

Why are proactive people more successful in their careers? The role of career adaptability in explaining multiple career success criteria

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Abstract

This study analyzed (a) the contemporary career variable of career adaptability as underlying mechanism in the proactive personality–career success relationship, and (b) broadened the criteria of career success (i.e., salary, bonuses, promotions, career satisfaction, job satisfaction) to the era of the boundaryless career (i.e., internal and external marketability). The analyzed sample was comprised of $N = 153$ participants from organizations in the fields of Software, IT as well as of Textile- and Automotive Industry. Bivariate and path analytical results confirmed the majority of our hypotheses and showed that career adaptability turned out as an important underlying mechanism for the relationship of proactive personality and several career success criteria (except from bonuses). Results are discussed with respect to proactive personality research, new career research, and career success research.

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Introduction

In recent years, career success research identified several personality factors that affect objective (i.e., salary, promotions) and subjective (i.e., career satisfaction) career success (Ng, Eby, Sorensen, & Feldman, 2005). Besides the Big Five also proactive personality, which is considered a stable disposition to take personal-initiative in a broad range of activities and situations, has been in the focus of personality and career researchers (McCrae & Costa, 1987; Seibert, Crant, & Kraimer, 1999). Proactive people are described as unconstrained by situational forces and they affect environmental change (Bateman & Crant, 1999). Further, a meta-analysis by Ng and colleagues (2005) showed that proactive personality is positively related to salary, promotions and career satisfaction.

However, little is known about the mechanisms underlying the relationship between proactive personality and specific career criteria (Fuller & Marler, 2009). As such findings allow important theoretical conclusions of personal and career functioning it seems very important to analyze them in more detail (Spurk & Abele, 2011; Zhang & Arvey, 2009). A study from Erdogan and Bauer (2005), for instance, has shown that the effect of proactive personality on career benefits of employees depends upon high person-organization and high person-job fits. Seibert, Crant, and Kraimer (2001) conducted a study that analyzed whether the mediators voice, innovation, political knowledge, and career initiative mediate the association between proactive personality with salary, promotions, and career satisfaction.

With our study, we aim at expanding this line of research by (1) analyzing a contemporary career variable, called career adaptability (Rottinghaus, Day, & Borgen, 2005), as a mediator in the proactive personality–career success relationship, and by (2) broadening the criteria of career success to the era of the boundaryless career (Eby, Butts, & Lockwood, 2003; Volmer & Spurk, 2011). A perspective on boundaryless careers was introduced Arthur

and Rousseau (1996) and is characterized by a focus on a person's agency which moves responsibilities for career progress from organizations to employees and by an emphasis on individual's psychological and organizational mobility (e.g., Arthur & Rousseau 1996). The boundaryless career and other forms of latest career concepts, e.g., the protean career, are also called new careers. They share the common core that substantial changes in today's work environment such as rapid technological advancements, flattened hierarchies, and decreased job stability due to financial meltdowns have diminished people's opportunity to pursue a career within one single organization during their lifetime with prescheduled linear upward moves over time.

Proactive Personality and Career Success

Proactive personality is a construct that captures a behavioral tendency toward enacting and changing one's environment. The prototypic proactive personality is described as someone who is relatively unconstrained by situational forces, and who takes charge for environmental change. Furthermore, proactive people can be characterized as seeking out new and different opportunities, showing initiative, and persevering to bring about meaningful change (Bateman & Crant, 1999). In contrast to proactive people, passive individuals are more affected by environmental forces and show more reactive coping styles.

Career success can be defined as "the positive psychological or work-related criteria or achievements one accumulates as a result of work experiences" (cf. Seibert et al., 1999, p. 417). *Objective career success* can be externally verified by variables such as pay (Judge, Cable, Boudreau, & Bretz, 1995), hierarchical position, or promotions (Arnold & Cohen, 2008). *Subjective career success* is a self-evaluation of career progress by an individual, such as career satisfaction or job satisfaction (e.g., (Heslin, 2005; Judge et al., 1995; Ng et al., 2005). Latest research on protean and boundaryless careers stated that in times of dynamic and individualized labor markets it is very important to analyze more horizontal objective

career moves and a broader range of subjective success criteria (Eby et al., 2003; Volmer & Spurk, 2011).

Personality affects careers for several reasons. First, careers are the product of behavioral tendencies that accumulate over time. Personality reflects a stable disposition structuring behavior over time. Second, careers offer a variety of “weak” situations over time, in which personality plays a dominant role concerning behavior choice (Seibert et al., 1999). Third, new career models like the protean career are person-driven, making personal attributes related to self-regulation critical factors in career success. More specifically, proactive personality is related to career success, because the emergence of boundaryless or protean careers requires individuals to be proactive if they want to be successful. Seibert and colleagues (2001, p.847) also acknowledged that proactive individuals “select, create, and effect work situations that increase the likelihood of career success”. We apply the above described reasoning to the context of careers and assume that proactive individuals do not only affect work situations but also select, create, and affect career environments and career pathways which consequently navigate them to more career success.

Referring to the latest meta-analyses on career success (Ng et al., 2005) and proactive personality (Fuller & Marler, 2009), there is no doubt that proactive persons are more successful in their careers. Ng and colleagues used different measures in their meta-analysis and found that the construct of “Proactivity”, which is composed of proactive personality and other proactive components (e.g., proactive behavior), is positively related to salary ($r = .11, p < .05$, four studies), promotions ($r = .16, p < .05$, two studies), and career satisfaction ($r = .38, p < .05$, three studies). These results were comparable to the meta-analysis from Fuller and Marler (2009), who analyzed studies which solely used measures of proactive personality. They also found that proactive personality is positively related to salary ($r = .14, p < .05$, ten studies), promotions ($r = .11, p < .05$, six studies), and career satisfaction ($r = .31, p < .05$, fourteen studies). Moreover, this study also investigated the relationship between proactive

personality and extended subjective career success criteria (i.e. comparison judgments; $r = .26, p < .05$, four studies; job satisfaction: $r = .30, p < .05$, twenty-one studies).

In our study, we want to make a contribution to the field by expanding the career success criteria to the era of the protean and boundaryless career (i.e., using internal and external marketability above the former used criteria; Eby et al., 2003). Further, we assume that proactive personality is also related to internal and external marketability judgments of employees. Internal marketability refers to the value of the employee for its current organization, and external marketability refers to the value of the employee to several different organizations across the labor market (Eby et al., 2003). Therefore, both marketability types reflect success in relation to different mobility types relevant within modern labor markets. In sum, based on theoretical considerations (Eby et al., 2003; Seibert et al., 1999) and empirical findings (Fuller & Marler, 2009) we postulate:

Hypothesis 1: Proactive personality is positively related to objective and subjective career success criteria. More specifically, proactive personality is positively related to salary, bonuses, promotions, job satisfaction, career satisfaction, internal marketability, and external marketability.

Career Adaptability as Mediator in the Proactive Personality–Career Success

Relationship

Although there is strong evidence that proactive personality is associated with career success, little is known about the underlying mechanisms. However, there are several calls to identify variables that mediate relationships between personality and work-related criteria (Barrick & Mount, 2005). Such studies provide more insights in how personality is functioning and provide empirical evidence for theoretical models concerned with indirect personality effects. One model which is well-suited in explaining the indirect effects of personality on career criteria is the meta-theoretical framework from McCrae and Costa (1996). These authors argued that personality affects *characteristic adaptations*, which refer

to personal strivings, attitudes, motivational states and self-regulatory tendencies which in turn affect the objective biography of a person.

Empirical evidence for this framework has been provided by Spurk and Abele (2011). The authors showed that the effect of the Big Five on salary was mediated by occupational self-efficacy, career goals, and work hours. Another study analyzed how the personality variables of social potency, achievement, and stress reaction affect salary mediated by leadership role occupancy (cf. Zhang & Arvey, 2009). Boudreau, Boswell, and Judge (2001) showed that the impact of the Big Five on remuneration was mediated by motivational criteria and by human capital.

We here argue that career adaptability might also be such a characteristic adaptation and at the same time a more proximal variable to career success than proactive personality. Thus, we believe that career adaptability represents an intervening mechanism for the proactive personality–career success relationship. Savickas (1997) defined career adaptability as “the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions” (p. 254). Adaptability encompasses three major components: “planful attitudes, self and environmental exploration, and informed decision making” (Savickas, 1997, p. 254). In this study we refer to a further developed one-dimensional definition of career adaptability as “a tendency affecting the way an individual views his or her capacity to plan and adjust to changing career plans and work responsibilities, especially in the face of unforeseen events” (Rottinghaus et al., 2005, p. 5). By definition, this conceptualization of career adaptability should be highly relevant for individuals in order to navigate their careers successfully in times of more protean and boundaryless career environments. Besides effects of career adaptability on career success, we assume that career adaptability itself should be affected by proactive personality.

Career adaptability possesses components of self-regulation or self-management strategies (King, 2004). Therefore, it conceptually fits well into Crant's (2000) model of proactive career management. Further, evidence for this classification can be drawn by the fact that career adaptability is close to the individual's active attempt to promote his or her career rather than a passive response to the career situation as given. Especially in today's labor markets that are characterized by continuous and dynamic environmental change, and therefore are in new boundaryless employment settings (e.g., Arthur & Rousseau, 1996), career responsibility becomes a major challenge. Because these challenges may often represent weak situations, proactive personality evokes proactive and innovative behavior, which can be seen as a form of adaptable career behavior. Furthermore, several authors have suggested that individual differences may be an important determinant of the degree to which individuals react in managing their own careers (Boudreau, Boswell, Judge, & Bretz, 2001; Spurk & Abele, 2011; Staw, Bell, & Clausen, 1986). Because proactive personality describes someone who actively shapes his or her work environment we expect proactive personality to predict the level of career adaptability shown by the individual. Further, empirical support for this assumption was given by studies that found positive relations of proactive personality with job crafting (Bakker, Tims, & Derks, 2012) and entrepreneurial intentions (Prabhu, McGuire, Drost, & Kwong, 2012). Both correlates can be seen as either a form of adaptive behaviors career intentions that are strongly related to adaptive behaviors (entrepreneurship). In sum, we postulate the following:

Hypothesis 2: Proactive personality is positively related to career adaptability.

Super, Brown, and Brooks (1990) assume that career adaptability is a key factor for successful career development of adults. Similarly, Hall (2002) stated that adaptability, in general, is one meta-competence to being able to live self-directed careers in today's work environments. Furthermore, adaptability is one sub-dimension of the employability construct (Fugate, Kinicki, & Ashforth, 2004), and employability is associated with career success,

because employable people show more effective job search strategies and possess higher efficacy-beliefs in the occupational domain (Van der Heijden, Lange, Demerouti, & Van der Heijde, 2009). Empirically, it has been shown that adaptability is positively related with successful job search and job change within an organizational downsizing context (Klehe, Zikic, van Vianen, & Pater, 2011), as well as with job re-entry after unemployment (McArdle, Waters, Briscoe, & Hall, 2007). Rottinghaus and colleagues (2005) showed that career adaptability is positively related to leadership efficacy, project management efficacy, and organizational management efficacy, which all are related to successful careers. In sum, individuals who are adaptable within their careers should be more successful because they plan their careers more efficiently, cope better with unforeseen events, and are more employable within today's labor markets.

Hypothesis 3: Career adaptability is positively related to objective and subjective career success criteria. More specifically, career adaptability is positively related to salary, bonuses, promotions, job satisfaction, career satisfaction, internal marketability, and external marketability.

Integrating Hypotheses 1-3 and based upon the theoretical framework of MacCrae and Costa (1996) we state the following indirect effect hypothesis:

Hypothesis 4: The indirect effect of proactive personality on salary, bonuses, promotions, job satisfaction, career satisfaction, internal marketability, and external marketability evokes via career adaptability.

Method

Sample

Participants were employed in organizations in the fields of Software, IT as well as in Textile- and Automotive Industry. From 385 persons who were invited to the Online-Survey, 226 responded (59%). From the 226 participants who started the survey, 73 participants did not answer the full questionnaire (32%). Therefore, in the final sample $N = 153$ participants

were analyzed (72% male; return rate in relation to invited persons: 40%). In total, 20% of participants were younger than 30 years, 68% of participants were between 31 and 50 years old, and 12% of the participants were older than 50 years. More than half of the participants held a university degree (69%), and participants worked on average 39.45 hours a week ($SD = 3.56$).

Measures

Proactive personality. We used the short measure of proactive personality developed by Seibert and colleagues (1999). The scale consists of 10 items (sample items “I am constantly on the lookout for new ways to improve my life“, “Nothing is more exciting than seeing my ideas turn into reality”, “I am always looking for better ways to do things”; Cronbach’s $\alpha = .83$). Participants responded on 5-point scales (1 = *not at all* to 5 = *very much*).

Career adaptability. We assessed career adaptability with the German version of the career futures inventory (Spurk & Volmer, 2011), which measures career adaptability as one dimensional construct. The German version of this measure shows comparable scale properties as shown in the English version of the scale (Spurk & Volmer, 2011). The scale consists of 8 items (sample items “I can adapt to change in my career plans“, “I tend to bounce back when my career plans don't work out quite right; Cronbach’s $\alpha = .84$). Participants responded on 6-point scales (1 = not at all to 5 = very much).

Objective career success. We operationalized objective career success as the person’s *salary* which is the most frequently used measure of objective career success (cf. Ng et al., 2005). We measured monthly salary before taxes in eleven equal steps from *no salary* coded *less than €999*, coded as 1 to *less than €10,000*, coded as 10; and *more than €10,000*; coded as 11. *Promotions* were measured with the following open question: “How often have you been promoted in your career? A promotion can be seen as any upward move in the organizational hierarchy or as any expansion of your occupational responsibility.” (Van der

Heijden et al., 2009). Finally, *bonuses* was assessed with the following open question: “How much bonuses have you received from your employer in the last year?”.

Subjective career success. We measured *career satisfaction* with the career satisfaction scale (Greenhaus, Parasuraman, & Wormley, 1990; Spurk, Abele, & Volmer, 2011). The scale consists of 5 items (sample item “I am satisfied with the success I have achieved in my career.”; Cronbach’s $\alpha = .85$). Participants responded on 5-point scales (1 = not at all to 5 = very much). *Job satisfaction* was measured in terms of overall job satisfaction (“All in all, how satisfied are you with your job at the moment?”). Participants based their responses on a 7-point rating scale (1 = not at all to 7 = absolutely). *Internal and external marketability* was measured by a scale reported by Eby and colleagues (2003). Perceived internal marketability was measured with three items (i.e., “My company views me as an asset to the organization”, “Given my skills and experience, the company that I work for views me as a value-added resource”, “There are many opportunities available for me in my company”; Cronbach’s $\alpha = .75$). Perceived external marketability was measured by three similar items (i.e., “I could easily obtain a comparable job with another employer”, “There are many jobs available for me given my skills and experience”, “Given my skills and experience, other organizations view find me as a value-added resource”, Cronbach’s $\alpha = .80$). Participants responded on 5-point scales (1 = not at all to 5 = very much).

Controls. We also included controls that might affect the above postulated relationships. We controlled for *gender, age, work hours, and education* (cf. Ng et al., 2005). We asked participants to report their gender (0 = *women*, 1 = *men*), and to report their contractual work hours with an open-ended question. Age was dummy coded (dummy 1: “under 30”, dummy 2: “31-50”, reference category was “above 50”) and Education was a dichotomous variable (0 = vocational training, 1 = university degree).

Results

Analytical Procedure and Model Building

We tested Hypotheses 1-3 on the bivariate relationships of our variables under study by estimating correlations between proactive personality, career adaptability, and all criteria of career success. Hypothesis 4 was tested by means of path analysis using the program *Mplus* version 6 (Muthén & Muthén, 1998-2012). In the mediation analysis we tested the significance of direct and indirect effects within the path model. Full mediation is indicated by significant indirect effects and non-significant direct effects. Partial mediation is indicated by both significant direct and indirect effects (Kline, 2005).

In the *path model* we allowed paths in line with our hypotheses (see above). Additionally, we regressed all career success criteria on all statistical controls (gender, education, work hours, age). Correlations between exogenous variables (proactive personality and statistical controls) were estimated freely as a standard setting in path analytical regression analysis (cf. Kline, 2005). Correlations between the endogenous career success criteria were allowed, because career success criteria usually correlate with each other in a moderate way. Note that in the here estimated path model, correlations between career success criteria should be interpreted as partial correlations after controlling for proactive personality, career adaptability, and the other statistical controls. Therefore, they should not be interpreted equally to the correlations on bivariate relationships. We used a Maximum Likelihood estimator (ML) for model estimation. The estimated model had reasonable fit statistics ($\chi^2 = 6.57$, $df = 5$, CFI = .99, TLI = .94, RMSEA = .05; SRMR = .02, see also Kline, 2005). We refer to this model in more detail below.

Proactive Personality, Career Adaptability, and Career Success

Correlations, means, and standard deviations can be seen in Table 1. Proactive personality, career adaptability and all criteria of objective and subjective career success are positively related within the here described sample.

Hypothesis 1 was confirmed because people who act in a more proactive way also showed higher levels of objective and subjective career success (salary: $r = .39$, $p < .001$,

bonuses: $r = .34, p < .001$, promotions: $r = .25, p < .01$, job satisfaction: $r = .17, p < .05$, career satisfaction: $r = .31, p < .001$, internal marketability: $r = .34, p < .001$, external marketability: $r = .40, p < .001$). Proactive personality was positively related to all analyzed career success criteria.

Hypothesis 2 was confirmed because people who act in a more proactive way also show higher levels of career adaptability ($r = .45, p < .001$). People who act more proactively also react more adaptable to unforeseen events altering their career plans.

Hypothesis 3 was confirmed because career adaptability was positively related to objective and subjective career success (salary: $r = .30, p < .01$, bonuses: $r = .21, p < .05$, promotions: $r = .32, p < .001$, job satisfaction: $r = .24, p < .05$, career satisfaction: $r = .30, p < .01$, internal marketability: $r = .31, p < .001$, external marketability: $r = .34, p < .001$). People who react more adaptable to unforeseen events altering their career plans also show higher levels on all analyzed criteria of career success.

Career Adaptability as Explaining Mechanism

The path model analyzing indirect effects can be seen in Figure 1. Most career success criteria are positively related to each other (r s from .19 to .60, all p s $< .05$). Moreover, proactive personality positively affects career adaptability as a basis for the now reported indirect effects ($\beta = .46, p < .001$).

For testing Hypothesis 4 on mediation we compared direct and specific indirect effects of proactive personality on all career success criteria. Specific indirect effects are computed by multiplying the β -values of two single paths (for instance, the path of proactive personality on career adaptability and of career adaptability on salary).

Despite bonuses, on which career adaptability did not have any effects in the model, Hypothesis 4 was confirmed. Career adaptability either fully or at least partially mediated the effects of proactive personality on several career success criteria. Because there was no direct effect of proactive personality on promotions ($\beta = .07, ns$) and job satisfaction ($\beta = .02, ns$)

after accounting for career adaptability, career adaptability fully mediated the effects of proactive personality on these career success criteria. Both tested indirect effects were significant (promotions: $.13, p < .05$; job satisfaction: $.08, p < .05$).

Because proactive personality still showed positive direct effects on the other career success criteria (salary: $\beta = .16, p < .05$; career satisfaction: $\beta = .17, p < .05$; internal marketability: $\beta = .24, p < .01$; external marketability: $\beta = .33, p < .001$), career adaptability partially mediated the effects on these outcome variables. The tested indirect effects were all significant (salary: $.06, p < .05$; career satisfaction: $.09, p < .05$; internal marketability: $.09, p < .01$; external marketability: $.15, p < .001$).

In sum, results revealed that proactive people are more adaptable within their careers and therefore they earn more, they get more frequently promoted, they are more satisfied with their jobs and careers, and they experience their own person as more valuable for their own organization as well as other organizations. People who act proactively also get more bonuses; however, this relationship is not mediated by career adaptability.

Additional Findings in the Path Model

Findings related to the controls and to the relationships between different career success criteria might also be interesting in the context of the study. Interestingly, gender showed no effects on any career success criterion (all β s from $-.03$ to $.16$, all $ps > .05$). People with university degree earned more than people with vocational training ($\beta = .23, p < .01$); however, all other criteria were unrelated to education (all β s from $-.04$ to $.13$, all $ps > .05$). Younger people earn less than older people (dummy 1: $\beta = -.46, p < .001$), but middle aged people get the highest bonuses (dummy 2: $\beta = .27, p < .01$). Also, younger and middle ages people perceive themselves as more external marketable than older people (dummy 1: $\beta = -.37, p < .001$; dummy 2: $\beta = .29, p < .01$). People who work more hours per week also earn more ($\beta = .17, p < .05$); however, all other success criteria were unrelated to work hours (all β s from $-.06$ to $.16$, all $ps > .05$)

Salary was positively related to bonuses ($r = .33, p < .001$), promotions ($r = .29, p < .01$), and career satisfaction ($r = .22, p < .01$). Bonuses were positively related to promotions ($r = .19, p < .05$). Promotions were positively related to job satisfaction ($r = .19, p < .05$). Job satisfaction was positively related to career satisfaction ($r = .50, p < .001$), internal ($r = .60, p < .001$), and external marketability ($r = .19, p < .05$). Career satisfaction was positively related to internal marketability ($r = .40, p < .001$). Internal marketability was related to external marketability ($r = .27, p < .01$).

Conclusion

The aim of this study was to analyze why proactive personality should be positively related to different criteria of career success. By doing so, we wanted to (a) analyze a contemporary career variable, called career adaptability (Rottinghaus et al., 2005), as mediator in the proactive personality–career success relationship, and we aimed to (b) broaden the criteria of career success to the era of the boundaryless career (i.e., internal and external marketability; Eby et al., 2003; Volmer & Spurk, 2011). Results confirmed the majority of our hypotheses and showed that career adaptability turned out as an important explanatory mechanism for the relationship of proactive personality and our career success criteria (except for bonuses). The results contribute to at least three different fields of research: Proactive personality research (Bateman & Crant, 1999), new career research (Hall, 2002), and career success research (Abele, Spurk, & Volmer, 2011).

Proactive Personality and Career Success

Our reported positive relationships between proactive personality and career success correspond with former research in this field (Fuller & Marler, 2009; Ng et al., 2005). However, the relationships between proactive personality and objective career success indicators were stronger than in other studies; and the relationship to job satisfaction was slightly weaker compared to other studies (e.g., Fuller & Marler, 2009; Seibert et al., 2001). The stronger relationship of proactive personality and objective success compared to

subjective success might have two reasons. First, this study was conducted in Germany, and therefore, cultural influences might have affected the findings. Second, compared to former studies labor markets might have changed so that proactive traits benefit even more in terms of objective attainments than a couple of years ago. Third, the cross-sectional design of our study the downside of common method variance might have attenuated the investigated relationships. Another study (Seibert et al., 2001), which analyzed mediators of proactive personality on career success, found that proactive personality was unrelated to objective success criteria, also on a bivariate level of analysis. Therefore, the here presented results extend this study by showing that the effects of proactive personality on career success diminish after controlling for relevant mediators.

Interestingly, proactive personality showed no effects on job satisfaction after controlling for career adaptability, and its correlation to job satisfaction was the weakest among the measured career success criteria. On the one hand, this suggests that proactive personality is a construct with high relevance for career development, because job satisfaction is the most controversial career success criteria used here. On the other hand, we measured overall job satisfaction with one item; hence, methodological reasons may explain the weak relationship in our study. Furthermore, promotions are clearly better predicted by career adaptability than by proactive personality; however, bonuses are clearly better predicted by proactive personality than by career adaptability. Getting high bonuses is also the success criterion that is least related to adaptability, because reacting to unforeseen events that alters one's own career plans might not necessarily result in higher bonuses. Higher bonuses are also related to stable components in one's career. They require at least some time of organizational membership before distributed among employees. Also, bonuses usually are related to innovation and personnel performance which is another component of proactive personality but less of career adaptability (Bateman & Crant, 1999).

Turning to perceived internal and external marketability as important criteria in the era of the boundaryless career, our study showed that proactive personality is more strongly related to external marketability than to internal marketability. This makes sense, because new career theories see organizational and psychological mobility as major challenge in today's world of work (Briscoe & Finkelstein, 2009; Briscoe, Hall, & Frautschy DeMuth, 2006; Volmer & Spurk, 2011). External marketability is therefore stronger embedded in new career theories than internal marketability. Therefore, our findings show that the concept of proactive personality is an important personality facet in order to navigate successfully in new careers.

Career Adaptability in Contemporary Careers

Career adaptability can be seen as an important meta-competence in new careers (Hall, 2002). Also career adaptability is one essential component of the employability concept (Van der Heijde & Van der Heijden, 2006). Therefore, it is not surprising that career adaptability is also more strongly related to external than to internal marketability. Moreover, external marketability is the career success criterion with the strongest relationships to career adaptability in our study. This shows that it is fruitful to extend career success criteria to the type of careers (i.e., boundaryless careers) studied predictors are relevant for. Another interesting finding of our study was that career adaptability was most strongly related to promotions within the measured objective career success criteria. Getting promoted is related to identification and taking opportunities. These opportunities may be related to mobility and responsibility, and therefore, result in altered career plans. Therefore, compared to salary or bonuses, career adaptability is a competence of major relevance in the domain of promotions and upward mobility, in general.

By integrating career adaptability in the proactive personality research we extended the set of mediators analyzed in former studies by an important variable of career functioning (Seibert et al., 1999). Out of the seven tested indirect effects six became significant and two

resulted in full mediation of proactive personality effects. By doing so, we not only expanded the set of analyzed mediators, but we also integrated the two research streams of personality and new careers.

The associations between the different career success criteria add to our understanding of career success as multi-dimensional and multi-faceted concept within new careers. Internal marketability is strongly related to career satisfaction and job satisfaction but only moderately related to external marketability. External marketability shows only small associations to job satisfaction and shows, altogether, relatively few associations with other career success criteria in the path model. Expressed in other words, external marketability seems to be a relatively distinct criterion of career success which is at the same time highly relevant in new careers. Also, most of the bivariate relationships between external marketability and other career success criteria disappear if controlling for proactive personality and career adaptability. This suggests that external marketability depends more on personal functioning than on other criteria of career success. Differently, job satisfaction depends to the same degree on other criteria of career success (e.g., promotions and internal marketability) and on variables of personal functioning (i.e., proactive personality and career success).

Practical Implications

Our study offers several opportunities for practical implications, particularly for personnel selection and personnel development. For instance, proactive personality as a rather stable trait could be considered as an interesting individual difference variable in the context of personnel selection. Personality questionnaires are frequently used in personnel selection (Morgeson et al., 2007); however, the use of proactive personality scales is rare and not well documented. Under consideration of the here presented results, proactive personality might be a variable becoming more and more relevant in personnel selection processes, especially in times of new and changing careers.

In contrast to proactive personality, career adaptability is conceptualized as a malleable type of career competence. Career adaptability therefore may be an interesting variable in the context of personnel development as well as career counseling. Based on our findings, specific training programs that train career adaptability should be developed and implemented in order to provide employees with skills to cope with the requirements of today's labor market.

Limitations and Future Research

First, the cross-sectional design of our study limits causal conclusions. Nonetheless, our hypothesized model was derived from theory and proactive personality is a more stable and more distal variable to career success than career adaptability. Therefore, it seems highly implausible that career adaptability alters proactive personality and not vice versa.

Nonetheless, there are findings that show that personality is affected by occupation especially in response to career success (Sutin, Costa, Miech, & Eaton, 2009). So, it is conceivable that people in job positions with higher salary or high responsibility behave more proactively due to role expectations and that this subsequently alters the proactive personality of these people. Longitudinal studies are needed in future research to clarify the issue of causality between the here studied variables.

Besides the few fully mediated proactive personality effects, we found several partially mediated effects leaving room for other explaining mechanisms. Future studies should therefore explore other mediation variables, like for instance other facets of employability (Van der Heijde & Van der Heijden, 2006), or career orientations related to new career (e.g. self-directed career management, organizational mobility preference, psychological mobility; Briscoe et al., 2006; Volmer & Spurk, 2011).

Moreover, in evaluating the present study, one may question the validity of our self-report measure of income. Yet, previous research has shown that archival salary and self-reported salary are closely related (Judge et al., 1995). Likewise, we measured our variables

as self-reports which might be an issue for common method variance (Chan, 2009; Podsakoff & Organ, 1986). However, most of the here studied constructs (e.g., proactive personality, career adaptability, career satisfaction), can best be judged by the persons themselves and not by other sources so that this problem cannot easily be resolved. Nonetheless, to develop other measurement approaches of the here studied concepts, especially for proactive personality and career adaptability, represent valuable future research endeavors. For example, one might use peer-ratings or biographical information to get more objective insights of a person`s career adaptability.

In summary, this study showed that (a) the contemporary career variable of career adaptability can be considered as an explaining mechanism in the proactive personality–career success relationship, and that (b) broadening the criteria of career success to the era of the boundaryless career is a fruitful endeavor when studying effects of proactive personality and career adaptability on multiple career success criteria. Future research should analyze (a) which further mediators are relevant for the proactive personality–career success relationship and (b) which role career adaptability plays in a network of other predictors of career success. Finally, future research should study the relative stability of proactive personality and career adaptability to (a) get a more precise picture about the malleability of both concepts and to (b) derive knowledge about the usability of both concepts in both personnel selection and personnel development.

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Table 1. Means, Standard Deviations, and Correlations of Study Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1 Gender ¹⁾	-	-												
2 Age ²⁾	-	-	.38***											
3 Education ³⁾	-	-	.05	.17*										
4 Work hours	39.45	3.56	.22**	-.03	.07									
5 Proactive personality ⁴⁾	3.66	0.59	.19*	.25**	.09	.13								
6 Career Adaptability ⁵⁾	4.73	0.64	.13	.09	.09	.25**	.45***							
7 Salary ⁶⁾	6.15	2.82	.37***	.48***	.30**	.26**	.39***	.30**						
8 Bonuses	12435.54	26653.45	.21*	.11	-.04	.10	.34***	.21*	.47***					
9 Number of Promotions	3.27	2.41	.24**	.38***	.04	.02	.25**	.32***	.52***	.44***				
10 Job satisfaction ⁷⁾	5.18	1.56	.09	.16	.17	.20*	.17*	.24**	.29**	.19*	.27**			
11 Career satisfaction ⁴⁾	3.82	0.74	.11	.18*	.18*	.20*	.31***	.30**	.40**	.24**	.25**	.56***		
12 Internal marketability ⁴⁾	3.64	0.85	.13	.08	.14	.19*	.34***	.31***	.30**	.26**	.25**	.62***	.50***	
13 External marketability ⁴⁾	3.57	0.78	.03	-.13	.03	.14	.40***	.44***	.22*	.22*	.10	.24**	.26**	.40***

Note. $N = 153$; * $p < .05$; ** $p < .01$; $p < .001$; ¹⁾ 0 = women, 1 = men; ²⁾ 1 = under 30, 2 = 30 to 50, 3 = above 50; ³⁾ 0 = vocational training, 1 = university degree; ⁴⁾ scale from 1 to 5; ⁵⁾

scale from 1 to 6; ⁶⁾ numbers from 1 to 11; ⁷⁾ scale from 1 to 7;

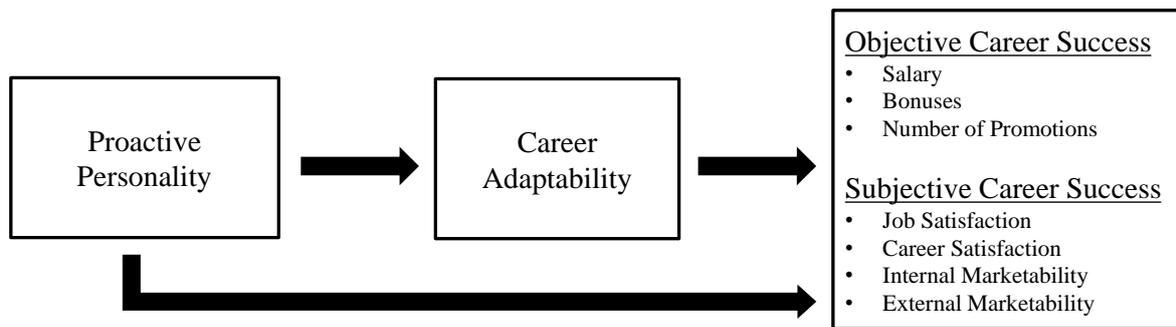


Figure 1. Theoretical Model on Proactive Personality, Career Adaptability, and Career Success

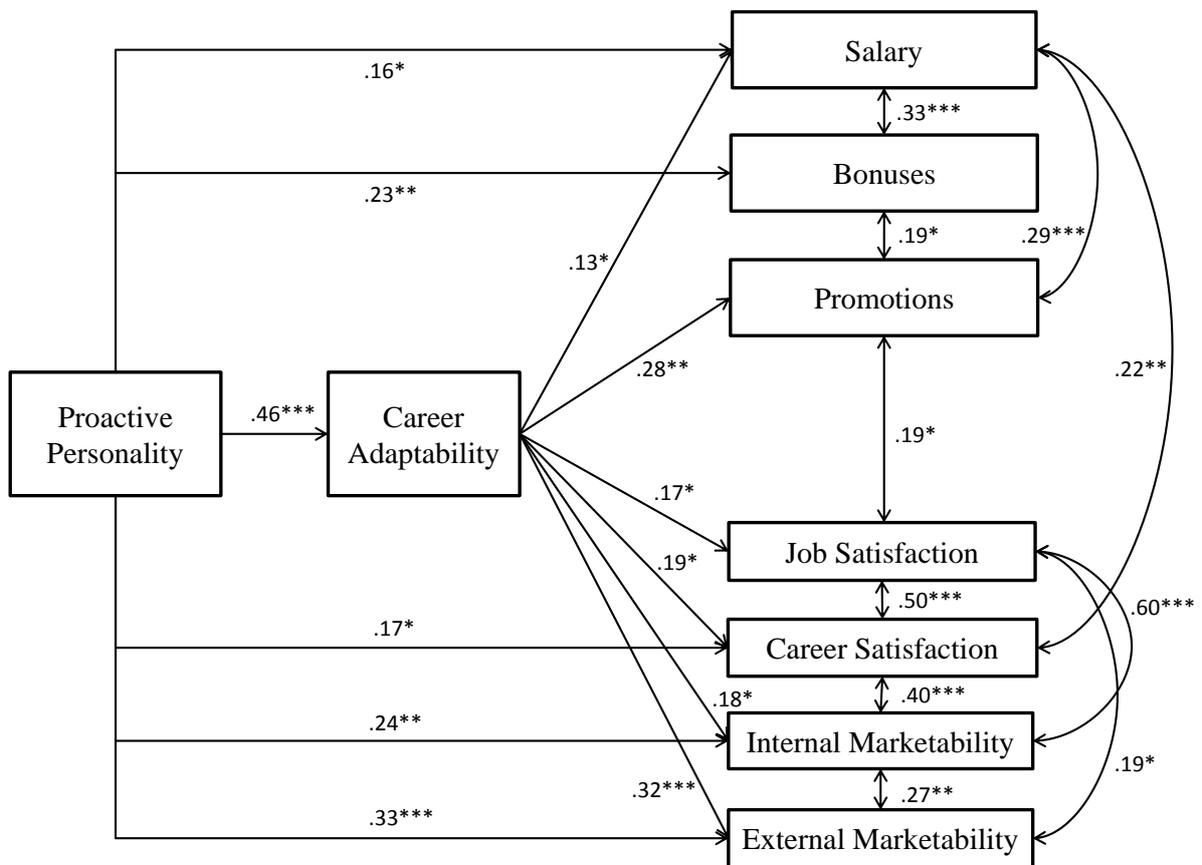


Figure 2. Path Model on Proactive Personality, Career Adaptability, and Career Success

Note. $N = 153$; nonsignificant paths or correlations between central study variables are not displayed; significant effects of control variables are not displayed.