

The impact of career ambition on psychologists' extrinsic and intrinsic career success

Impact of
career
ambition

The less they want, the more they get

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Abstract

Purpose – The purpose of this paper is to investigate the relationship between career ambition – defined as high achievement motivation and strong career orientation – and both extrinsic (salary, position) and intrinsic success (job satisfaction, goal attainment) of psychologists. Over and above this, the authors explore whether extrinsic success predicts intrinsic success or vice versa.

Design/methodology/approach – In order to analyze the impact of career ambition on extrinsic and intrinsic success, the authors conducted two online studies with psychology graduates – a cross-sectional study (Study 1; $n = 119$) and a longitudinal one (Study 2; $n = 63$; two-three years interval between assessment points). The authors applied regression and cross-lagged analyses to investigate the interplay of career ambition and career success.

Findings – The results show that career ambition impacts on both extrinsic and intrinsic success. More specifically, extrinsic success was positively predicted by career orientation in Study 1. In contrast, achievement motivation was negatively related to intrinsic success (Study 1) and even diminished it over time (Study 2). Findings of the cross-lagged analysis further underlined that intrinsic success predicts extrinsic success.

Originality/value – The study contributes by separately investigating two aspects of career ambition and showing their different effects on career success in the specific profession of psychologists. As cross-lagged findings revealed that psychologists' intrinsic success predicted their extrinsic success and not vice versa, the authors discuss whether psychologists might be worsening their career development in the long run by showing high achievement motivation.

Keywords Psychologists, Career success, Achievement motivation, Career ambition, Career orientation

Paper type Research paper

Introduction

Across academic professions, careers have become less predictable and less structured (Baruch, 2004). So called “hard skills,” such as expertise, are no longer sufficient for “climbing the ladder” or for sustaining one's employability (Laker and Powell, 2011). During the past



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decades, graduates have faced increasing demands regarding their jobs: while their work environments changed continuously, e.g. through technological progress, they have to plan their careers more self-determinedly (Arthur, 2014). Indeed, self-determination skills are associated with higher career achievement. However, different professions might require a set of different skills to attain career success. Therefore, we focus on one specific profession, namely, psychologists. It seems that for psychologists especially, career development is characterized as being intermittent or inconsistent, because career interruptions or varying job contents are quite usual (Hoff *et al.*, 2002). Therefore, a strong career ambition (cf. Ashby and Schoon, 2010; Judge and Kammeyer-Mueller, 2012) is becoming more and more essential for psychologist's career success.

Career ambition expresses the motivation in our mind to actively further one's career by having a strong focus on one's work life and career (operationalized via the concept of career orientation) in combination with a high motivation to excel (reflected by the concept of achievement motivation). In line with self-determination theory (SDT; Deci and Ryan, 1985), these attributes predict best options for fostering one's career, at least as long as extrinsic career parameters such as salary and position are at play. However, extrinsic parameters are deficient for defining career success comprehensively. Inspired by the idea that protean careers are value driven (Hall, 2002), intrinsic success parameters such as job satisfaction or goal attainment should also be taken into consideration. We assume that individuals with high achievement motivation and with a strong career orientation might be more subject to experience discrepancies between their ideal and real job situation and that career ambition might not be functional for intrinsic success.

Studies based on SDT support the idea that there are two kinds of aspirations, which people try to achieve: extrinsic and intrinsic ones (Kasser and Ryan, 1993; Niemiec *et al.*, 2009). Kasser and Ryan (1996) recommended that it is important to separately investigate both domains. Furthermore, SDT distinguishes between different reasons or motivators to attain these aspirations (Deci and Ryan, 1985; Ryan and Deci, 2000).

This study contributes to the literature by investigating the role of career ambition. In their meta-analysis on predictors of career success, Ng *et al.* (2005) were not able to include the concept of career ambition because studies were lacking on this subject. Moreover, to the best of our knowledge, no research so far has focused on career ambition within this specific sample and even research on career success for this professional group is scarce (Sobiraj *et al.*, 2016). In the following, we will first define the concept of career success with focus on psychologists, then introduce the specific role of career ambition within this professional group and finally derive our hypotheses.

Psychologists' career success

At first glance, the psychological profession seems to be very different for a therapist or a consultant in the field of HRM. Nevertheless, certain similarities across the various work settings exist, because the specific nature of the psychological profession is "to render professional services to clients, based on psychological principles, knowledge, models and methods which are applied in an ethical and scientific way" (Batram and Roe, 2005, p. 95). Most psychologists work in social contexts, i.e., with people as individuals and group members who they potentially want to change – whether in a therapy setting, in the field of education or HRM. Although we admit that various possibilities of specialization exist, prior research found roles, functions and purposes of psychologists' work to be comparable (Batram and Roe, 2005).

Research on career success of psychologists is scarce: first evidence suggests that psychologists put a lower value on earning money and a higher one on receiving social appreciation (Sobiraj *et al.*, 2016). Hence from the SDT viewpoint (Ryan and Deci, 2000), psychologists tend to be motivated less by external regulation. Various scholars have aimed at

defining the concept of career success – independently from the profession – but there is still no agreement so far regarding a comprehensive definition (Arthur *et al.*, 2005). Most researchers at least share the assumption that career success is regarded to be a sum of indicators consisting of two broad dimensions (Arthur *et al.*, 2005; Judge *et al.*, 1995). One dimension includes objective, measureable and independently verifiable indicators (extrinsic success), the other includes subjective evaluations of one's working situation (intrinsic success).

Following Judge *et al.* (1999), extrinsic success can be regarded as objective and observable, consisting of highly visible outcomes such as pay and position. Frequencies of promotions and pay rises as well as number of subordinates (leadership span) equally belong to the extrinsic success dimension (Gunz and Heslin, 2005). Considering ideas of the SDT (Deci and Ryan, 1985), we could assume that pay and promotions are an expression of extrinsic aspirations, and therefore attaining these extrinsic aspirations would represent an indicator of extrinsic success. As outlined before, there are different motivators, which affect people's behavior. The non-self-determination, which is the focus of this study, describes that people act to attain some external goal (external regulation) or to avoid guilt or to achieve, e.g. pride (introjected regulation) (Ryan and Deci, 2000). One might assume that non-self-determination, the motivation to attain something external, might be related to extrinsic aspirations (salary and position) and thus positively to extrinsic success.

Yet, extrinsic indicators alone cannot comprehensively mirror career success, because they neglect an individual's subjective reactions to his or her own career (Judge *et al.*, 1995). This might be particularly true when taking into account the specific context of the psychological profession. On the one hand, there are different obstacles – such as being self-employed or working on a staff position – preventing the possibility of promotion of any kind. On the other hand, the psychologists' salary might be solely determined by the work setting (school psychologists in the public sector vs consultants in the private sector).

Accordingly, one has to take into consideration intrinsic success, which reflects the subjective evaluation of how much people are satisfied with their professional development (Judge *et al.*, 1995). Prior findings suggest that psychologists seem to have a broader understanding of intrinsic success considering, for example, their personal efficacy with respect to clients and patients (Sobiraj *et al.*, 2016). Hall and Chandler state that “true success is not just getting what you want in life – it's liking what you get” (2005, p. 19). “Helping people” might be one of the first associations which come to mind when thinking about the job content of psychologists. It seems to be beneficial in this respect whether psychologists have a “sense of calling,” which is defined as the highest level of intrinsic success (Hall and Chandler, 2005). Summing up, in order to explore the career success of psychologists, one should also take subjective indicators such as job satisfaction and goal attainment into account (Arthur *et al.*, 2005).

The role of career ambition for career success

To better understand the influence of career ambition on career success, we will start by defining what ambition means. One of the several definitions proposed comes from Elchardus and Smits, who considered that people are ambitious “when they entertain plans and goals for their professional future, are intent on making promotion and on realizing a ‘nice career,’ and agree to describe themselves as ambitious” (2008, p. 248). Following this line of thought and in an attempt to integrate different definitions, Judge and Kammeyer-Mueller defined ambition as “the persistent and generalized striving for success, attainment, and accomplishment” (2012, p. 759). Empirical findings in this context compliment the SDT assumptions that some individuals are inspired by interest to satisfy psychological needs of autonomy and competence, while others aspire for separable outcomes such as money (Ryan and Deci, 2000). Particularly, ambition is positively related to some indicators of extrinsic success such as occupation prestige (Judge and Kammeyer-Mueller, 2012) and income (Ashby and Schoon, 2010; Judge and Kammeyer-Mueller, 2012).

Ashby and Schoon (2010) investigated the role of teenage career aspirations in predicting extrinsic success (social status and earnings) and found that, when comparing young people high in ambition with young people low in ambition, the former earn more money in adulthood than the latter. Moreover, they found that teenage career aspirations and ambition values predicted social status attainment and earnings for females; for males, on the other hand, career aspirations predicted social status attainment, and ambition value predicted earnings. Furthermore, researchers investigated which variables predicted extrinsic success and found that ambition, which is a motivational variable, positively predicted pay and ascendancy (Judge *et al.*, 1995).

Cantor (1990) described personality (i.e. the “Big Five”) as something that people have and ambition as a middle-level trait as something what people actually do with this personality. Based on Cantor’s (1990) work, Judge and Kammeyer-Mueller (2012) included ambition in their study and argued that a middle-level trait has more influence on behavior in comparison to personality traits, which are more abstract. Hence, we see the strong need to introduce work-related personality concepts, or according to Cantor (1990) or Judge and Kammeyer-Mueller (2012), middle-level traits in order to predict career success. More precisely, we would like to introduce career orientation and achievement motivation as essential predictors for successful career development (see De Vos and Soens, 2008). The classic approach to achievement motivation focuses on motives and investigates differences in how strongly individuals are motivated and energized. Achievement motivation means putting high requirements on one’s professional performance through steadily optimizing and engagement in one’s vocational goals (Hossiep and Paschen, 1998). Career orientation describes one’s aspiration to attain those vocational goals, even if great effort is needed (Maier *et al.*, 2009).

As extrinsic success should be determined by one’s permanent striving to be the best and one’s focus to overcome any obstacles on the way to the ideal position, we expect achievement motivation and career orientation to be positively related with psychologists’ salary and hierarchical position. Assuming that a person’s career orientation is high, the underlying achievement motivation might also turn out to be important in the context of career development. Furthermore, former research indicates that career orientation is positively linked to extrinsic success (Ashby and Schoon, 2010; Judge and Kammeyer-Mueller, 2012).

In the framework of SDT, both external and introjected motivation (non-self-determined) represent forms of extrinsic motivation which are externally regulated. As the focus of the behavior is trying to attain some external goals or aspirations such as salary or approval from others (Deci and Ryan, 1985; Ryan and Deci, 2000), we argue that for people who are externally or introjectedly motivated, fulfilling extrinsic aspirations could be very important for defining career success, and therefore they will try harder to obtain it:

H1a. Career orientation is positively related to extrinsic success in psychologists.

H1b. Achievement motivation is positively related to extrinsic success in psychologists.

While the relations are straightforward for extrinsic success, they are much more questionable for intrinsic success. Some researchers, however, have investigated the relationship between ambition and intrinsic success (job and career satisfaction). Judge and Locke (1993) investigated the relationship between ambition and job satisfaction and found that ambition and job satisfaction were negatively related. They argued that people high in ambition were constantly dissatisfied with their current situation and had to accomplish more in order to improve their condition as compared with their counterparts, which could explain the findings described above. Along the same lines, Judge *et al.* (1995) not only investigated the relationship between ambition and extrinsic success, but also that between ambition and intrinsic success (job and career satisfaction). Their findings show that ambition negatively predicts both aspects of intrinsic success: job satisfaction and career satisfaction.

On the other hand, Tremblay *et al.* (2009) found that self-determination increased job satisfaction and suggested that non-self-determination is related to negative outcomes. In their study, non-self-determination was negatively related to, e.g. citizenship behavior. Taking into account all these arguments, we hypothesize that career ambition diminishes intrinsic success:

H2a. Career orientation is negatively related to intrinsic success in psychologists.

H2b. Achievement motivation is negatively related to intrinsic success in psychologists.

Method

Procedure

We conducted two studies with psychology graduates from the University of Leipzig (Germany). In Study 1, the participants were requested via e-mail to complete an online questionnaire. In order to overcome some of the shortcomings of analyzing only cross-sectional data, we carried out a second study in which we applied a longitudinal design (Study 2). Again, psychology graduates were contacted via their e-mail addresses (T1), and after two to three years they were asked to complete a follow-up questionnaire (T2).

Study 1: sample

All in all, 128 psychologists participated in the study. The psychology graduates had finished their studies between 2001 and 2006. Taking into consideration that, on average, 60 psychologists graduated each year at the University of Leipzig, the return rate (more than a time frame of six years) is at least of 35.6 percent; it is probably 10-20 percent higher due to the fact that not all graduates might still use their old e-mail account. Furthermore, data from currently unemployed psychologists could not be used for our study's purpose (14.1 percent). Therefore, our final sample comprised 119 psychologists of which 80 percent were female. They were on average 28.91 years old ($SD = 4.30$). Most participants worked in the field of clinical psychology (43.6 percent), 6.4 percent in the field of educational psychology, 17.3 percent in the field of work and organizational psychology, 2.6 percent in the field of criminal psychology and the remaining psychologists were employed in other fields, in- and outside of the psychological profession.

Study 2: sample

For the longitudinal study, 69 data could be matched across both assessment points. As six participants reported to be unemployed, they were excluded from the analyses, leading to a longitudinal sample of 63 psychologists. All of them had finished their studies between 2001 and 2009. Their mean age at the first assessment point was 29.95 years ($SD = 4.89$) and 77.4 percent of the psychologists were women. In total, 22 of them worked as clinical psychologists, ten as educational psychologists, five as WO-psychologists, three as criminal psychologists, 12 as researchers and the others in other fields.

Measures

Descriptive statistics and intercorrelations of all measures used in Studies 1 and 2 are provided in Table I.

Career ambition. All items for measuring ambition were rated on six-point Likert-type scales ranging from 1 (totally disagree) to 6 (totally agree). First, career orientation was operationalized by a scale from the German General Social Survey (Koch *et al.*, 1994) which comprised four items (e.g. "To be successful in my profession is very important to me"). Cronbach's α 's of 0.81 in Study 1 and 0.80 in Study 2 (T1) indicated satisfactory internal consistencies.

Table I.
Descriptive statistics of controls, career ambition and career success, as well as their inter-correlations (Studies 1 and 2)

	Study 1		Study 2		1	2	3	4	5	6	7	8	9	10
	M	SD	M	SD										
<i>Controls</i>														
(1) Sex	0.80		0.77		-	-0.20*	0.08	-0.10	-0.04	-0.04	-0.03	-0.13	-0.04	-
(2) Age	28.91	4.30	29.95	4.89	-0.17	-	0.33**	0.58***	0.03	0.08	0.17	0.24*	0.15	-
(3) Exam grade	1.56	0.35	1.52	0.37	-0.02	0.47***	-	0.25*	-0.03	0.10	0.14	0.17	0.02	-
(4) Practical experience	0.32	-	0.26	-	-0.12	0.65***	0.28*	-	0.11	0.08	0.10	0.16	0.07	-
(5) Weekly working hours	38.78		40.33	9.65	-0.08	0.19	0.25	0.18	-	0.32**	0.38***	0.40***	0.18	-
<i>Career ambition</i>														
(6) Career orientation	4.07	0.87	4.18	0.83	-0.01	0.02	-0.05	0.19	0.13	-	0.70***	0.32**	0.09	-
(7) Achievement motivation	3.66	0.65	3.74	0.68	-0.16	0.09	0.12	0.10	0.19	0.59***	-	0.27**	0.02	-
<i>Career success</i>														
(8) Extrinsic success	1.44	1.05	2.73	1.05	-0.14	0.10	0.05	0.23	0.62***	0.26*	0.31*	-	0.43***	-
(9) Intrinsic success	5.16	1.59	5.90	1.33	-0.07	0.23	-0.07	-0.03	0.22	0.02	-0.11	0.39**	-	-
(10) Extrinsic success (T2)	-	-	3.12	1.27	-0.11	0.10	-0.02	0.03	0.46***	0.24***	0.24***	0.72***	0.50***	-
(11) Intrinsic success (T2)	-	-	6.10	1.44	-0.06	0.08	-0.13	-0.10	0.18	0.10	-0.20	0.24	0.73***	0.55***

Notes: For sex, 0 = male; 1 = female. For practical experience, 0 = no experiences at the workplace before studying psychology; 1 = practical experiences before studying psychology. According to the German educational system lower values in exam grade indicate a better achievement and higher values a worse achievement. For all other variables a high value represented a strong endorsement of the construct. The correlations of Study 1 (cross-sectional) are displayed above the diagonal and the correlations of Study 2 (longitudinal) below. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; **** $p < 0.0001$ (two-tailed tests)

In order to investigate achievement motivation, the respective subscale of the Business-focused Inventory of Personality (Hossiep and Paschen, 1998) was used. The measure consisted in 14 items (e.g. “I am only satisfied with my performance when I exceed the expectations”). This scale additionally possessed good psychometric properties with Cronbach’s α s of 0.81 in Study 1 and 0.80 in Study 2 (T1).

To verify that career orientation and achievement motivation are conceptually distinct, we conducted a CFA using Amos 19.0 (Arbuckle, 2010). Our results lend support to the hypothesized two-factor model of career ambition ($\chi^2 = 246.88$, $df = 127$, $p < 0.001$, $\chi^2/df = 1.94$ (ratio < 2.5 indicates a good model fit), $CFI = 0.83$, $RMSEA = 0.09$), which provided a significantly better fit ($\Delta\chi^2 = 135.32$, $\Delta df = 8$, $p < 0.001$) than the one-factor model in which all items patterned on to a global factor ($\chi^2 = 382.20$, $df = 135$, $p < 0.001$, $\chi^2/df = 2.83$, $CFI = 0.65$, $RMSEA = 0.13$).

Career success. With respect to extrinsic success, information about the psychologists’ salary and their position was assessed. First, salary was measured by using nine categories ranging from less than EUR1,000, in steps of EUR500 up to more than EUR5,000 for the monthly gross income. Regarding the salary, 17.1 percent of the psychologists of Study 1 received less than EUR1,000, 27.6 percent received between EUR1,000 and 1,500, and 17.1 percent between EUR1,500 and 2,000.

Next, information on the psychologists’ position in organizational hierarchy was gathered by using the specific item “How many hierarchy levels of employees work under your position?” of the Job Descriptive Questionnaire (Neuberger and Allerbeck, 1978). This item had to be answered by using the response categories 1 (no subordinates; only superiors) to 5 (four or more levels of subordinates). By far, most of the participants of Study 1 had no supervising responsibilities at all (48.2 percent) or only one level of subordinates to care for (40.9 percent), whereas 6.4 percent had a supervising position over two levels of subordinates. Salary and position were positively inter-correlated in Study 1 ($r = 0.20$; $p < 0.05$) and also in Study 2 (T1: $r = 0.23$; $p < 0.10$; T2: $r = 0.24$; $p < 0.10$) and thus combined into global indicators of extrinsic success. Prior research also pooled salary and position, as salary alone might be less valid for people being employed by the state, for example (who get pay rises depending on age and tenure and not so much on performance) whereas position alone might be less valid if a person is self-employed (for details, see Abele and Spurk, 2009). Please note that in Study 2, the extrinsic success of the psychologists significantly increased between T1 and T2 (see Table I; $p < 0.01$).

In contrast, intrinsic success was composed of job satisfaction and goal attainment. Job satisfaction was measured with seven global items from 1 (totally disagree) to 6 (totally agree) of the Job Descriptive Questionnaire from Neuberger and Allerbeck (1978; e.g. “All in all, I am satisfied with my colleagues”). The Cronbach’s α were all satisfactory and reached 0.80 in Study 1 ($M = 4.58$, $SD = 0.80$) and 0.77 (T1) and 0.74 (T2) in Study 2 (T1: $M = 4.55$, $SD = 0.83$; T2: $M = 4.69$, $SD = 0.67$).

Goal attainment was measured with three items, where the participants should appraise to which percentage on a scale from 0 (0 percent achieved) to 9 (90 percent or more achieved) they had attained their goals relating to their salary, their job content and their position (e.g. “To which percentage did you attain your vocational goal relating to your salary?”). Items of goal attainment and job satisfaction in Study 1 ($\alpha = 0.65$) and Study 2 (T1: $\alpha = 0.70$; T2: $\alpha = 0.63$) were combined into global indicators of intrinsic success. This index of intrinsic success yielded Cronbach’s α of 0.65 in Study 1 and of 0.63 in Study 2 (T2), and thus failed the criterion of $\alpha > 0.70$ to be considered as satisfying (Nunnally and Bernstein, 1994). However, Clark and Watson (1995) suggested that mean inter-item correlations between 0.15 and 0.20 should be achieved for scales measuring broad characteristics. The mean inter-item correlations for Study 1 was $r_{est} = 0.32$ and for Study 2 at T2 was $r_{est} = 0.30$.

Analytic strategy

We used hierarchical regression analyses to adequately test our hypotheses. Because several studies evidenced that career success strongly depends on gender (Kirchmeyer, 2006) and age (Judge *et al.*, 1995), these two socio-demographic variables were considered to be relevant control variables. Moreover, as the academic success might be seen as an indicator of career success (Busato *et al.*, 2000), the psychologists' exam grade was equally taken into account. Next, practical experiences before studying psychology were assessed, as a more detailed knowledge of the labor market might help to choose the "right" subject to study and thus to enhance career success in the long run. Finally, as the time spent at work can be considered as being associated with extrinsic success (in particular with salary), weekly working hours were controlled. In sum, gender, age, exam grade, practical experiences and weekly working hours were included as controls in the first step of the regression analyses.

With regard to Study 2, we explored whether differences in career ambition explained any longitudinal changes in career success from the first to the second assessment. Evidence for these kinds of cross-lagged effects would provide stronger support for our theoretical assumptions. We considered extrinsic as well as intrinsic success at T2 as the dependent variables in order to explore whether career ambition predicted career success at a later point in time. The autoregressor (extrinsic success at T1, intrinsic success at T1) was entered in the first step, followed by control variables at T1, and finally achievement motivation and career orientation at T1.

Results

The bivariate correlations presented in Table I lend preliminary support for our assumptions. As hypothesized, the stronger the psychologists' career orientation was (*H1a*), and the higher their achievement motivation (*H1b*), the more they reported on being extrinsically successful. Contrary to this, no significant relations were revealed for intrinsic success (*H2a*, *H2b*).

The results of the regression analyses can be found in Table II. For extrinsic success, 31 percent of the variance in Study 1 and 7 percent of the variance in Study 2 (after controlling for the autoregressor) could be predicted. In Study 1, we found career orientation to be positively associated with extrinsic success. This is in line with *H1a*: the more the psychologists strived for getting on in their career, the better was their position and the higher was their salary. Yet, this finding could not be replicated in the longitudinal study. Furthermore, achievement motivation was neither cross-sectionally nor longitudinally related to extrinsic success. Therefore, *H1b* was not confirmed.

For intrinsic success, 25 percent of the variance in Study 1 and 7 percent of the variance (after controlling for the autoregressor) in Study 2 could be predicted. This time, no evidence for the relationship of career orientation and intrinsic success could be found. Hence, *H2a* has to be denied. In line with our assumption, though, a negative relationship between achievement motivation and intrinsic success was revealed across both the cross-sectional and the longitudinal study confirming *H2b*: the more psychologists put high requirements on their professional performance, the lower was their job satisfaction and goal attainment in the long run.

Cross-lagged analysis

Arthur *et al.* (2005) found that 37 percent of the reviewed studies assume that extrinsic success determines intrinsic success, 19 percent of the studies consider that intrinsic success increases extrinsic success and 9 percent report about an interaction of extrinsic and intrinsic success. In a ten-year longitudinal study, Abele and Spurk (2009) showed that the traditionally hypothesized impact of extrinsic parameters on intrinsic success are lower

Predictors at T1	Study 1						Study 2					
	Extrinsic success			Intrinsic success			Extrinsic success (at T2)			Intrinsic success (at T2)		
	B	β	p	B	β	p	B	β	p	B	β	p
<i>Step 0</i>												
Autoregressor	-			-			0.97	0.80	***	0.74	0.70	***
<i>Step 1</i>												
Sex	-0.19	-0.07		-0.17	-0.04		-0.06	-0.02		-0.20	-0.06	
Age	0.06	0.21		0.08	0.18		0.06	0.26		-0.02	-0.08	
Exam grade	0.32	0.10		-0.28	-0.05		-0.09	-0.03		0.08	0.02	
Practical experience	0.04	0.02		-0.08	-0.02		-0.98	-0.34	*	-0.04	-0.01	
Weekly working hours	0.03	0.39	***	0.05	0.43	***	-0.01	-0.09		0.01	0.03	
<i>Step 2</i>												
Career orientation	0.33	0.28	*	0.37	0.18		0.18	0.11		0.34	0.20	
Achievement motivation	-0.23	-0.15		-0.83	-0.31	**	-0.13	-0.07		-0.57	-0.29	*
Step 0: ΔR^2	-			-			0.53		***	0.54		***
Step 1: ΔR^2	0.27		***	0.20		***	0.06			0.02		
Step 2: ΔR^2	0.04			0.05		*	0.01			0.05		
F	6.83		***	5.26		***	7.10		***	8.05		***

Table II.
Regression of indicators of psychologists' career success on career ambition using a cross-sectional (Study 1) and longitudinal design (Study 2)

Notes: For a detailed description of the constructs, see Table I. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

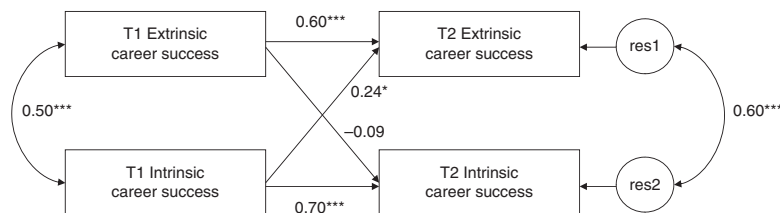
than expected, whereas the causal relationship of intrinsic measures on extrinsic success is so far underestimated.

Hence, in order to look whether extrinsic success of psychologists predicts intrinsic success or vice versa, a cross-lagged analysis was conducted. Cross-lagged analyses allow for the exploration of both cross-lagged effects simultaneously: the expected effect that extrinsic success predicts increases in intrinsic success and the complementary effect that intrinsic success predicts increases in extrinsic success (cf. Taris, 2000).

The cross-lagged analysis was computed with Amos 19.0 (Arbuckle, 2010). Figure 1 displays the results. As illustrated, intrinsic success at T1 showed a cross-lagged effect on extrinsic success at T2 when controlling for the longitudinal effect of extrinsic success on extrinsic success. In contrast, extrinsic success at T1 did not show a cross-lagged effect on intrinsic success at T2. In sum, intrinsic success predicted increases in extrinsic success of psychologists, but not vice versa.

Discussion

The purpose of our studies was to explore the role of career ambition for extrinsic and intrinsic success of psychologists. SDT presumes that individuals strive to achieve extrinsic or intrinsic goals or both; and particularly, the intrinsic aspirations are related to the



Note: res1, res2=residuals

Figure 1.
Cross-lagged effects of extrinsic success and intrinsic success over time (T1, T2)

psychological need for competence (Ryan and Deci, 2000). Roe (2002) demonstrates that pillars of psychologists' competences, namely, knowledge, skills and attitudes, are built upon the individual's dispositions (Batram and Roe, 2005). On the basis of these models and of descriptions of career ambition as a striving for success (Judge and Kammeyer-Mueller, 2012), we define career ambition as comprising two attitudes: achievement motivation and career orientation. We assumed that these attitudes are important antecedents for fostering objective indicators of career development (i.e. salary, position), as extrinsic success should be determined by one's permanent striving to be the best and one's focus to overcome any obstacles on the way to the ideal position (Ashby and Schoon, 2010; Judge *et al.*, 1995). Based on the assumption that people high in ambition could easily be dissatisfied with their achievements (Judge *et al.*, 1995), we predicted career orientation and achievement motivation to be negatively linked with intrinsic success. Moreover, our indicators of ambition as described tend to be dominated by extrinsic, introjected and identified aspirations rather than intrinsic aspirations.

Regarding extrinsic success, our findings from the cross-sectional study were in line with our assumptions, highlighting career ambition (or specifically career orientation) as a predictor of career success. Although we did not observe the same in the longitudinal study, the finding still advances extant research which shows that the stronger the career orientation, the higher the likelihood of career success (Judge *et al.*, 1995, Judge and Kammeyer-Mueller, 2012). Psychologists who put their career above all else tend to earn higher salaries and have higher positions in the organizational hierarchy, which is in line with Ashby and Schoon's (2010) finding that ambitious individuals attain higher status than their less ambitious peers. The observation that career orientation does not predict career success in the longitudinal study could be a precursor to the likelihood that career ambition diminishes psychologists' career success over time, particularly regarding the intrinsic aspects. Such situations might result when there are unmet expectations (Ng and Feldman, 2014) from the ambitious efforts in psychologists' career progression.

Our results indicate by contrast that psychologists' achievement motivation did not predict their extrinsic success. However, on a bivariate level, correlation results revealed a positive covariance between the two both cross-sectionally and longitudinally. But when simultaneously analyzed with career orientation, these associations vanished. Whereas these results do not explicitly point to the direct effects of achievement motivation on extrinsic success, there could be mechanisms causing indirect effects both in the short and the long term. Achievement motivation is also called success orientation, where individuals strive to avoid failure and its consequences (De Castella *et al.*, 2013). Thus psychologists with a strong achievement motivation have higher effort levels for achieving success, which may partly explain the higher correlation with extrinsic success. This may begin by achieving success at schooling level, as they may achieve better grades (Busato *et al.*, 2000). Success at this level may increase the achievement motivation levels and likely positively impact on their extrinsic success, following Higgins *et al.*'s (2001) analogy of achievement from the perspective of subjective histories of success. Although career orientation turned out to be the more potent predictor in the regression analyses, individuals with an achievement motivation which is more directed to career than to other aspects most likely achieve better extrinsic success. In this regard, SDT research has shown that the direction of aspirations is associated with goal attainment (Niemiec *et al.*, 2009).

As expected, achievement motivation was negatively related to intrinsic success cross-sectionally and longitudinally (cf. Judge *et al.*, 1995). However, career orientation did not strongly predict intrinsic success both in the cross-sectional and longitudinal studies. The need to succeed and the resulting efforts can result into positive outcomes such as academic success, higher positions in organizational hierarchy and higher salaries. This may not necessarily translate, however, into positive subjective evaluations of success.

Yet such evaluations are further subjective to individuals' goals and expectations. Extant SDT literature shows that achieving extrinsic aspirations does not necessarily satisfy people's needs (Kasser and Ryan, 2001) and at best the goals pursued need to be aligned to one's psychological needs (Sheldon and Kasser, 1998). When psychologists do not achieve or exceed their personal expectations, they tend to evaluate their success negatively. In relation to social cognitive theory, this is likely to in turn lower their motivation (Larson *et al.*, 2015) in the long run. In addition, a question arises of what psychologists really need, by way of gratifying their psychological needs. Aligning their aspirations to their personal psychological needs might be very useful in achieving success.

Overall, in our research, career ambition – or more precisely achievement motivation – turned out to be maladaptive for intrinsic success over time. Achievement motivation even diminished extrinsic success via an impaired intrinsic success in the long run. Accordingly, in the cross-lagged analysis, we found that intrinsic success heightened extrinsic success in the long run but no evidence was found for the opposite effect. This contradicts Abele and Spurk's (2009) study of various professions which showed that it is extrinsic success that influences intrinsic success. It is probable that the trend is quite different for psychologists. Nonetheless, Cerasoli *et al.* (2014) posit that intrinsic and extrinsic aspects are certainly not in conflict with each other but rather, that they are best understood when considered concurrently.

Our study suggests that psychologists with higher intrinsic success may have greater hunger to achieve extrinsic incentives. However, psychologists' internal feelings of success derive from aspects of career beyond job position, promotions and salary. Referring to Hall and Chandler's (2005) proposition that a "sense of calling" is the highest level of intrinsic success, psychologists who feel called may achieve high intrinsic success. With respect to their job content, they are seen as "helping people" who measure their success by how well they have helped others or more precisely by how well they have performed according to their "calling." It is therefore important that such dimensions should be included in measures of intrinsic success. To sum up, our results suggest that psychologists should reflect on their work as a calling in the sense of Wrzesniewski *et al.* (1997) such that they seek intrinsic aspirations, and in terms of extrinsic aspirations, their work is socially useful (introjected aspiration). Achieving these aspirations can consequently be accompanied by extrinsic success.

Limitations and potential strength

This study contains some strength, making it stand out against prior research, but also some limitations which have to be considered. One of the strengths of our research is that we focused on a single and often neglected profession. Moreover, by combining cross-sectional and longitudinal data, we could at least identify indicators of a causal sequence from career ambition to career success. But it has to be kept in mind that our longitudinal sample was quite small and covered only a time frame of two to three years, which is a relatively short period of time in one's career span.

We would also like to highlight some other limitations which urge to caution in over-generalizing our results. The first shortcoming is that our data exclusively consists in self-reports, so that the associations we have found may have resulted from carry-over effects. Note, however, that Abele and Spurk (2009) showed for extrinsic measures of career success that self-reported salary strongly correlated with an objective assessment of salary. Second, the study was conducted online, which while allowing us easy access to graduates of the University of Leipzig, prevented us from gathering a representative sample of psychologists. In addition, the sample might be biased if especially those graduates participated, who are satisfied with their career development. Third, even though our research provided evidence for explaining the well-established indicators of extrinsic and intrinsic success, research still lacks a clear assessment of whether these indicators still

comprehensively define the concept of career success in the eyes of the beholders. Sobiraj *et al.* (2016) further called for inclusion of social appreciation and personal efficacy in measuring career success for psychologists. Relatedly, our study focuses mainly on the quantity of aspirations. SDT also advocates for examining the quality of motivation. Given the uniqueness of the psychology profession, future studies should explore the impact of the direction of motivation on psychologists' career success.

References

- Abele, A.E. and Spurk, D. (2009), "How do objective and subjective career success interrelate over time?", *Journal of Occupational and Organizational Psychology*, Vol. 82 No. 4, pp. 803-824.
- Arbuckle, J.L. (2010), *IBM SPSS® Amos™ 19 User's Guide*, Amos Development Corporation, Crawfordville, FL.
- Arthur, M.B. (2014), "The boundaryless career at 20: where do we stand, and where can we go?", *Career Development International*, Vol. 19 No. 6, pp. 627-640.
- Arthur, M.B., Khapova, S.N. and Wilderom, C.P.M. (2005), "Career success in a boundaryless career world", *Journal of Organizational Behavior*, Vol. 26 No. 2, pp. 177-202.
- Ashby, J. and Schoon, L. (2010), "Career success: the role of teenage career aspirations, ambition value and gender in predicting adult social status and earnings", *Journal of Vocational Behavior*, Vol. 77 No. 3, pp. 350-360.
- Baruch, Y. (2004), "Transforming careers: from linear to multidirectional career paths: organizational and individual perspectives", *Career Development International*, Vol. 9 No. 1, pp. 58-73.
- Batram, D. and Roe, R.A. (2005), "Definition and assessment of competences in the context of the European Diploma in psychology", *European Psychologist*, Vol. 10 No. 2, pp. 93-102.
- Busato, V.V., Prins, F.J., Elshout, J.J. and Hamaker, C. (2000), "Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education", *Personality and Individual Differences*, Vol. 29 No. 6, pp. 1057-1068.
- Cantor, N. (1990), "From thought to behavior: 'having' and 'doing' in the study of personality and cognition", *American Psychologist*, Vol. 45 No. 6, pp. 735-750.
- Cerasoli, C.P., Nicklin, J.M. and Ford, M.T. (2014), "Intrinsic motivation and extrinsic incentives jointly predict performance: a 40-year meta-analysis", *Psychological Bulletin*, Vol. 140 No. 4, pp. 980-1008.
- Clark, L.A. and Watson, D. (1995), "Constructing validity: basic issues in objective scale development", *Psychological Assessment*, Vol. 7 No. 3, pp. 309-319.
- De Castella, K., Byrne, D. and Covington, M. (2013), "Unmotivated or motivated to fail? A cross-cultural study of achievement motivation, fear of failure, and student disengagement", *Journal of Educational Psychology*, Vol. 105 No. 3, pp. 861-880.
- De Vos, A. and Soens, N. (2008), "Protean attitude and career success: the mediating role of self-management", *Journal of Vocational Behavior*, Vol. 73 No. 3, pp. 449-456.
- Deci, E.L. and Ryan, R.M. (1985), "The general causality orientations scale: self-determination in personality", *Journal of Research in Personality*, Vol. 19 No. 2, pp. 109-134.
- Elchardus, M. and Smits, W. (2008), "The vanishing flexible: ambition, self-realization and flexibility in the career perspectives of young Belgian adults", *Work, Employment & Society*, Vol. 22 No. 2, pp. 243-262.
- Gunz, H.P. and Heslin, P.A. (2005), "Reconceptualizing career success", *Journal of Organizational Behavior*, Vol. 26 No. 2, pp. 105-111.
- Hall, D.T. (2002), *Careers in and Out of Organizations*, Sage Publications, Thousand Oaks, CA.
- Hall, D.T. and Chandler, D.E. (2005), "Psychological success: when the career is a calling", *Journal of Organizational Behavior*, Vol. 26 No. 2, pp. 155-176.
- Higgins, E.T., Friedman, R.S., Harlow, R.E., Idson, L.C., Ayduk, O.N. and Taylor, A. (2001), "Achievement orientations from subjective histories of success: promotion pride versus prevention pride", *European Journal of Social Psychology*, Vol. 31 No. 1, pp. 3-23.

- Hoff, E.H., Grote, S. and Wahl, A. (2002), "Erfolg in den Berufsverläufen von Frauen und Männern. Das Beispiel der Profession Psychologie", *Wirtschaftspsychologie*, Vol. 4 No. 1, pp. 56-63.
- Hossiep, R. and Paschen, M. (1998), *Das Bochumer Inventar zur berufsbezogenen Persönlichkeitsbeschreibung (IP – Business-focused Inventory of Personality)*, Hogrefe, Göttingen.
- Judge, T.A. and Kammeyer-Mueller, J.D. (2012), "On the value of aiming high: the causes and consequences of ambition", *Journal of Applied Psychology*, Vol. 97 No. 4, pp. 758-775.
- Judge, T.A. and Locke, E.A. (1993), "Effect of dysfunctional thought processes on subjective well-being and job satisfaction", *Journal of Applied Psychology*, Vol. 78 No. 3, pp. 475-490.
- Judge, T.A., Cable, D.M., Boudreau, J.W. and Bretz, R.D. Jr (1995), "An empirical investigation of the predictors of executive career success", *Personnel Psychology*, Vol. 48 No. 3, pp. 485-519.
- Judge, T.A., Higgins, C.A., Thoresen, C.J. and Barrick, M.R. (1999), "The big five personality traits, general mental ability, and career success across the life span", *Personnel Psychology*, Vol. 52 No. 3, pp. 621-652.
- Kasser, T. and Ryan, R.M. (1993), "A dark side of the American dream: correlates of financial success as a central life aspiration", *Journal of Personality and Social Psychology*, Vol. 65 No. 2, pp. 410-422.
- Kasser, T. and Ryan, R.M. (1996), "Further examining the American dream: differential correlates of intrinsic and extrinsic goals", *Personality and Social Psychology Bulletin*, Vol. 22 No. 3, pp. 280-287.
- Kasser, T. and Ryan, R.M. (2001), "Be careful what you wish for: optimal functioning and the relative attainment of intrinsic and extrinsic goals", in Schmuck, P. and Sheldon, K.M. (Eds), *Life Goals and Well-being: Towards a Positive Psychology of Human Striving*, Hogrefe & Huber Publishers, Göttingen, pp. 116-131.
- Kirchmeyer, C. (2006), "The different effects of family on objective career success across gender: a test of alternative explanations", *Journal of Vocational Behavior*, Vol. 68 No. 2, pp. 323-346.
- Koch, A., Gabler, S. and Braun, M. (1994), "Konzeption und Durchführung der 'Allgemeinen Bevölkerungsumfrage der Sozialwissenschaften' (ALLBUS) 1994", *ZUMA Arbeitsbericht*, Vols 94/11.
- Laker, D.R. and Powell, J.L. (2011), "The differences between hard and soft skills and their relative impact on training transfer", *Human Resource Development Quarterly*, Vol. 22 No. 1, pp. 111-122.
- Larson, H.K., McFadden, K., McHugh, T.L.F., Berry, T.R. and Rodgers, W.M. (2015), "Expectations, outcomes, and motivation in new exercisers", *Journal of Exercise, Movement, and Sport*, Vol. 47 No. 1.
- Maier, G.W., Wastian, M. and von Rosenstiel, L. (2009), "Der differenzielle Einfluss der Berufsorientierungen auf Berufserfolg und Arbeitsmotivation: Ergebnisse einer Längsschnittstudie über 6 Jahre", *Zeitschrift für Arbeits- und Organisationspsychologie A&O*, Vol. 53 No. 3, pp. 104-120.
- Neuberger, O. and Allerbeck, M. (1978), *Messung und Analyse von Arbeitszufriedenheit*, Huber, Bern.
- Ng, T.W. and Feldman, D.C. (2014), "Subjective career success: a meta-analytic review", *Journal of Vocational Behavior*, Vol. 85 No. 2, pp. 169-179.
- Ng, T.W., Eby, L.T., Sorensen, K.L. and Feldman, D.C. (2005), "Predictors of objective and subjective career success: a meta-analysis", *Personnel Psychology*, Vol. 58 No. 2, pp. 367-408.
- Niemiec, C.P., Ryan, R.M. and Deci, E.L. (2009), "The path taken: consequences of attaining intrinsic and extrinsic aspirations in post-college life", *Journal of Research in Personality*, Vol. 43 No. 3, pp. 291-306.
- Nunnally, J.C. and Bernstein, I.H. (1994), *Psychometric Theory*, McGraw-Hill, New York, NY.
- Roe, R.A. (2002), "What makes a competent psychologist?", *European Psychologist*, Vol. 7 No. 3, pp. 192-202.
- Ryan, R.M. and Deci, E.L. (2000), "Intrinsic and extrinsic motivations: classic definitions and new directions", *Contemporary Educational Psychology*, Vol. 25 No. 1, pp. 54-67.

- Sheldon, K.M. and Kasser, T. (1998), "Pursuing personal goals: skills enable progress, but not all progress is beneficial", *Personality and Social Psychology Bulletin*, Vol. 24 No. 12, pp. 1319-1331.
- Sobiraj, S., Schladitz, S. and Otto, K. (2016), "Defining and explaining career success in psychologists using person and job based resources", *Psychology and Education Journal*, Vol. 53 No. 2, pp. 1-20.
- Taris, T.W. (2000), *A Primer in Longitudinal Analysis*, Sage, Thousand Oaks, CA.
- Tremblay, M.A., Blanchard, C.M., Taylor, S., Pelletier, L.G. and Villeneuve, M. (2009), "Work extrinsic and intrinsic motivation scale: its value for organizational psychology research", *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, Vol. 41 No. 4, pp. 213-226.
- Wrzesniewski, A., McCauley, C., Rozin, P. and Schwartz, B. (1997), "Jobs, careers, and callings: people's relations to their work", *Journal of Research in Personality*, Vol. 31 No. 1, pp. 21-33.

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