resources* were analyzed that are recognized by several authors as being important for many employees within different working environments and which are relevant in the context of T-Systems' technical career path. Hackman and Oldham (1975) consider feedback from agents and from the job itself as essential aspects belonging to the five core dimensions of job characteristics. Constructive feedback helps employees perform more effectively and improves the communication between supervisors and their employees (Bakker et al., 2005). In order to improve performance in the future, an employee needs to know what his or her weaknesses were in the past and how to correct them in the future (Cascio, & Aguinis, 2005). Employees get *performance feedback* from the competence profiles from which they can assess themselves through five developmental groups called expert groups and thereby recognize which competences they still lack within their group or, moreover, how they can achieve the next level. This is functional in achieving work goals. It is also the task of the line managers to give constructive feedback to their employees within the EDD. Social support is supposed to buffer the symptoms of negative task characteristics (Karasek, Triantis, & Chaudhry, 1982), whereby House and Wells (1978, in Karasek et al., 1982) find supervisory support to be more salient than co-worker support. Social support can, furthermore, help to achieve work goals (Bakker et al., 2005). *Supervisor support* can especially put demands in another perspective and help employees in coping with them. Thus, it helps in reducing job demands and the associated costs. Another aspect of job resources is to stimulate personal growth and development. At T-Systems, this is achieved through strategic promotional programs which are part of the technical career path system.

*Opportunities for professional development* are commonly said to be an intrinsic job resource and have powerful motivational effects (Bakker, Demerouti, Taris et al., 2003). The technical career path is supposed to have a positive influence on employees in the following ways.

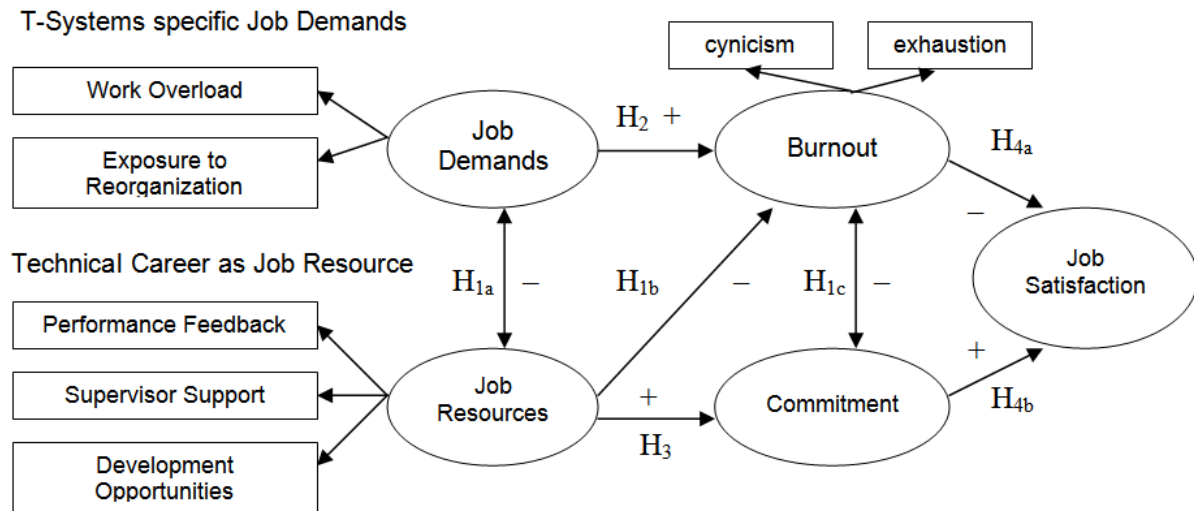


Fig. 1. The Job Demands–Resources Model Applied to T-Systems' Technical Career Path and with Job Satisfaction as an additional element (Hypotheses H<sub>1-4</sub>).

Cross-links exist between the health impairment and the technical career path driven processes:

*Hypothesis 1.*

- Job demands and job resources are negatively related.
- Job resources are negatively related to exhaustion.
- Commitment and burnout are negatively related.

Drawing on the main propositions of the JD-R model, it can be hypothesized that (see fig. 1):

*Hypothesis 2.*

In line with the health impairment process of the JD-R model, job demands are primarily and positively related to exhaustion and primarily and positively related to cynicism.

*Hypothesis 3.*

In line with the motivational process, technical career path specific job resources are primarily and positively related to commitment and primarily and negative related to cynicism.

Mattila (2006) detected a negative significant relationship between burnout and job satisfaction, and a positive significant correlation between job satisfaction and organizational



commitment in IT workers. Burnout and commitment are elements of the JD-R model. This model is robust with different national and occupational contexts (Llorens, Bakker, Schaufeli, & Salanova, 2006). From this a new element for the JD–R model could follow.

*Hypothesis 4.*

Job satisfaction will be negatively related with the two burnout dimensions and positively related with commitment.

In the JD-R model, job resources act by definition as buffers of burnout: job resources reduce job demands and the associated physiological and psychological costs (Bakker et al., 2004). In this investigation, the buffer hypothesis is tested for T-Systems specific job demands and specific job resources supported by the technical career path on the two core dimensions of burnout. This leads to the following:

*Hypothesis 5.*

Job resources (supervisor support, performance feedback, and professional development) will buffer the impact of high job demands (work overload, and exposure to reorganization) on burnout (cynicism and exhaustion).

## **2 Methods**

### *2.1 Participants & Procedure*

A questionnaire was distributed among all 112 participants of a program for high potentials of Systems Integration, a department of T-Systems, in Germany. High potentials are employees who are optimally set on their present function, but show competences of the next higher expert group level. During the promotion program, they get systematically prepared for a function in the next higher expert group. T-Systems has about 46,000 employees all over the world. On the basis of the literature and interviews with employees of T-Systems, a list of two job demands was compiled. With respect to the goals of the technical career path three job resources were identified. Employees were kindly requested to fill out the questionnaire, and to give it back to their trainer during the program. The confidentiality and anonymity of the answers were emphasized. A total of 72 employees filled out and returned the questionnaire to the trainers (response rate: 64.3 %). The sample included 64 males (88.9 %) and 8 females (11.1 %). Their mean age was 41.69 years (SD = 6.04) and mean organizational tenure was 11.60 years (SD = 5.55). All of them were experts with no leadership or just technical guidance employed as consulting managers (N = 18, 25.0 %), project managers (N = 24, 33.3 %), IT engineers (N = 11, 15.3 %), service delivery managers (N = 3, 4.2 %), or had mixed / double functions (N = 11, 15.3%). Five respondents did not state their function (6.9 %).

## 2.2 Measures

*Job demands.* Two job demands were included in the questionnaire. *Exposure to reorganization* was measured with a short self-developed scale. The scale included four items measured on a 4-point scale (1 = *totally disagree*, 4 = *totally agree*). Unfortunately, the scale did not prove to be reliable and was therefore excluded from further analyses. For example, an item was, "I have to adjust frequently to changes in my organization." *Work overload* was measured with a four-item scale on the basis of Karasek's Job Content Instrument (1984, 2008), including: "My work requires working very hard." (1 = *totally disagree*, 4 = *totally agree*). The final internal consistency of the job demands scale was not very high but sufficient with a Cronbach's  $\alpha$  of .61. One of the four items had to be deleted, "My work goals are not clearly." Nevertheless, it was decided, that the scale would be kept because the low reliability could be due to the translation into German. *Future job insecurity* was excluded from the model because of political reasons. In the context of restructuring and a recently finished compensation program it was abandoned to ask these questions.

*Job resources.* Three job resources were included in the present research. *Performance feedback* was assessed with a three-item scale developed by Bakker, Demerouti, Taris, Schaufeli, and Schreurs (2003), for example, receiving sufficient information about work goals (1 = *never*, 5 = *always*). Cronbach's  $\alpha$  was .72. *Possibilities for professional development* were measured with a four-item scale developed by Bakker, Demerouti, Taris et al. (2003) ranging from 1 (*never*) to 5 (*always*). An example was, "My work offers me the opportunity to learn new things." Additionally, two items were self-constructed to shape the concrete situation. A sample item was, "The competence profiles show me my development opportunities." (Cronbach's  $\alpha$  = .75). *Supervisor support* was assessed with a scale developed by Peeters, Buunk, & Schaufeli (1995), including: "My supervisor pays attention for my feelings and problems." (1 = *never*, 5 = *always*). It consisted of four items. The internal consistency was high with a Cronbach's  $\alpha$  of .85.

All scores were coded such that higher scores referred to higher job demands and more job resources, respectively.

*Burnout* was assessed using the Maslach Burnout Inventory–General Survey (MBI–GS; Schaufeli, Leiter, Maslach, and Jackson, 1996). This burnout scale includes more generic dimensions which are not limited to the human service sector. The dimensions used are exhaustion, and cynicism (Schaufeli et al., 1996). *Exhaustion* was measured with a German five-item scale, including "I feel burned out from my work." translated by Klattenbach and Demerouti (2002). Cronbach's  $\alpha$  was .73. *Cynicism* was measured with four items. An exemplary item was, "I have become more cynical about whether my work contributes anything." Participants were asked to indicate the extent to which they agreed with each

statement using a 4-point Likert-scale ranging from 1 (*totally disagree*) to 4 (*totally agree*). After deleting one item the internal consistency was sufficient for the cynicism scale: Cronbach's  $\alpha = .67$ . Also here the elimination of one item did not lead to the exclusion of the whole scale due to the translation which could have caused the low reliability. High scores indicated a high degree of burnout symptoms.

*Commitment* was measured with a short scale of five items developed by Klattenbach and Demerouti (2002). Affective commitment was measured with three items, including "I tell my friends that it is great to work for my organization." Continuance commitment was assessed with two items, "My organization I work for is the best I can imagine." The five items together formed the organizational commitment scale: Cronbach's  $\alpha = .72$  (after removing one item). For the same reasons as with the workload and cynicism scale the commitment scale was further used in this investigation. The answer scale ranged from 1 (*totally disagree*) to 4 (*totally agree*). High scores on the scale were indicative of organizational commitment.

*Work satisfaction* was measured with just one general item, "How satisfied are you with your general work situation?" (1 = *totally satisfied*, 5 = *totally not satisfied*). Wanous, Reichers, and Hudy (1997) showed in their meta-analysis that single-item measures are highly correlated with multi-item job satisfaction scales. This is a valid and economical measure of general job satisfaction (de Jonge, Dollard, Dormann, le Blanc, and Houtman, 2000). The scale was recoded so that high scores point to high job satisfaction.

### 2.3 Descriptive Statistics

Table 1 shows the means, standard deviations, internal consistencies (Cronbach's alphas), and correlations among all variables. The reliability of workload, performance feedback, supervisor support, development opportunities, exhaustion, cynicism, and commitment was good. The internal consistencies of workload and cynicism were not very high with .61 and .67 but sufficient. *Exposure to reorganization* had no reliability and therefore had to be excluded from further analyses. Respectively one item of cynicism, workload, and commitment had to be deleted to guarantee a high enough reliability. One reason why valid scales like these three did not have enough reliability could be due to the German translation. The correlations were in the right direction even if not every correlation was on a significant level. The relation between performance feedback and exhaustion was the only correlation in which the direction was opposite the expectation, although the positive direction of correlation was not significant.

## 2.4 Analyses

The data were analyzed with the statistical program SPSS 17.0. The distribution of all variables were examined by taking a closer look at histograms, boxplots, skewness, standard error of skewness, kurtosis, and the standard error of kurtosis to detect the degree of skew and kurtosis of all variables (Miles, & Shevlin, 2007). The variable 'supervisor support' had a moderate degree of skew (-0.597); this was significant, as 0.597 is greater than two times the standard error of skewness ( $2 * 0.283 = 0.566$ ), but probably not high enough to concern us. Miles and Shevlin (2007) cautiously suggest that if the skewness statistic is less than 1.0, there should be little problem. The skewness of the variable cynicism was slightly bigger than 1.0 with 1.128 and with a standard error of 0.289 also significant. There should be awareness that it might be having an effect on the parameter estimates, but because it was less than 2.0 it is probably not problematic (Miles, & Shevlin, 2007). The data were normally distributed with regard to kurtosis. Although the variables supervisor support and cynicism were not complete normally distributed the skewness was not high enough to bother us. No outliers were deleted. The outliers were not extreme and because of the small sample, all of the data was modeled.

The five hypotheses were tested with six different multiple regression analyses. Hypotheses 1 a, b, and c were tested with Pearson's correlations. Hypothesis 2 was tested with two multiple regression analyses because the effect of job demands was tested for each dimension of burnout (exhaustion and cynicism) with one regression analysis respectively. Also hypotheses 3 was checked with two multiple regression analysis, one tested the effect of job resources on commitment, while the other tested the effect of job resources on cynicism. Hypothesis 4a was tested with two multiple regression analyses and hypothesis 4b with on multiple regression analysis. The last hypothesis could not be tested because no significant relationship between job demands and job resources could be found.

Table 1

Means (M), standard deviations (SD), internal consistencies (Cronbach's alphas on the diagonal), and correlations (r) among variables, N = 72

Variable	Range	M	SD	<i>r</i>									
				1	2	3	4	5	6	7	8		
1 Job Satisfaction	(1-5)	3.97	.56										
2 Workload	(1-4)	2.83	.56	-.06	(.61)								
3 Performance Feedback	(1-5)	3.48	.82	.22	-.06	(.72)							
4 Supervisor Support	(1-5)	3.86	.86	.32**	-.04	.48**	(.85)						
5 Development Opportunities	(1-5)	3.53	.61	.40**	-.11	.30*	.49**	(.75)					
6 Exhaustion	(1-4)	2.12	.52	-.30**	.38**	.08	-.00	-.03	(.73)				
7 Cynicism	(1-4)	1.42	.48	-.37**	.12	-.08	-.28*	-.28*	.34**	(.67)			
8 Commitment	(1-4)	2.74	.54	.40**	.18	.30*	.30**	.41**	-.11	-.17	(.72)		

\* p < .05, \*\* p < .01

### 3 Results

Hypothesis 1a presumed that job demands and job resources are negatively related. Table 1 gives information for these correlations. All three job resources were negatively correlated with the only job demand workload (performance feedback  $-.06$ , supervisor support  $-.04$ , and development opportunities  $-.11$ ). These are very weak and not significant correlations. Therefore hypothesis 1a had to be rejected. A negative correlation between exhaustion and the three job resources was presumed in hypothesis 1b. This hypothesis had to be rejected as well. No significant correlations could be found neither for performance feedback ( $.08$ ), supervisor support ( $-.00$ ) nor development opportunities ( $-.04$ ). Hypothesis 1c stated that commitment and burnout are negatively related. No significant correlation could be detected neither between commitment and exhaustion ( $-.11$ ) nor between commitment and cynicism ( $-.17$ ). Therefore the hypothesis could not be confirmed with the data. In summary, hypothesis 1 and its sub hypotheses had to be rejected.

Besides the examination of the hypotheses, some other correlations from table 1 are noteworthy. First, *workload*, the only job demand, had a strong, significant, and positive correlation with exhaustion and a positive but not significant correlation with cynicism, the other burnout component. Second, the three components of job resources had a significant positive relation with commitment. Third, job resources were positively and significantly related among each other. In the same way the burnout components were related among one another. Fourth, supervisor support and development opportunities were significantly and negatively related to cynicism. No significant correlation could be found between performance feedback and cynicism. Fifth, the variable *workload* was negatively correlated with commitment but this relationship was not significant. Finally, job satisfaction was significantly and positively related to supervisor support, development opportunities, and commitment. Job satisfaction was significantly and negatively related to exhaustion and cynicism. *Workload* and performance feedback were not significantly bonded to job satisfaction.

Hypothesis 2 stated that job demands are positively related to exhaustion and positively related to cynicism. The only remaining job demand was *workload*, due to the fact that the scale *exposure to reorganization* had not been found reliable. Two multiple regression analyses with two steps each were used to test this hypothesis. Exhaustion was the dependent variable in the first multiple regression analysis. The three variables *sex*, *age* and organizational *tenure* were entered in the first step to control their potential influence on the relationship under construction. In step 2, the predictor *workload* was added to examine its unique main effect (table 2).

Table 2

*The influence of job demand 'workload' on exhaustion (multiple regression analysis)*

	step 1	step 2
	Beta	Beta
sex	.189	.197
age	-.010	.002
tenure	-.139	-.139
workload		.363***
R <sup>2</sup>	.062	.194
F	1.351	3.609*
ΔR <sup>2</sup>		.132
F change		9.798***

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .005$ . ENTER:  $F(4, 60) = 3.609$ ,  $p = .011$ . Adjusted  $R^2 = .140$ .

Workload was a significant predictor of exhaustion when controlled for age, sex, and organizational tenure which seemed to have no effect on exhaustion. The variable *workload* added 13.2% of unique explained variance in exhaustion.

Cynicism was the dependent variable in the second regression analyses. Here, the three control variables (*sex*, *age*, and *tenure*) were also entered first. In the next step the predictor *workload* was added (table 3). Workload was not a significant predictor of cynicism ( $p = .426$ ). In the tested model, *sex* was the only variable that had significant influence on cynicism. Men were significantly more cynical ( $M = 1.47$ ,  $SD = .49$ ) than women ( $M = 1.08$ ,  $SD = .15$ ). Using the enter method, only a marginal significant model emerged for the control variables. The variable *workload* added no value to the model.

Table 3

*The influence of job demand 'workload' on cynicism (multiple regression analysis)*

	step 1	step 2
	Beta	Beta
sex	.271*	.273*
age	.041	.036
tenure	-.145	-.142
workload		.097
R <sup>2</sup>	.096	.106
F	2.197	1.799
ΔR <sup>2</sup>		.009
F change		.624

\* $p < .05$ . ENTER:  $F(4, 61) = 1.799$ ,  $p = .141$ . Adjusted  $R^2 = .047$ .

Hypothesis 2 could be partially confirmed. Workload was a significant predictor of exhaustion but not of cynicism.

The third prediction was that job resources (performance feedback, supervisor support, and development opportunities) are predictors of both commitment and cynicism. This hypothesis was tested with two multiple regression analyses done in the same manner as the antecedent analyses. In the first regression analysis, the control variables (sex, age, and organizational *tenure*) were entered and thereafter the three job resources were entered as predictors. Organizational commitment was the dependent variable. Neither sex nor age nor organizational tenure had any significant effect on commitment. Performance feedback and supervisor support also seemed to have no impact on the prediction of commitment ( $p = .158$  and  $p = .877$ ), but a significant effect of development opportunities on commitment could be found. The variable 'development opportunities' was the only job resource that had significant influence on commitment (table 4). The Adjusted  $R^2$  value of .142 indicates that nearly fifteen percent of the variance in commitment were predicted by the development opportunities of the employee.

Table 4

*The influence of job resources on commitment (multiple regression analysis)*

	step 1	step 2
	Beta	Beta
sex	.092	.032
age	-.125	-.128
tenure	.009	-.041
performance feedback		.200
supervisor support		.024
development opportunities		.331*
$R^2$	.027	.225
F	.549	2.713*
$\Delta R^2$		.198
F change		4.772**

\* $p < .05$ , \*\* $p < .01$ . ENTER:  $F(6, 56) = 2.713$ ,  $p = .022$ . Adjusted  $R^2 = .142$ .

In the second regression analysis the three control variables were entered into the equation. In the second step the three job resources were added. Here cynicism was the dependent variable of the model. In the first step neither age nor organizational tenure had an effect on cynicism. However, sex was a significant predictor of cynicism in step 1 as well as in step 2. This is in line with the results from hypothesis 2, but this time development opportunities had a significant influence on cynicism (table 5). The Adjusted  $R^2$  value of .131 indicates that 13 % of the variability in cynicism were predicted by the development opportunities of the employee.

Due to the results of the multiple regression analyses, only development opportunities were a significant predictor of commitment and of cynicism. Hypothesis 3 could partially be



confirmed. Not all job resources seemed to predict commitment and cynicism, but opportunities for professional development had a significant effect on both.

Table 5  
*The influence of job resources on cynicism (multiple regression analysis)*

	step 1	step 2
	Beta	Beta
sex	.264*	.283*
age	.038	.019
tenure	-.131	-.084
performance feedback		.057
supervisor support		-.128
development opportunities		-.291*
R <sup>2</sup>	.089	.210
F	2.043	2.661*
ΔR <sup>2</sup>		.122
F change		3.077*

\* $p < .05$ . ENTER:  $F(6, 60) = 2.661$ ,  $p = .023$ . Adjusted  $R^2 = .131$ .

Hypothesis 4a, job satisfaction is negatively related to the two burnout components, was tested with two multiple regression analysis with job satisfaction as dependent variable. In the first equation, the control variables (sex, age, and organizational tenure) were entered in step one. In the next step workload was added and in the last step exhaustion. This sequence was chosen because workload is the only predictor of exhaustion in this model. Table 6 shows the results of the analysis. None of the control variables had an effect on job satisfaction. Also workload was no predictor of satisfaction felt at work. Although exhaustion was a significant predictor of job satisfaction, the overall model did not reach the significant level of .05 with  $p = .123$ . Exhaustion added 7.1 % of unique variance to job satisfaction. Therefore, the first hypothesis 4a had to be rejected.

Table 6  
*The influence of job demand 'workload' and exhaustion on job satisfaction (multiple regression analysis)*

	step 1	step2	step 3
	Beta	Beta	Beta
sex	.014	.012	.070
age	-.074	-.076	-.076
tenure	.263	.263	.222
workload		-.082	.026
exhaustion			-.296*
R <sup>2</sup>	.059	.063	.134
F	1.215	1.010	1.821
ΔR <sup>2</sup>		.007	.071
F change		.429	4.810*

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .005$ . ENTER:  $F(5, 59) = 1.821$ ,  $p = .123$ . Adjusted  $R^2 = .060$ .

In the second equation, testing hypothesis 4a, the control variables were entered first. Then the three job resources were added into the equation, followed by cynicism in step 3. In the first step, neither sex nor age was a significant predictor of job satisfaction, although organizational tenure seemed to have significant impact. This effect disappeared in step 2. Here just development opportunities predicted job satisfaction. This effect was not consistent about the next step. In the last step cynicism was the only significant predictor of job satisfaction (table 7).

Cynicism had a mediating effect. The significant effect of development opportunities on job satisfaction disappeared when controlled for cynicism. Again, development opportunities were the only job resource that had a significant effect. The hypothesis that cynicism is a significant predictor of job satisfaction could be confirmed. The Adjusted  $R^2$  value of .207 indicates that more than one fifth of the variability in job satisfaction is predicted by this model.

Table 7

*The influence of job resources and cynicism on job satisfaction (multiple regression analysis)*

	step 1	step2	step 3
	Beta	Beta	Beta
sex	-.007	-.045	.027
age	-.113	-.112	-.107
tenure	.294*	.253	.231
performance feedback		.070	.084
supervisor support		.141	.108
development opportunities		.296*	.223
cynicism			-.255*
$R^2$	.069	.241	.293
F	1.528	3.125*	3.428***
$\Delta R^2$		.172	.051
F change		4.466**	4.222*

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .005$ . ENTER:  $F(7, 58) = 3.428$ ,  $p = .004$ . Adjusted  $R^2 = .207$ .

Hypothesis 4b was tested with one multiple regression analysis with job satisfaction as a dependent variable. In step one the control variables (sex, age, and organizational tenure) were entered. In the next step the three job resources were added into the equation, followed by commitment in step 3. None of the control variables had an effect on job satisfaction in step 1 and step 2. In the last step, however, organizational tenure had an effect on job satisfaction. There probably exists a correlation between organizational tenure and the predictor commitment which was entered in step 3. Further, a mediator-effect could be observed. Opportunities for professional development were a significant predictor for job satisfaction in step 2. Development opportunities also had a significant correlation with commitment as seen in table 4. The first effect disappeared if the correlation was controlled

for commitment. Thus, commitment was a mediator in the relationship between development opportunities and job satisfaction. The hypothesized prediction that commitment is a predictor of job satisfaction could be confirmed even if controlled for sex, age, organizational tenure, and job resources (table 8). The Adjusted R<sup>2</sup> value of .215 indicates that more than one fifth of the variability in job satisfaction was predicted by this model.

Table 8

*The influence of job resources and commitment on job satisfaction (multiple regression analysis)*

	step 1	step 2	step3
	Beta	Beta	Beta
sex	.074	.041	.023
age	-.091	-.085	-.071
tenure	.269	.230	.256*
performance feedback		.073	.008
supervisor support		.144	.129
development opportunities		.290*	.203
commitment			.293*
R <sup>2</sup>	.064	.239	.305
F	1.311	2.884*	3.390**
ΔR <sup>2</sup>		.176	.066
F change		4.237**	5.132*

\* $p < .05$ , \*\* $p < .01$ . ENTER:  $F(7, 54) = 3.390$ ,  $p = .005$ . Adjusted R<sup>2</sup> = .215.

To summarize, hypothesis 4 could partially be confirmed. Cynicism was negatively related with job satisfaction while commitment was positively related. No significant model could be found for exhaustion and job satisfaction, although the coefficient of exhaustion on job satisfaction was significant.

The fifth and last prediction assumed that job resources (supervisor support, performance feedback, and professional development) would buffer the positive impact of high job demands (work overload, and exposure to reorganization) on burnout (cynicism and exhaustion). Hypothesis 6 could not be tested because there was no significant relationship between job demands and job resources (hypothesis 1a).

In summary, the following research model remains (figure 2): The health impairment process could be demonstrated starting at job demands and leading to exhaustion. Moreover, the motivational process starting at technical career path specific job resources could be confirmed through the significant relationship between cynicism and commitment. The new added element of job satisfaction had a significant negative correlation with cynicism and a significant positive relation with commitment. None of the cross-links could be confirmed with the data.

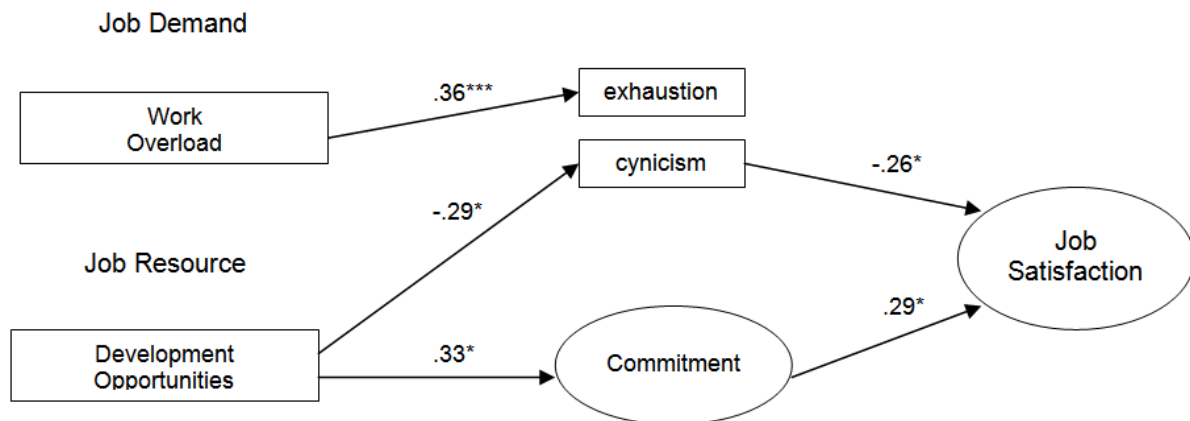


Fig. 2. The Job Demands–Resources Model Applied to T-Systems' technical career path with significant results. *Note:* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .005$ .

## 4 Discussion

This investigation is aimed at showing the effects of a technical career path and expanding the JD-R model – which divides work characteristics in job resources and job demands – with the outcome job satisfaction. Using a questionnaire completed by a sample of high potentials of the investigated organization, results provided insight into the JD-R model and the technical career path in three ways. First, a positive effect of development opportunities on commitment and on job satisfaction could be identified, and a negative effect of development opportunities on cynicism. Development opportunities seemed to be the most essential element of T-Systems' technical career path. Second, the independent character of the health impairment and motivational processes could be supported. Third, job satisfaction seemed to be an outcome of the motivational process not of the health impairment process.

### 4.1 Differential Effects of Job Demands and Resources – the Two Processes

In line with the propositions of the JD-R model, job demands were primarily and positively related to exhaustion, whereas job resources were primarily and negatively related to cynicism (Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003) and primarily and positively related to organizational commitment (Bakker, Demerouti, de Boer, & Schaufeli, 2003).

The motivational process which starts with job resources could be confirmed among the participants of this investigation (hypothesis 3). Opportunities for professional development had a significant, positive, and direct effect on organizational commitment and a significant, negative, and direct effect on cynicism. The first path from job resources to commitment is in line with results of the studies of Llorens, Bakker, Schaufeli, and Salanova (2006) and of

Bakker, Demerouti, de Boer, and Schaufeli (2003). Llorens et al. (2006) found that work engagement can play a mediator role between job resources and organizational commitment which were about the size of the direct effect. These findings point out that organizational commitment is both a direct outcome of job resources and an outcome of job resources partially mediated by work engagement. The second path from job resources to cynicism confirmed that the burnout component cynicism is a part of the motivational process (Bakker & Demerouti, 2007). Important to notice particularly for organizations is the outcome of excellent performance as a result of the motivational driven process (Bakker & Demerouti, 2007). The result was confirmed by Bakker, van Emmerik, and van Riet's (2008) study which states that cynicism mediates the relationship between job resources and objective team effectiveness and between job resources and financial performance (van Riet & Bakker, 1998). An interesting finding was that just one job resource had significant effect on cynicism, commitment, and job satisfaction. Opportunities for professional development seemed to be the most important job resource in this sample of high potentials. Although the bivariate correlation between supervisor support and cynicism, between performance feedback and commitment, and between supervisor support and commitment is reliably different from zero (table 1), the relationship seemed to be mediated by, or redundant to the relationship between commitment and cynicism respectively and development opportunities as an independent variable. This could mean, for instance, that the relationship between supervisor support and commitment of the employee to the organization is mediated by opportunities for professional development. Another explanation could be that employees with high potential are accustomed to excellent feedback and sufficient support from their supervisors or it could be that these employees do not need much support due to their independence. For that reason, development opportunities provide a unique challenge. The other two job resources (performance feedback and supervisor support) have been found to be essential job resources for many populations, e.g. Dutch home care employees (Xanthopoulou, Bakker, Dollard, Demerouti, Schaufeli, Taris, & Schreurs, 2007). They seemed not to be for German high potentials working for a large ICT-company. Also restriction to range could have a share in the variability of the scores of supervisor support and performance feedback. Then the correlation is likely to be misleadingly low (Grimm, 1993). High potentials are an important target group for managers and get a lot of attention anyway. Surely, there is more investigation needed to determine why these two job resources did not succeed in this special sample.

The health impairment process could be confirmed within this study (hypothesis 2). In accord with the results of Xanthopoulou, Bakker, Dollard et al.'s (2007) study, workload was a significant predictor of exhaustion. In the investigation of Bakker, Demerouti, de Boer, and Schaufeli (2003) both burnout components were related to job demands. Cynicism was clearly part of the motivational process in this study. However, there exists evidence that it is

also part of the energetic process. A possible explanation of this phenomenon could be the causal relationship between exhaustion and cynicism. Bakker, Demerouti, Taris, Schaufeli, and Schreurs (2003) explained that physical and emotional demands of home care employees may influence employees' attitudes toward their work (depersonalization) as they attempt to gain mental distance from their work and clients as a way of coping with their exhaustion. Bakker, Schaufeli, Sixma, Bosveld, and van Dierendonck (2000) support this cause with a longitudinal study among general practitioners. Apparently, in the examined sample of high potentials this indirect effect of job demands on cynicism via exhaustion was not strong enough to be observed. Perhaps the burnout symptoms among the employees were not in full effect.

#### *4.2 Other Relationships in the JD-R Model*

A somewhat unexpected finding was that none of the cross-links between the motivational and the energetic processes could be confirmed within the sample. Hypothesis 1 had to be rejected completely. The buffer hypothesis that job resources buffer the impact of job demands on burnout which Bakker, Demerouti, and Euwema (2005) and others detected, could not be replicated in this investigation. In the study of Xanthopoulou, Bakker, Dollard et al. (2007) social support and opportunities for development buffered the relationship between workload and cynicism. How can the non-existence of these cross-links be explained? One reason for the results of this investigation could be that just one reliable job demand and one significant job resource were used. However, the definition of job resources as potentially able to reduce job demands should be checked critically.

None of the correlations between job resources and exhaustion were significant. The relation between performance feedback and exhaustion was the only correlation of which the direction was opposite the expectation (table 1), although the positive direction of correlation is very weak and not significant. A possible explanation of this connection is that negative performance feedback can cause short-term stress symptoms because behavior has to be changed. In the study of Van den Broeck, Vansteenkiste, De Witte, and Lens (2008) a significant relationship between job resources (task autonomy, positive feedback, and skill utilization) and exhaustion could be found. Satisfaction of basic needs such as autonomy, belonging, and competence fully accounted for the relationship with exhaustion. Xanthopoulou, Bakker, Demerouti, and Schaufeli (2007) found another mediator between the significant relationship of job resources (autonomy, social support, supervisory coaching, and professional development) and exhaustion: personal resources. Thus, we see that the relationship between job resources and exhaustion is not that simple. There are at least two mediators which could form a sequence, or operate in parallel. Future studies should focus on the complex connection of job resources with exhaustion.

Burnout and commitment are not related to each other in this investigation supported by the results of Hakanen, Schaufeli, and Ahola (2008). However, Schmidt (2007) detected a buffer effect of organizational commitment on the consequences of high stress. These consequences are the two burnout dimensions exhaustion and depersonalization. Affective committed employees may suffer less from high work stress because they feel a sense of belonging to the organization and therefore perceive stress as less threatening.

The results of the present investigation affirm the independent character of the two processes of the job demands-resources model.

#### *4.3 Job Satisfaction*

The new element job satisfaction which was added as an outcome to the model (hypothesis 4) had significant correlations with cynicism and commitment. No significant model of exhaustion as predictor of job satisfaction could be found. That is contrary to the results of Wolpin, Burke, and Greenglass (1991) which provided support for reduced job satisfaction as an attitudinal reaction to exhaustion and depersonalization. Negative work characteristics were associated with increased burnout, which in turn resulted in decreased job satisfaction. When the longitudinal design was used, psychological burnout appeared to have a causal relationship to job satisfaction, not vice versa. Perhaps the causal relationship between exhaustion and depersonalization could explain these ambivalent results. Exhaustion had a strong positive relationship with cynicism which caused an indirect influence on job satisfaction but not a direct one. Another explanation could be the high level of commitment of the sample as stress did not change job displeasure for highly committed employees (Begley & Czajka, 1993). For those less committed, stress increased job displeasure. In sum, job satisfaction was found to be an element of the motivational process but not of the health impairment process.

#### *4.4 The Technical Career Path*

With respect to T-Systems' technical career path the results support the positive effects of a technical career path for high potentials. In particular systematic opportunities for professional development were a unique source for decreasing cynicism and increasing commitment and thereby also increasing job satisfaction. This is in line with the negative propositions of Weiner et al. (1992) who predicted a loss of motivation and subsequent decline in productivity of talented employees when no promotion could be given to them. Promotion in the form of development opportunities seemed to be an effective way to prevent employees from cynicism and reinforce their commitment to the organization. Thom (2007) claimed that employees cannot be bonded to an organization. The only way to keep them is to offer them appeals to stay. Employees are always able to go, but must be happy to stay

(Thom, 2007). This could be managed by offering them enough and appropriate opportunities for professional development.

The Peter Principle is the principle that “in a hierarchy every employee tends to rise to his level of incompetence” (Peter & Hull, 1969). People get promoted when they are competently working. The new post often involves tasks which employees have not been trained in. So they get a little incompetent if they do not consolidate their position. This state is rising with every new higher position. That is a humorous but also tragic principle that reveals the incompetence of many organizations to create adequate promotion opportunities for highly qualified and talented employees. T-Systems maps development paths for its employees with competence profiles and offers appropriate promotion programs (Förster & Bohinc, 2009). Not only technical and methodological knowledge is trained in such programs. Social competence is also needed as well as being able to work in interdisciplinary teams for professional advancement (Kunz, 2004). High potentials get the opportunity for fast career advancement. Thus, with the right professional promotion programs the Peter Principle is prevented at T-Systems.

There is also a financial advantage of a technical career path: Only necessary promotion programs take place and competences of employees become visible also for clients (Förster & Bohinc, 2009). Financial performance is an outcome of the motivational process (Riet & Bakker, 2004) and therefore controllable with job resources and the variety of promotional programs.

#### *4.5 Limitations*

Limitations of this study should be noted. The main limitation is certainly the cross-sectional design of the investigation which allows no causal implications. However, a lot of studies provided evidence that work characteristics (diverse job demands and job resources) are antecedent to burnout (Schaufeli & Enzmann, 1998), other health outcomes (Buunk, De Jonge, Ybeme, & Wolff, 1998), organizational commitment (Hakanen, Schaufeli, & Ahola, 2008), and job satisfaction (De Lange, Taris, Kompier, Houtman, Bongers, 2004).

A second limitation is the collection of data with self-report questionnaires making results contaminated by common method variance. But Spector (1994, 2006) argued that common method bias is often overstated.

Another weakness of this investigation is that respectively one item from the scales cynicism, commitment, and workload had to be deleted. A reason for the low reliability could be the German translation. In future research the translation into the German language has to be investigated again.

Finally, the sample had no large size (N = 72). Therefore, there was chosen for a pairwise exclusion of missing data which means that statistics are based on cases with no missing



values for any variable used. Thus, the dataset varies slightly from analysis to analysis. This led to some confounding results in tables 3 and 5, and also in tables 6, 7, and 8. Tables 3 and 5, both had cynicism as dependent variable. The coefficients of the control variables in step 1 should be the same for both analyses. But because of pairwise exclusion of missing data the coefficients differ slightly from each other (.271/.264, .041/.038, -.145/-.131). More extreme were the results for the control variables in tables 6, 7, and 8 with job satisfaction as dependent variable (-.007/.014/.074, -.113/-.074/-.091, .294/.263/.269). In step 1, the coefficient of organizational tenure on job satisfaction was significant once (table 7;  $p < .05$ ), but not in the other two analyses. Therefore the influence of organizational tenure should be treated with caution. However, according to Miles and Shevlin's charts (2007) generated by using GPower (Faul, & Erdfelder, 1992) a sample size of  $N = 55$  is sufficient when handling ten predictors, an alpha of 0.05, a power of 0.80, and a large effect size. In summary, the estimates for the model are accurate and potential problems arising from small sample sizes are not a major issue in the present study.

#### *4.6 Implications for Practice and Research*

Within this study, the two processes of the JD-R model were supported. The specific chosen job resources supported the positive influence of T-Systems' technical career path for high potentials. The technical career path is a serious alternative hierarchical system opposite the managerial career. Despite limitations, the present study may have implications. Efforts by Human Resource Management to give high potentials opportunities for professional development are very fruitful and should be continued or even extended. This is a way to increase employee commitment and to protect the employees from burnout via reducing cynicism. This is a way to optimize the employees' environment without changing the workload which may be difficult to realize in many cases. The promotion program for high potentials was a success and has to be continued. These interventions may lead to satisfaction at work.

The study emphasizes the importance of a technical career path. To test the buffer hypothesis that job resources could buffer the positive impact of high job demands on burnout, more job demands need to be investigated. In times where a lot of organizational restructuring takes place a reliable scale to measure this construct has to be developed. Moreover, a longitudinal research with job satisfaction as an outcome is needed to provide the causal relationship assumed in this investigation.

## **5 Conclusion**

The accuracy of the model could be confirmed in this study with a new important sample, with high potentials, and be completed with a new element, job satisfaction. The advantages

of a technical career path in matters of organizational commitment and job satisfaction could be demonstrated by the data. Opportunities for professional development were the most essential job resource for high potentials. Job satisfaction seemed to be part of the motivational but not of the health impairment process.

In sum, Human Resource Management can have a lot of influence on increasing organizational commitment and job satisfaction of high potentials through offering enough and appropriate promotion programs. Cynicism can also be decreased through that activity. Human Resource Management can make an important contribution to increase job pleasure.

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## **Attachment**

Questionnaire (see next pages)

# Fragebogen

## Expert Career



Fakultät für Sozialwissenschaften  
Arbeits- & Organisationspsychologie  
Universität Utrecht, Niederlande  
Helena Wenninger & Phil Heiligers

T-Systems Enterprise Services GmbH  
System Integration  
Resource Management & Service Agency  
Qualifizierungsmanagement  
Petra Twisterling

T-Systems Enterprise Services GmbH  
Human Resources Development  
Projektleiter Go Ahead!  
Dr. Tomas Bohinc  
2009



Sehr geehrte Teilnehmerin, sehr geehrter Teilnehmer,

im Rahmen meiner Masterarbeit soll der vorliegende Fragebogen Ihre Arbeitskriterien und die damit verbundene Zufriedenheit erfassen. Hierbei ist uns vor allem *Ihre persönliche Ansicht* wichtig. Es gibt daher keine richtigen oder falschen Antworten. In den meisten Fällen müssen Sie eine für Sie zutreffende Antwort ankreuzen.

Diese Befragung erfolgt anonym. Entsprechend dem Datenschutzgesetz müssen wir Ihre Einwilligung zur Speicherung und Verarbeitung der Daten einholen. Da wir Sie nicht um eine Unterschrift bitten können, erklären Sie sich mit der Teilnahme an der Befragung und der Rückgabe des ausgefüllten Fragebogens damit einverstanden, dass die Daten Ihres Fragebogens elektronisch gespeichert und zum Zweck der wissenschaftlichen Auswertung durch uns verarbeitet werden. Selbstverständlich werden alle Angaben vertraulich behandelt; niemand außer uns wird einen ausgefüllten Fragebogen zu Gesicht bekommen oder Zugriff auf diese Daten haben!

Am Ende des Fragebogens haben Sie die Möglichkeit, eventuelle Bemerkungen oder Anregungen zu notieren. Sollten Sie an den Ergebnissen dieser Untersuchung interessiert sein, schreiben Sie uns bitte eine kurze Mail. Wir werden Ihnen dann gerne einen Bericht zusenden, sobald die Ergebnisse ausgewertet sind. Auch für anderweitige Rückfragen stehen wir Ihnen unter folgender E-mail-Adresse gerne zur Verfügung:

*H.E.Wenninger@students.uu.nl*

Für Ihre Mitarbeit und Hilfe möchten wir Ihnen schon vorab herzlich danken!

Mit freundlichen Grüßen

Helena Wenninger, Petra Twisterling und Dr. Tomas Bohinc

### Zuerst möchten wir gerne etwas über Ihre Person und Ihre Tätigkeit im allgemeinen erfahren...

1  weiblich  männlich **Sie sind...**

.

2 **Wie alt sind Sie?** \_\_\_\_\_ Jahre

.

3 **Welche Berufsausbildung haben Sie?**

.

\_\_\_\_\_  
(hier ist auch ein abgeschlossenes Studium gemeint)

4 **In welcher Schlüsselfunktion sind Sie angestellt?**

.

Ich arbeite als \_\_\_\_\_

5 **Wie lange arbeiten Sie schon für T-Systems oder eine ihrer Vorgängerorganisationen?**

\_\_\_\_\_ Jahre

6 **Wie zufrieden sind Sie mit Ihrer Arbeitssituation im Allgemeinen?**

                         
 sehr      eher      teils/      eher un-      sehr un-  
 zufrieden    zufrieden    teils    zufrieden    zufrieden

**Die folgenden Fragen beziehen sich auf Einflüsse, die Ihren Arbeitsalltag mitbestimmen. Markieren Sie bitte jeweils die für Sie zutreffendste Zahl. Die Antwortkategorien sind wie folgt:**

1 trifft nicht zu	2 trifft eher nicht zu	3 trifft eher zu	4 trifft zu
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#### Umgang mit Reorganisation und Verantwortung

7. Ich kann mich schnell in neue Teams einarbeiten	1	2	3	4
8. Ich muss mich oft an Veränderungen in der Organisation anpassen	1	2	3	4
9. Das Eingehen auf neue Kunden stellt für mich eine hohe Herausforderung dar	1	2	3	4
10. Es fällt mir schwer, Verantwortung zu übernehmen	1	2	3	4

#### Auslastung bei der Arbeit

11. Ich muss viel dafür tun, um die Anforderungen meiner Arbeit zu erfüllen	1	2	3	4
12. Ich muss zu viel arbeiten	1	2	3	4
13. Ich muss sehr schnell arbeiten	1	2	3	4
14. Meine Arbeitsziele sind nicht eindeutig	1	2	3	4

Die folgenden Fragen beziehen sich auf Einflüsse, die Ihren Arbeitsalltag mitbestimmen. Markieren Sie bitte jeweils die für Sie zutreffendste Zahl. Die Antwortkategorien sind wie folgt:

1 nie	2 manchmal	3 regelmäßig	4 oft	5 immer
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### Feedback

1.	Ich erhalte für Aufgabenstellungen (im Rahmen der Auftrags-erteilung) ausreichend Informationen über meine Arbeitsziele	1	2	3	4	5
2.	Ich bekomme genug Feedback über die Qualität meiner Arbeit im 3D dialog	1	2	3	4	5
3.	Ich bekomme ausreichend Informationen über das Ergebnis meiner Arbeit	1	2	3	4	5

### Unterstützung durch die Führungskraft

4.	Meine Führungskraft interessiert sich für meine persönlichen Belange und Probleme in Bezug auf meine Arbeit	1	2	3	4	5
5.	Meine Führungskraft zeigt mir, dass sie meine Arbeitsweise schätzt	1	2	3	4	5
6.	Wenn nötig, unterstützt mich meine Führungskraft bei bestimmten Aufgaben	1	2	3	4	5
7.	Meine Führungskraft unterstützt mich bei der Festlegung und Erreichung meiner Entwicklungsziele	1	2	3	4	5

### Lernmöglichkeiten

8.	Meine Arbeit bietet mir die Möglichkeit, neue Dinge zu lernen	1	2	3	4	5
9.	Ich habe ausreichend Möglichkeiten, um mich bei der Arbeit zu entfalten	1	2	3	4	5
10.	In meiner Arbeit habe ich die Möglichkeit, meine Stärken zu entwickeln	1	2	3	4	5
11.	In meiner Organisation gibt es genügend Möglichkeiten, um in eine höhere Funktion / Expertenrolle aufzusteigen	1	2	3	4	5
12.	Durch die Kompetenzprofile sind mir meine Entwicklungsmöglichkeiten deutlich aufgezeigt	1	2	3	4	5
13.	Im 3D dialog bespreche ich mit meiner Führungskraft meine Entwicklungsmöglichkeiten	1	2	3	4	5
14.	Das Professional Expert Program (PEP) hat mir passende und interessante Anregungen gegeben, die ich in meiner täglichen Arbeit umsetzen kann	1	2	3	4	5

**Die folgenden Fragen beziehen sich auf Einflüsse, die Ihren Arbeitsalltag mitbestimmen. Markieren Sie bitte jeweils die für Sie zutreffendste Zahl. Die Antwortkategorien sind wie folgt:**

1 trifft nicht zu	2 trifft eher nicht zu	3 trifft eher zu	4 trifft zu
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### Belastung und Anreize bei der Arbeit

15	Ich habe bei der Arbeit immer häufiger das Gefühl mental ausgelaugt zu sein	1	2	3	4
16	Die Belastung durch meine Arbeit ist ganz gut zu ertragen	1	2	3	4
17	Ich fühle mich ausgebrannt aufgrund meiner Arbeit	1	2	3	4
18	Nach der Arbeit fühle ich mich in der Regel schlapp und abgespannt	1	2	3	4
19	Es gibt Tage, an denen ich mich schon vor der Arbeit müde fühle	1	2	3	4
20	Manchmal bin ich von meiner Arbeitstätigkeit richtiggehend angewidert	1	2	3	4
21	Es passiert mir immer öfter, dass ich mich abwertend über meine Arbeitstätigkeit äussere	1	2	3	4

<b>22</b> Mit der Zeit engagiere ich mich immer mehr bei meiner Arbeit .	1	2	3	4
<b>23</b> Mit der Zeit verliert man die innere Beziehung zur eigenen Arbeit .	1	2	3	4

### Verbundenheit

<b>24</b> Ich erzähle meinen Freunden, dass es toll ist für T-Systems zu arbeiten. .	1	2	3	4
<b>25</b> Ich finde, dass meine eigenen Wertvorstellungen und die des Unternehmens einander sehr ähnlich sind. .	1	2	3	4
<b>26</b> Ich bin bereit, wesentlich mehr als das Erwartete zu leisten, um am Unternehmenserfolg beizutragen. .	1	2	3	4
<b>27</b> Für mich ist T-Systems das Beste aller Unternehmen, die für mich in Frage kommen. .	1	2	3	4
<b>28</b> Ich kündige nicht, weil es für mich im Moment zu wenig Chancen auf dem Arbeitsmarkt gibt. .	1	2	3	4

**Raum für Lob, Kritik und Anregungen:**

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**Herzlichen Dank für Ihre Mithilfe!**