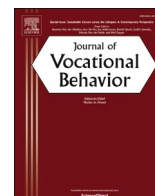


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Striving for success: Towards a refined understanding and measurement of ambition

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ABSTRACT

Despite broad interest in the nature of ambition and its effects on career outcomes, scientific research on this issue is limited due to an inconsistent conceptualization and measurement of ambition. Consistent with theoretical views, but in contrast to most existing measurements, we conceptualize ambition as a general personal disposition and developed and evaluated a 5-item measure of ambition consistent with this conceptualization. We report a six-phase process including (1) item generation, (2) item content review by subject matter experts, (3) item reduction and selection based on a university student ($N = 1074$) and employee ($N = 469$) sample, (4) examining convergent, discriminant, and incremental validity in relation to existing ambition scales with an employee sample ($N = 301$), (5) establishing discriminant validity to other personal dispositions in terms of achievement striving, trait competitiveness, and future time perspective with an employee sample ($N = 544$), and (6) establishing re-test reliability, longitudinal measurement-invariance, and incremental criterion validity regarding objective (i.e., salary, promotions) and subjective career success (i.e., career satisfaction) with a six-month time-lagged study ($N = 394$). In sum, the newly developed scale should be useful for future research to improve the theoretical and empirical understanding of the nature and effects of ambition.

Big results require big ambitions¹.

Heraclitus

Ambition has long attracted the interest of philosophers and laypeople because it is regarded as both a high virtue that can lead someone to significant personal and societal attainments as well as a vice that can inflict suffering on others in the pursuit of personal gains (Pettigrove, 2007). Ambition is originally conceptualized as a relatively stable personal disposition, defined as “the persistent and generalized striving for success, attainment, and accomplishment” (Judge & Kammeyer-Mueller, 2012, p. 759), or “a yearning desire to rise that is committedly pursued” (Pettigrove, 2007, p. 57). Ambition is considered as highly relevant in diverse social contexts, such as educational attainment, sports, or politics (Judge & Kammeyer-Mueller, 2012; Pettigrove, 2007), and seems to be particularly relevant in the work context. Indeed, several researchers argued that ambition should exert significant effects on a broad range of work and career behaviors and outcomes (e.g., Jones et al., 2017; Judge & Kammeyer-Mueller, 2012).

However, existing research on the role of ambition in the work context yielded inconsistent and often difficult-to-interpret results.

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Table 1
Existing conceptualizations and measures of ambition.

Measure label	Ambition described/defined as	Items	No. of items	Reference
Conceptualization of ambition: desire for professional and career advancement				
Ambition	The desire to get ahead	How many levels do you want to move up from your current position?	1	Judge et al. (1995)
Ambition value	The importance attached to having a job that enables to be challenged, be promoted and get ahead	How much will it matter to me to get a promotion so I can get ahead? How much will it matter to me to get a job with a real challenge?	2	Ashby and Schoon (2010)
Career advancement ambition	A motivational basis of professional and organizational commitment as a type of reward expectancy (i.e., the expectation of advancing in one's profession or organization) and a commitment to a course of action (the willingness to do whatever is necessary to advance in one's profession or organization)	How important is it that you succeed in your present firm? How important is it that you move up in your present firm? How important is it that you succeed in your profession? How important is it that you move up in your profession?	4	Desrochers and Dahir (2000)
Conceptualization of ambition: importance of specific work values and career goals				
Career ambition	<i>No definition/formal description provided</i>	To what extent do you have the career goal of a good salary? ^a To what extent do you have the career goal of developing your capabilities? ^a To what extent do you have the career goal of having meaningful tasks? ^a How important is getting a promotion for you? ^a	3	Kuijpers and Scheerens (2006)
Ambition values	Attributed weight on status-related indicators such as rewards, recognition, and reputation	How important is high pay for you? ^a How important is recognition from others in the field for you? ^a How important is building a professional reputation for you? ^a	4	Zimmerman et al. (2012)
Conceptualization of ambition: combining different typical characteristics of ambitious people				
Ambitious career attitude	Entertaining plans and goals for the professional future, intent on making promotion and on realizing a 'nice career', and agreeing to describe oneself as ambitious	I have lots of plans for my professional future I can describe myself as ambitious Professionally I have a number of goals I definitely want to realize I want a job in which I can get promotion I think I will be able to realize a nice professional career In a group I like to take charge of things ^b	5	Elchardus and Smits (2008)
Ambition	The degree to which a person seems socially self-confident, leader-like, competitive, energetic	I am an ambitious person ^b I know what I want to be ^b I am a very self-confident person ^b	28	Hogan and Hogan (1995)
Ambition	Achievement motivation, drive, energy, initiative	I enjoy talking in front of groups of people ^b Degree of achievement motivation, drive, energy, and initiative ^c	–	Jansen and Vinkenbug (2006)
Conceptualization of ambition: direct assessment of general disposition, ad-hoc assessment				
Ambition	The persistent and generalized striving for success, attainment, and accomplishment	Do you have a definite purpose in life? What do you regard as your most serious faults of personality or character? What do you regard as your most outstanding favorable qualities of personality or character? To what extent is this person characterized by ambition, drive, and willingness to work in order to attain success?	4	Judge and Kammeyer-Mueller (2012)
Ambition	<i>No definition/formal description provided</i>	I am ambitious	1	Tschopp et al. (2015)
Conceptualization of ambition: direct assessment of general disposition, purposefully developed and validated scale				
Ambition	The persistent and generalized striving for success, attainment, and accomplishment	I am ambitious I strive for success I have challenging goals For me it is very important to achieve outstanding results in my life For me it is very important to accomplish great things	5	current paper

^a The cited publication did not provide the exact item wording. The provided item wording in the table is inferred from information given in the cited publication.

^b Only sample items are provided as the full item list is not publicly available.

^c Assessment was based on an interview with no specifications of interview content provided in the cited publication.

For example, whereas some studies suggest that ambition promotes objective career attainment (Ashby & Schoon, 2010; Judge & Kammeyer-Mueller, 2012), meta-analytic results (Ng & Feldman, 2014a) did not find a significant correlation between ambition and salary, but showed a significant variance in effects across studies. Also regarding subjective career outcomes, studies remain inconclusive. Whereas some studies found that ambition is negatively related to career satisfaction (Judge et al., 1995), others found a positive relation (El Baroudi et al., 2017), and still others found no significant correlation (Zimmerman et al., 2012).

In addition to providing inconclusive results, the existing literature on ambition shows large discrepancies in how ambition has been conceptualized and assessed. Indeed, such discrepancies are likely an important reason for the fragmented and divergent state of knowledge regarding the nomological net of ambition (i.e., its correlates and outcomes). Existing studies conceptualized and measured ambition as a striving to rise in one's current organization (Desrochers & Dahir, 2000; Judge et al., 1995), the importance of specific work outcomes (e.g., a high salary; Kuijpers & Scheerens, 2006; Zimmerman et al., 2012), or by combining different facets, such as self-confidence, desire for leadership, or sense of identity (Hogan & Hogan, 1995; Jansen & Vinkenbug, 2006). Hence, in contrast to its theoretical conceptualization, empirical research mostly did not assess ambition as a general disposition and is based on very diverse measurements of ambition. Moreover, the discriminant validity of ambition in relation to conceptually closely related constructs (e.g., achievement striving) has not been sufficiently established. In sum, to obtain a better understanding of ambition, it is important to clarify the nomological net of ambition and more closely examine the unique value of ambition beyond other established personal dispositions to predict career outcomes.

To address these issues, we first provide a conceptual clarification of the nature of ambition as a general disposition and then developed and evaluated a new short 5-item measure to assess ambition according to this conceptualization. Specifically, in a series of six phases, we followed best-practice guidelines of scale development and evaluation (Hinkin, 1998) in terms of (1) item generation, (2) item content review by subject matter experts, (3) item reduction and selection based on a university student and employee sample, (4) examining convergent, discriminant, and incremental validity in relation to existing ambition scales with an employee sample, (5) establishing discriminant validity to other personal dispositions (i.e., achievement striving, trait competitiveness, and future time perspective) with a new employee sample, and (6) establishing re-test reliability, longitudinal measurement invariance, and incremental criterion validity regarding objective (i.e., salary, promotions) and subjective career success (i.e., career satisfaction) with a six-month time-lagged study.

Combined, our study makes several contributions towards a better theoretical and empirical understanding of the nature and career effects of ambition. First, we present an improved measure of ambition with a set of validated items to reliably and content-validly assess ambition as a personal disposition in future research. Second, we theoretically clarify the nature of ambition as a general disposition in contrast to most existing context-specific measures of ambition. Third, we theoretically and empirically clarify the nomological net of ambition in relation to context-specific ambition measures and other more general personal dispositions (i.e., achievement striving, trait competitiveness, and future time perspective). Finally, we address existing inconsistencies regarding the relation of ambition with different forms of career success, including the incremental value of ambition beyond related constructs.

1. The conceptual nature of ambition and existing measurement approaches

Consistent with existing research (Huang et al., 2014; Jones et al., 2017; Judge & Kammeyer-Mueller, 2012), we herein conceptualize ambition as a relatively stable and general personal disposition. Specifically, ambition can be defined as “the persistent and generalized striving for success, attainment, and accomplishment” (Judge & Kammeyer-Mueller, 2012, p. 759). Ambition in its original meaning is thus not workplace-specific and not limited to a specific context (e.g., work) or objects (e.g., high salary). Rather, ambition can be expressed in a range of life domains (e.g., work, family, leisure, politics), and in aspirations for a range of objects and states (e.g., success, wealth, recognition) that are usually scarce and hard to attain, continuous, and abstract (e.g., “success” and not a specific promotion; Pettigrove, 2007).

As stated above, a major shortcoming of existing ambition research is the heterogeneity of used conceptualizations and measures. Often, existing research only indirectly assessed ambition, and treated it as a component of another construct, but not as a distinct personal disposition: for example, as a form of goal setting, self-enhancement values, or a facet of conscientiousness or extraversion, such as achievement striving (see Judge & Kammeyer-Mueller, 2012, for an overview of related research and definitions). Such approaches tap into constructs closely related to ambition, but are insufficient if one wants to investigate the nature and outcomes of the core construct of ambition more specifically.

However, studies aiming to directly measure ambition are also based on very heterogeneous conceptualizations of the construct (see Table 1 for an overview of existing conceptualizations and measurement approaches). One frequent approach (Ashby & Schoon, 2010; Desrochers & Dahir, 2000; El Baroudi et al., 2017; Judge et al., 1995; Judge & Locke, 1993) conceptualizes and measures ambition as the desire for career advancement in one's current organization and/or profession, for example, by gaining promotions or leadership positions. Although such a desire to rise in one's current organization and profession is certainly related to ambition, such measurement scales have limited content validity because they conceptually assess a potential context-specific expression (i.e., outcome) of ambition (i.e., “workplace ambition”) rather than ambition as a more general disposition.

A related measurement approach (Kuijpers & Scheerens, 2006; Zimmerman et al., 2012) conceptualizes ambition as the importance

attributed to specific (mostly extrinsic) work values or career goals. For example, ambition was assessed in these studies as the importance of a good salary, recognition from others, or developing capabilities. However, such measures also have limited construct validity because they tap into goals and values and not personality dispositions, and are also best conceptualized as context-specific expressions or targets of ambition, rather than a direct assessment of the general disposition.

It is moreover common across studies to conceptualize and measure ambition as a combination of more general and very different facets, such as combinations of being generally ambitious, having professional goals, desire for promotion, having self-confidence, being competitive, showing a desire for leadership, or having a sense of identity (Elchardus & Smits, 2008; Hogan & Hogan, 1995; Huang et al., 2014; Jansen & Vinkenburg, 2006; Jones et al., 2017). This seems problematic because it is unclear what such scales really measure due to their broad content coverage. Moreover, ambition is conceptualized as a specific disposition and not a combination of other distinct dispositions or personal attitudes (Judge et al., 1995; Pettigrove, 2007). Hence, although diverse aspects such as professional goals, as sense of identity, or self-confidence might be related to ambition, they are not a direct assessment of the personality construct of ambition and thus possess limited construct validity as measures of ambition.

Finally, some studies (Judge & Kammeyer-Mueller, 2012; Tschopp et al., 2015) used ad-hoc items and/or single item measures, usually by asking people directly whether they see themselves or a focal person as “ambitious”. Whereas these measures tap the theoretical construct of ambition as a general disposition, the respective items do not represent a purposefully developed and validated measure of ambition. Importantly, due to the lack of a purposeful scale development process, there is no established concurrent and discriminant validity information for these items.

In sum, because previous research often did not adequately conceptualize and measure ambition as a general disposition (vs. more specific goals, desires, or behavioral intentions), existing research is significantly limited in its ability to fully understand the nature and nomological net of ambition. To address this limitation, we aimed to develop and evaluate a new measure of ambition as a general disposition. The new scale should address two major shortcomings of existing measures: (1) In contrast to scales that assess context-specific expressions of ambition (e.g., desire for promotion, importance of high salary), the newly derived scale should assess ambition in a more general way, aligned with its theoretical conceptualization as a general disposition; and (2) the new scale should avoid assessing ambition through a range of related yet distinct constructs, such as identity or self-confidence, and instead should directly assess ambition as a general disposition.

2. Phase 1: item generation

We used a deductive item generation approach (Hinkin, 1998) and collected all publicly available items from the existing ambition measures listed in Table 1. We adapted some of these items to correspond to a common format. For example, “How many levels do you want to move up from your current position?” from Judge et al. (1995), was changed into “It is important to me to move up from my current position”. In addition, we created new items that represent the definition of ambition applied herein. As a result of this procedure, 36 items were created/assembled (full list available from authors upon request).

3. Phase 2: item content review

In a second step, the first author and a graduate student highly knowledgeable of the ambition construct independently assessed the content validity of the items in terms of the definition of ambition applied here. The analysis revealed that many items did not possess sufficient construct validity because they either (a) focused on completing specific challenging tasks and not on the generalized striving for valued objects or states; (b) assessed a related, but distinct, construct (e.g., achievement striving, identity, leadership, meaningful work); or (c) narrowly and specifically focused on work and career success (e.g., desire to get promotions, importance of moving up in an organization), and therefore did not reflect the general nature of ambition. The jointly decided elimination of these items resulted in 18 items that were used for the subsequent analysis.

To validate this selection, we gave all 36 items in random order to seven subject matter experts, who were either doctoral ($N = 3$) or post-doctoral ($N = 4$) researchers in work and organizational psychology and highly knowledgeable of psychological measurement issues generally, and personality and organizational behavior specifically. These experts were invited via e-mail to an online survey. All invited experts participated at the survey and answered all questions. The experts were presented with the definition of ambition used herein, as well as the outlined criteria for item evaluation, and instructed to rate each item on how well it measured ambition, ranging from 1 (*does not fit at all*) to 5 (*does fit very well*). The results showed that the 18 selected items were rated as significantly better fitting ($M = 4.29$, $SD = 0.31$) compared to the 18 unselected ones ($M = 3.06$, $SD = 0.76$, $t(5) = 3.55$; $d = 1.45$; $p < .05$).

4. Phase 3: item reduction and selection

Because we conceptualized ambition as a general disposition, the newly derived scale should be applicable across nonworking and working populations. We thus administered the 18 selected items to both university students and employees to select the items that best represented the construct of ambition across both groups. As we aimed to have a concise measure that would avoid unnecessary survey length and fatigue of study participants in subsequent research, we targeted between four to six final items (Hinkin, 1998).

4.1. Method

4.1.1. Participants and procedure

For the *student sample*, we contacted university students in a German university via email and invited them to participate in an online questionnaire on career preparation. Two reminder emails were sent to nonresponders, with a final response rate of 35% and $N = 1074$; 67% female, age $M = 23.9$ years, $SD = 3.0$. The sample was heterogeneous in terms of study major, including, for instance, economics, social sciences, politics, or engineering majors. For the *working sample*, we invited university alumni from the same university, who had registered their email address to be used for research purposes, via email to an online questionnaire, and achieved a final response rate of 45% after two reminder emails. In all, we achieved a sample size of $N = 469$; 66% female, age $M = 28.8$ years, $SD = 4.9$. The sample was heterogeneous with respect to occupations and employment sectors (e.g., finance and insurance, automotive industry, culture and tourism, or information and communication). In both samples, participation in a lottery to win one of three different prizes with values between EUR 100.- and 400.- (total value EUR 600.-) were offered as incentive.

4.1.2. Measure

The 18 ambition items identified in Phase 2 were administered to both groups in random order, with a 5-point Likert-type response scale (1 = *strongly disagree* to 5 = *strongly agree*).

4.2. Results and discussion

In a first step, we verified that no item correlated less than 0.40 with all other items in both groups. We then conducted an exploratory factor analysis (EFA) with principal axis factoring and Promax rotation, as well as a parallel analysis (Hayton et al., 2004), where factor extraction is based on multiple randomly generated data sets. Regarding the EFA, in the student sample, three factors with an Eigenvalue >1 emerged, and in the employee sample, two factors emerged with an Eigenvalue >1 . The same number of factors emerged on the basis of the parallel analysis. However, in both groups, there was a significant drop in the amount of explained variance between the first factor and the subsequent factor, 48% vs. 9% in the student sample, and 55% vs. 7% in the employee sample. Moreover, the factors correlated with $r > 0.57$ in the student sample and $r = 0.73$ in the employee sample. Finally, all items showed significant cross loadings of >0.33 to the other factor(s) in the student and employee group. Combined, these results suggest that the EFA and parallel analysis resulted in an overextraction of factors and that the data are best represented by only one factor.

In a second step, we restricted the EFA to only one factor and found that all items showed factor loadings >0.55 in both groups. Due to generally very high factor loadings of all items in both groups, item selection was not based purely on factor loadings, but also on theoretical and semantic considerations. Specifically, we retained items to maximize construct coverage and to minimize item redundancy. In addition, we favored items with simpler item wording over very similar items with longer or more complex wording. Based on this content analysis, we thus eliminated items that were highly correlated and redundant. For example, we retained the item "I strive for success," but eliminated the items "I want to be particularly successful in my life," and "For me it is very important to be successful in life." This process led to the selection of five items reported in Table 2 with their respective factor loadings based on EFA and CFA, as well as reliabilities and fit values for every sample in the study (see below for other sample descriptions).

5. Phase 4: convergent, discriminant, and incremental validity in relation to existing ambition scales

In this phase, we wanted to examine with a new sample to what extent the newly derived ambition measure would be empirically related to existing ambition measures. We expected that the new scale would be significantly positively correlated with existing measures. However, due to the outlined conceptual differences between existing scales and the newly derived measure in the main

Table 2

Final items of the ambition scale and results of exploratory and confirmatory factor analyses and reliabilities across all samples.

Item	Sample 1		Sample 2		Sample 3	Sample 4
	EFA	CFA	EFA	CFA	CFA	CFA
1. I am ambitious	0.63	0.63	0.66	0.66	0.76	0.79
2. I strive for success	0.76	0.75	0.75	0.75	0.84	0.85
3. I have challenging goals	0.74	0.74	0.77	0.76	0.84	0.89
4. For me it is very important to achieve outstanding results in my life	0.74	0.74	0.76	0.76	0.76	0.80
5. For me it is very important to accomplish great things	0.70	0.71	0.74	0.75	0.84	0.78
Cronbach's alpha	0.84		0.85		0.90	0.90

Note. Values represent standardized factor loadings. EFA (exploratory factor analysis) = Promax rotation with free factor estimation. EFA was only conducted in Sample 1 and Sample 2 because those samples were guiding the item selection process. CFA (confirmatory factor analysis) = all five items loading on one latent ambition factor. Sample 1: Student sample Phase 3; Sample 2: Employee sample Phase 3; Sample 3: Employee sample Phase 4; Sample 4: Employee sample Phase 5.

Items were answered on a 5-point Likert-type response scale (1 = *strongly disagree* to 5 = *strongly agree*).

All loadings are significant, $p < .001$. Fit values CFA: Sample 1: CFI = 0.95, RMSEA = 0.13, SRMR = 0.04; Sample 2: CFI = 0.97, RMSEA = 0.11, SRMR = 0.03; Sample 3: CFI = 0.99, RMSEA = 0.06, SRMR = 0.02; Study 1: CFI = 0.98, RMSEA = 0.10, SRMR = 0.03; Study 2: CFI = 0.99, RMSEA = 0.07, SRMR = 0.02; Study 3: CFI = 0.99, RMSEA = 0.05, SRMR = 0.02.

manuscript, we also expected that the new scale would be empirically distinct from existing ambition scales.

To test the incremental validity of the new scale in comparison with existing measures, we investigated the relation with subjective career success. We chose subjective career success as criterion variable because previous research suggests that ambitious people strive to be successful in their career and should be more likely to experience career success (e.g., Ashby & Schoon, 2010; Judge et al., 1995; Judge & Kammeyer-Mueller, 2012). We specifically examined career satisfaction as a typical indicator of subjective career success (Ng et al., 2005).

5.1. Method

5.1.1. Sample and procedure

The sample was gathered in Germany through an online survey company that also directly compensated study participants with 3.00 EUR for participation. Among the 432 people who completed the questionnaire, we conducted extensive quality checks concerning streamlining, carelessness, speeding, and partial answering, with 131 participants excluded from the dataset. The final sample (N = 301) was on average 46.24 years old (SD = 13.14); included 156 women (52%) and 89 participants (30%) held some type of university degree. The sample was heterogeneous with respect to occupations and employment sectors (e.g., finance and insurance, automotive industry, health sector, or information and communication), and the mean work tenure at the current employer was 10.92 years (SD = 10.05).

5.1.2. Measures

Participants completed the new 5-item *ambition scale* plus a range of alternative ambition scales listed in Table 1: The *ambition item* by Judge et al. (1995); *ambition value* with the two items from Ashby and Schoon (2010); *ambitious career attitudes* with the five item scale by Elchardus and Smits (2008); *career advancement ambition* with the four item scale from Desrochers and Dahir (2000); *career ambition* with the three items from Kuijpers and Scheerens (2006); and four *ambition values* (i.e., promotion, pay, recognition, professional reputation) by Zimmerman et al. (2012). *Career satisfaction* was measured with the 5-item scale (e.g., “I am satisfied with the success I have achieved in my career”) from Greenhaus et al. (1990). All scales, except the *ambition item*, used a 5-point Likert-type response scale (1 = *strongly disagree* and 5 = *strongly agree*).

5.2. Results and discussion

We first confirmed the factor structure of the new scale with confirmatory factor analysis (CFA). Therefore, we modeled one latent factor on which the five selected ambition items loaded. Correlations between error terms of the manifest indicators were not allowed. The results showed a good model fit (Table 2), supporting the one-factorial structure of the new ambition scale. The bivariate correlations in Table 3 support our assumption that the new ambition scale is positively correlated with existing ambition measures, with correlations ranging between 0.18 (ambition item) and 0.68 (ambitious career attitudes), all *p*-values below 0.05.

To test if the new ambition scale is empirically distinct from existing ambition scales, we first conducted a series of chi-square difference tests (Table 4). With 22 to 31 free parameters across the two-factor models and an *N* of 301, the minimum case-to-parameter estimate ratio of 5–10 cases per parameter estimate was met. In these tests, the items of the new ambition scale and every single other ambition scale were modeled as either a one-factor CFA measurement model or as a two-factor CFA measurement model (i.e., distinguishing the new measure from an existing measure). Cross-loadings of indicators on the second latent factor or correlations between the error terms of the manifest indicators were not allowed. As expected, in all conducted comparisons (except for the two-item ambition value measure), the two-factor model was preferable over the one-factor model (ΔChi^2 ranged from 2.32 to 204.85, $\Delta\text{df} = 1$, all *p*-values below 0.001; except the 2.63 value for ambition value, with *p* = .13). Regarding the discrimination of the new ambition scale with ambition value, the factor loadings of the general factor on the two ambition value items (0.55, 0.54) was much lower than the factor loadings on the five new ambition items (0.75 to 0.85). Moreover, the AIC of the two-factor model was lower and the CFI larger compared to the one-factor model, indicating that the two-factor model fits the data slightly better than the one-factor model.

Furthermore, we conducted the Fornell and Larcker (1981) test. This test examines how much variance a latent factor explains on

Table 3
Cronbach's alphas, means, standard deviations, and Pearson's correlations between the study variables, phase 4.

		<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1	Ambition (new measure)	3.37	0.86	<i>0.90</i>							
2	Ambition item	1.15	1.78	0.18	–						
3	Ambition value	4.29	1.14	0.62	0.38	0.53					
4	Ambitious career attitude	3.36	0.86	0.68	0.20	0.63	0.86				
5	Career advancement ambition	3.98	1.09	0.66	0.24	0.66	0.69	0.86			
6	Career ambition	3.87	0.82	0.58	0.03	0.54	0.57	0.54	0.79		
7	Ambition values	4.12	0.99	0.62	0.13	0.60	0.60	0.71	0.60	0.84	
8	Career satisfaction	3.77	1.15	0.32	–0.06	0.18	0.32	0.26	0.25	0.09	0.92

Note. *N* = 301. Cronbach's alphas are in diagonal in italics. All $r \geq 0.13$ are * $p < .05$, $r \geq 0.18$ are ** $p < .01$, $r \geq 0.25$ are *** $p < .001$.

Table 4

Fit of CFA models to test discriminant validity of the new ambition scale with other ambition measures, phase 4 (N = 301).

Model	Model fit indices					Model comparison		
	χ^2	df	CFI	RMSEA	SRMR	$\Delta\chi^2$	Δdf	p
a) Ambition value + new ambition measure two factors ^a	46.079	13	0.970	0.092	0.030	–	–	–
b) Ambition value + new ambition measure one factor ^b	48.355	14	0.969	0.090	0.032	2.276	1	ns
a) Ambitious career attitude + new ambition measure two factors	180.856	34	0.923	0.120	0.062	–	–	–
b) Ambitious career attitude + new ambition measure one factor	385.702	35	0.817	0.182	0.078	234.846	1	< 0.001
a) Career advancement ambition + new ambition measure two factors	244.966	26	0.882	0.167	0.071	–	–	–
b) Career advancement ambition + new ambition measure one factor	443.853	27	0.776	0.226	0.082	198.887	1	< 0.001
a) Career ambition + new ambition measure two factors	42.439	19	0.983	0.064	0.023	–	–	–
b) Career ambition + new ambition measure one factor	205.141	20	0.864	0.175	0.074	162.702	1	< 0.001
a) Career values + new ambition measure two factors	88.866	26	0.960	0.090	0.038	–	–	–
b) Career values + new ambition measure one factor	255.483	27	0.854	0.168	0.078	166.617	1	< 0.001

^a AIC = 4431.595.

^b AIC = 4431.319. a) model where the items of two separate factor load on the expected factors. b) model where all items of both factors are allowed to load on one latent factor. If model a) has a better model fit compared to model b) this suggest discriminant validity.

average within its factor indicators. The so-called average variance extracted (AVE) is than compared to the shared variance (i.e., squared correlation) of this factor (i.e., the new ambition scale) with another factor (i.e., another ambition scale). One factor can be discriminated from a second one if the AVE of the first factor is larger than the squared correlation of the first factor with the second factor. In support of the discriminant validity of the new ambition scale, the AVE (i.e., 0.65) of the latent new ambition construct exceeded all squared correlations between the new ambition scale and the other ambition scales (maximum squared correlation = 0.46). Hence, the latent factor of the new ambition scale explained more variance in its own indicators compared to variance in other ambition scales. Moreover, the AVE was larger than 0.50, showing that the latent new ambition construct explains more variance in its indicators than measurement error does, which is seen as further indicator for psychometric adequacy. Altogether, the results from the CFA model comparisons and the Fornell and Larcker test indicate that the new ambition scale is empirically distinct from the other ambition scales.

In a final set of analysis, we conducted hierarchical regression analysis as an incremental validity test for career satisfaction against the other ambition scales. Results (Table 5) showed incremental validity of the new developed scale beyond all other included ambition scales (the new ambition measure also showed the largest positive relation with career satisfaction in this analysis). Noteworthy, other measures (i.e., one-item ambition measure and ambition values) were not even correlated with career satisfaction.

6. Phase 5: discriminant validity in relation to other personal dispositions

Because we conceptualize ambition in its original sense as a domain-independent and specific disposition (Judge & Kammeyer-Mueller, 2012), it is important to examine how ambition relates to other general personal dispositions. We specifically address the question if ambition is distinct from the related personal dispositions of achievement striving, trait competitiveness, and future time

Table 5

Incremental validity analysis of the new ambition scale for predicting career satisfaction beyond existing ambition measures, phase 4.

Predictor	Career satisfaction			
	B	SE B	β	p
Step 1				
Ambition item	-0.215	0.074	-0.192	0.004
Ambition value	-0.145	0.177	-0.068	0.411
Ambitious career attitude	0.446	0.115	0.339	0.000
Career advancement ambition	0.342	0.100	0.329	0.001
Career ambition	0.203	0.104	0.148	0.054
Ambition values	-0.411	0.102	-0.359	0.000
R ²	0.21			
F in R ²	F(6, 294) = 9.93			
Step 2				
Ambition item	-0.193	0.072	-0.172	0.008
Ambition value	-0.252	0.176	-0.118	0.154
Ambitious career attitude	0.352	0.116	0.267	0.003
Career advancement ambition	0.287	0.099	0.277	0.004
Career ambition	0.146	0.104	0.107	0.161
Ambition values	-0.468	0.102	-0.408	0.000
Ambition (new measure)	0.359	0.108	0.281	0.001
ΔR^2	0.03			
F change in R ²	F(1, 293) = 10.14			

Note. N = 301.

perspective. By examining the nomological net of ambition in relation to other constructs, including their empirical distinctness, we seek to (a) provide more conceptual clarity on the construct of ambition and (b) to empirically expand and refine the nomological net and empirical distinctness of ambition and important correlates. We moreover use these related constructs in the subsequent phase to (c) establish incremental validity of ambition beyond related personal dispositions.

6.1. Achievement striving

Achievement striving is a specific facet of conscientiousness (Costa et al., 1991) and reflects a striving that aims at a certain level of excellence, or being perceived as skilled, competent, and effective in their tasks (Judge & Kammeyer-Mueller, 2012). There is thus a meaningful relation with ambition because ambitious people can be expected to often attain their desired objects and states through being skilled and effective, and are thus likely to be striving for such achievements. However, achievement striving is conceptually distinct from ambition because achievement striving focuses more on being skilled and the quality of performance, how competent a person is perceived by others, or on how well a task is done. By contrast, ambition is focused on the potential rewards that skills and competence could produce and represents the striving for valued objects and states (e.g., career success, status, recognition). Ambition thus refers to the desire for attainment, irrespective of the quality of performance, or if these states and objects are obtained due to extraordinary competence or by other means (Judge & Kammeyer-Mueller, 2012). We hence presume that ambition is generally positively related to achievement striving, but the typical strivings expressed in these two dispositions (e.g., high quality and competence in job performance tasks vs. the outcome of being recognized and promoted) are meaningfully different, and the concepts are thus not redundant. Because ambition more directly aims at attaining valued objects and states (vs. the quality of actions), we can presume that ambition also predicts success, attainment, and accomplishment beyond achievement striving.

6.2. Trait competitiveness

Trait competitiveness is conceptualized as “the enjoyment of interpersonal competition and the desire to win and be better than others” (Spence & Helmreich, 1983, p. 41), with self-aggrandizement and striving for interpersonal success as core components identified across several studies (Fletcher & Nusbaum, 2008; Houston et al., 2002). Hence, similar to achievement striving, trait competitiveness is related to striving for high levels of excellence and performance, specifically in comparison to other individuals. There is thus a relation of trait competitiveness with ambition because competitive people can also be expected to live out their desire to win and be better than others by attaining desired objects or states. However, for competitive individuals, interpersonal success through social comparisons is the most important desire—whereas ambitious people do not necessarily focus on interpersonal success or a comparison with coworkers or other people. Instead, the competitive aspect of ambition refers to the desire for extraordinary attainment per se (which might be competitive in terms of being scarce and not available for everyone), but not necessarily focus on the direct comparisons and winning against a peer group. Expressed in other words, competitive individuals fulfill their desire if they win against other people even if the target of the competition is not extraordinary valuable or desirable, whereas ambitious people specifically strive for highly desirable objects or states. Therefore, we can also presume that ambition can predict success, attainment, and accomplishment beyond trait competitiveness.

6.3. Future time perspective

Future time perspective is a cognitive-motivational construct that describes a person’s tendency to anticipate and structure their future, and can be defined as “a general concern for and corresponding consideration of one’s future” (Kooij et al., 2018, p. 869). Future time perspective should predict achievement-related outcomes based on social-cognitive theory (Bandura, 2006) because people with high future time perspective should attach greater value to future goals and have higher goal expectancy, because they believe that current behavior will lead to future outcomes (Kooij et al., 2018). A future time perspective can thus be an important motivational factor for purposeful, goal-directed activities. Because ambition represents a striving for desirable and scarce objects or states, it is also a future-oriented construct. Ambitious people can be expected to think about their (future) desired objects and states, and thus generally show a stronger cognitive inclination to think about the future (i.e., have a higher future time perspective). This anticipated future can thereby be a motivational drive for ambitious people to actively pursue their desired objects and states. However, ambition is not equal to a future time perspective because ambition is not limited to thinking about future states in general. Rather, ambition entails the notion that the considered future objects and states are highly desirable (vs. neutral or feared future states), highly scarce and hard to attain (vs. other types of desirable states, such as feeling relaxed), and actively pursued (vs. merely thought about). Because ambition is more specific in the aspired nature of future states and entails more of an action-orientation, we can presume that ambition predicts success, attainment, and accomplishment beyond future time perspective.

6.4. Method

6.4.1. Participants and procedure

The sample was gathered in Germany through an online survey company. We specifically sampled 547 people (T1) who were working in private industry (not self-employed or working students), aged between 25 and 34 (early career stage), and holding contracts at a minimum of 50% of full-time employment. The sampling was done by stratified random sampling (quota random sampling), where the target population is sampled according to specific attributes or characteristics of sub-groups known as strata

(Levy & Lemeshow, 2013), in our case age, gender, and occupational education. The sample was representative of the German private business working population with respect to gender and occupational education and worked in very different occupational fields (e.g., social, economics, law, trade) and different industries (e.g., automotive, health, information technology, and transport). The sample was on average 30.33 years old ($SD = 2.73$); included 263 women (48.1%) and 190 participants (34.7%) held some type of university degree. Participants worked approximately 37 h by contract per week ($SD = 7.20$).

6.4.2. Measures

Ambition was assessed with the new 5-item *ambition* scale. We assessed *achievement striving* with the seven positively worded items (e.g., “I plunge into tasks with all my heart”) in German from the International Personality Item Pool’s (Goldberg et al., 2006) respective subdimension of conscientiousness from the NEO-PI-R using a 5-point Likert-type response scale (1 = *strongly disagree* and 5 = *strongly agree*). *Trait competitiveness* was measured using the German language version (Spurk et al., 2019) of the 4-item (e.g., “I enjoy working in situations involving competition with others.”) scale by Helmreich and Spence (1978) on a seven-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). *Future time perspective* was measured with the 4-item future temporal focus scale (e.g., “I think about what my future has in store.”) from Shipp et al. (2009) on a 5-point Likert-type scale.

6.5. Results and discussion

Confirming the theoretical relations between ambition and the other personal dispositions, ambition was positively related to achievement striving ($r = 0.62, p < .001$), trait competitiveness ($r = 0.53, p < .001$), and future time perspective ($r = 0.39, p < .001$).

To establish discriminant validity, we conducted CFAs and Fornell and Larcker (1981) tests. Regarding the CFAs, we compared five different models (Table 6): (1) theoretically expected structure with four correlated factors (ambition, achievement striving, trait competitiveness, and future time perspective); (2) a g-factor model where all items loaded on one factor; (3) a 2-factor model where ambition was collapsed with achievement striving; (4) a 2-factor model where ambition was collapsed with trait competitiveness; and (5) a 2-factor model where ambition was collapsed with future time perspective. The theoretical model fitted the data significantly better than all comparison models ($\Delta\chi^2$ from 429.935 to 2036.035, Δdf from 3 to 6, all $p < .001$). Hence, the new ambition measure can be empirically discriminated from achievement striving, trait competitiveness, and future time perspective by CFA tests. The results of the Fornell and Larcker confirmed this findings and revealed that the average explained variance (i.e., 0.67) of the five ambition indicators by the underlying latent ambition construct exceeded the squared correlations between the ambition scale and achievement striving (0.38), trait competitiveness (0.28), and future time perspective (0.15). Hence, the latent factor of the ambition scale explained more variance in its own indicators compared to variance in related scales. Altogether, these results indicate that ambition is empirically distinct from achievement striving, trait competitiveness, and future time perspective.

7. Phase 6: criterion validity regarding objective and subjective career success

In this last phase, we wanted to examine the incremental criterion validity of ambition for explaining career success outcomes. We specifically tested the incremental validity of ambition beyond achievement striving, trait competitiveness, and future time perspective. This is important because these constructs should be positively related to attainment-related outcomes, such as career success (Kooij et al., 2018; Ng et al., 2005), and share some conceptual overlap with ambition (see Phase 5). These constructs thus provide a good test of the incremental validity of ambition beyond other related general dispositions. Moreover, because we conceptualized ambition as a general disposition, we wanted to test if the new measure exhibits meaningful between- and within-person stability over time.

Previous research generally showed that ambition—although operationalized differently than we have herein—is positively related to objective career success in terms of salary and promotions (Judge et al., 1995; Otto et al., 2017), income and occupational prestige

Table 6
Fit of CFA models to test discriminant validity of the new ambition scale with other related personality constructs, phase 5.

Model	Model fit indices					Model comparison		
	χ^2	<i>df</i>	CFI	RMSEA	SRMR	$\Delta\chi^2$	Δdf	<i>p</i>
a) Theoretically expected model of four distinct and correlated factors: Achievement striving + trait competitiveness + future time perspective + new ambition measure	628.738	164	0.938	0.072	0.048	–	–	–
b) One factor model: All items of the included constructs load on one general factor	3357.932	170	0.574	0.185	0.124	2729.194	6	< .001
c) Three factor model 1: Achievement striving + new ambition measure one factor, future time perspective and trait competitiveness distinct factors	1260.138	167	0.854	0.109	0.069	631.400	3	< .001
d) Three factor model 2: Trait competitiveness + new ambition measure one factor, achievement striving and future time perspective distinct factors	966.794	167	0.865	0.105	0.069	338.056	3	< .001
e) Three factor model 3: Future time perspective + new ambition measure one factor, achievement striving and trait competitiveness distinct factors	2362.437	167	0.707	0.150	0.170	1733.699	3	< .001

Note. $N = 547$. a) model where the items of two separate factor load on the expected factors. b) model where all items of both factors are allowed to load on one latent factor. If model a) has a better model fit compared to model b) this suggest discriminant validity.

Table 7
Cronbach's alphas, means, standard deviations, and Pearson correlations between the study variables, phase 6.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Gender ^a	-	-	-													
2 Age	30.51	2.70	0.12*	-												
3 Organizational tenure T2 (in years)	5.01	3.78	0.10	0.30***	-											
4 Education ^b	-	-	-0.03	0.01	-0.18***	-										
5 Organization size T2 ^c	5.00	1.75	0.15**	0.01	0.16**	-0.03	-									
6 Contractual working hours T2	37.21	6.86	0.21***	-0.02	0.04	0.03	0.09	-								
7 Ambition T1	3.24	0.81	0.05	-0.04	-0.06	0.08	-0.01	0.10	0.90							
8 Achievement striving T1	3.67	0.69	0.02	0.04	-0.06	0.12*	-0.04	0.04	0.62***	0.90						
9 Trait competitiveness T1	4.17	1.20	0.08	-0.05	0.01	0.02	0.10	0.13**	0.53***	0.44***	0.87					
10 Future time perspective T1	4.67	1.15	-0.12*	-0.04	-0.02	0.03	0.06	0.05	0.39***	0.40***	0.27***	0.94				
11 Salary T2	5.84	2.83	0.23***	-0.01	0.12*	0.15**	0.33***	0.35***	0.22***	0.16**	0.20**	0.13*	-			
12 Promotions T2	1.17	1.46	0.12*	0.04	0.15**	0.09	0.18***	0.12*	0.21***	0.14**	0.17**	0.11*	0.31***	-		
13 Career satisfaction T2	3.27	0.81	0.16**	0.03	0.03	0.08	0.15**	0.12*	0.32***	0.30***	0.22**	0.06	0.34***	0.28***	0.91	
14 Ambition T2	3.24	0.76	0.05	-0.11*	-0.01	0.08	0.10	0.13*	0.68***	0.44***	0.46***	0.30***	0.24***	0.29***	0.38***	0.90

Note. *N* = 394; Cronbach's alphas are in diagonal.

^a 0 = female, 1 = male.

^b 0 = non-academics, 1 = academics.

^c 1 = fewer than 5; 2 = 5–9; 3 = 10–19; 4 = 20–99; 5 = 100–199; 6 = 200–1999; 7 = 2000 or more employees.

* *p* < .05.

** *p* < .01.

*** *p* < .001.

(Judge & Kammeyer-Mueller, 2012), and adult earnings when ambition was assessed in adolescence (Ashby & Schoon, 2010). However, the meta-analysis by Ng and Feldman (2014a) on predictors of salary attainment did not confirm a positive relation between ambition and salary. This might be due to the inconsistent conceptualization and measurement of ambition across studies. Theoretically, obtaining a high salary and more promotions should be an attractive goal for many ambitious people because it signals objective success and often goes along with status and prestige (Judge & Kammeyer-Mueller, 2012). Furthermore, a high salary and promotions can lead to wealth, which is assumed to be a classic object of ambition (Judge & Kammeyer-Mueller, 2012).

We assume that ambition should be positively related to salary and number of received promotions. Based on the theory of purposeful work behavior (Barrick et al., 2002; Barrick et al., 2013) general dispositions lead to the pursuit of goals which are in accordance with these dispositions. We thus presume that ambition promotes the pursuit of accomplishment and status goals. As such, ambitious people should be more attracted to jobs, occupations, and careers that allow the attainment of recognition and high status. Moreover, organizations should be more inclined to recruit highly ambitious people in higher-paying and more responsible positions because a striving for accomplishment and status can be expected to promote higher job performance in such jobs (Barrick et al., 2002). Finally, highly ambitious people should be more likely to remain and become promoted in jobs, occupations, and careers that show a high potential for achieving a high salary because these environments correspond to their long-term career goals.

Hypothesis 1. Ambition is positively related to (a) salary and (b) number of promotions beyond achievement striving, trait competitiveness, and future time perspective.

As a second career outcome, we examined subjective career success, a self-evaluation of satisfaction with career progress, or other valued outcomes by an individual (Ng & Feldman, 2014b). El Baroudi et al. (2017) assessed ambition as leadership aspirations and found a positive correlation with career satisfaction. Conversely, Judge et al. (1995) assessed ambition as the desire to move up from the current position and found a negative relation to satisfaction with the current career situation. We propose that these inconsistent findings are due to the inconsistent measurements of ambition and the relation between ambition and career satisfaction requires further clarification with an improved measure that more directly assesses ambition as a general disposition. By definition, ambitious people are more likely to have challenging goals, which should lead to more invested effort for goal pursuit, resulting in higher probabilities of goal attainment, a stronger subjective sense of success, and more satisfaction upon goal attainment, compared with people who set less challenging goals (Locke & Latham, 2002). Moreover, based on the theory of purposeful work behavior (Barrick et al., 2013), the pursuit of goals that are consistent with dispositions also leads to more experienced meaningfulness and satisfaction. Hence, even if the pursued goals that emerge due to being ambitious (e.g., accomplishment and status goals) can never be fully satisfied, the pursuit and enactment of intrinsically motivated ambitious goals can create a sense of meaningfulness, higher sense of subjective success, and subsequent satisfaction.

Hypothesis 2. Ambition is positively related to career satisfaction beyond achievement striving, trait competitiveness, and future time perspective.

7.1. Method

7.1.1. Sample and procedure

We used the same sample ($N = 547$) at T1 as in Phase 5. Participants were invited again six months later (T2), receiving the same incentive as at T1, resulting in a final sample of $N = 394$ (72% response rate) used in all of the subsequent analyses. The sample was comprised of 191 women (49%) and 127 participants with completed university degrees (32%). The mean age of the participants was $M = 30.51$, $SD = 2.70$. Participants worked approximately 37 h by contract per week ($SD = 6.86$). Achievement striving, trait competitiveness, and future time perspective were assessed at T1; salary, promotions, and career satisfaction at T2; ambition was assessed at T1 and T2. Participants who dropped out between T1 and T2 did not differ from participants who participated at both time points regarding their values in ambition, achievement striving, trait competitiveness, and future temporal focus at T1, all p -values above 0.05.

7.1.2. Measures

Ambition was assessed with the same 5-item measure as reported in Study 1. *Salary* was measured in terms of gross monthly income over 21 equal steps, with 1 = less than €500 and 21 = equal or more than €10,000. *Promotions* were assessed by the reported number of promotions they had received over their entire careers, defined as “any increases in level and/or any significant increases in job responsibilities or job scope” (Seibert & Kraimer, 2001). *Career satisfaction* was measured with the German version (Abele & Spurk, 2009) of the 5-item scale (e.g., “I am satisfied with the success I have achieved in my career”) from Greenhaus et al. (1990) on a 5-point Likert-type scale. Additionally, we also assessed *achievement striving* (Goldberg et al., 2006), *trait competitiveness* (Helmreich & Spence, 1978), and *future time perspective* (Shipp et al., 2009) to test incremental validity, see Phase 5 for details on these measures.

7.2. Results and discussion

7.2.1. Stability of ambition over time

Table 7 shows Cronbach's alphas, means, standard deviations, and correlations between the study variables. The rank order stability of ambition from T1 to T2 was 0.68 ($p < .001$), which is comparable to what meta-analytic research finds for rank-order stability of different personality traits, ranging between 0.51 and 0.75 among adults (Roberts & DelVecchio, 2000). The re-test stability of the

new scale is thus what can be expected when assessing personality dispositions with self-report scales.

7.2.2. Longitudinal measurement invariance

We also tested the ambition scale for longitudinal measurement invariance and could confirm full factorial (factor loadings constrained to be equal), full strong (item intercepts constrained to be equal), and partial strict measurement invariance (item residual variances constrained to be equal) with only one item (“I have challenging goals”) not showing equal residual variances (model fit of this final model with partial strict invariance: $\chi^2 = 82.09$, $df = 42$, CFI = 0.985, RMSEA = 0.049, SRMR = 0.039). Table 8 provides an overview of the different tested models and their fit indices, showing that the constrained models did not differ by fit indices and therefore the assumptions of longitudinal measurement invariance have been confirmed. In addition, we could confirm invariance of the scale mean, which supports the within-person stability of the measure across time.

7.2.3. Prediction of career success

We conducted a series of regression analyses, one regression model for each outcome, to establish the relation of ambition with the assessed indicators of career success. We tested these regression models with and without controlling for gender (0 = female, 1 = male), age in years, education (0 = non-academics, 1 = academics), organizational tenure in years, contractual working hours per week, and organization size (coded as 1 = less than 5 employees; 2 = 5–9; 3 = 10–19; 4 = 20–99; 5 = 100–199; 6 = 200–1999; 7 = 2000 or more employees). These factors could act as confounding predictors of career success because gender, education, working hours, and organization size can pose socio-demographic, skill-related, or work environment hurdles, respectively, for career attainment (Ng & Feldman, 2014a, 2014b). Moreover, age, education, and organizational tenure can represent differences in available human capital, which might affect career attainment (Ng et al., 2005). However, including the controls in the analyses did not change the relations between ambition and the career success outcomes, and we thus report results without controls. However, we included achievement striving, trait competitiveness, and future time perspective in the first step to test for incremental validity (Table 9). Ambition at T1 positively predicted salary ($\beta = 0.15$; $\Delta R^2 = 0.012$, $p < .05$), promotions ($\beta = 0.16$; $\Delta R^2 = 0.015$, $p < .05$), and career satisfaction at T2 ($\beta = 0.23$; $\Delta R^2 = 0.026$, $p < .001$) beyond achievement striving, trait competitiveness, and future time perspective at T1, supporting Hypothesis 1 and 2.

In sum, the results show that ambition is positively related to both objective and subjective indicators of career success. This finding could be explained by the way that ambitious people are more actively engaged and invested in their career, which allows them to realize various extrinsic and intrinsic career goals. Our findings thus support previous studies that showed a positive relation of ambition with objective career outcomes (Ashby & Schoon, 2010; Judge et al., 1995; Judge & Kammeyer-Mueller, 2012). However, we extend these findings by applying a more construct-valid measure of ambition, controlling for achievement striving, trait competitiveness, and future time perspective, and by investigating more diverse career success indicators. Contrary to some previous findings (Judge et al., 1995), we found that ambition is positively related to higher career satisfaction. This difference in results could be explained in the way that Judge et al. (1995) measured ambition, not as a general disposition, but as a more specific desire to move up in one’s organization, which could be induced by a dissatisfaction with one’s previous career progress. In contrast, when assessed as a general disposition, our results imply that because ambitious people might be more likely to achieve various career goals, they also feel more satisfied with their career attainments and perceive themselves as more valuable for the current and other employers.

8. General discussion

The presumed effects of ambition on various work and career outcomes received broad popular attention, but scientific research on the issue has been sparse and inconclusive as well as hampered by inconsistent conceptualizations and measurements of ambition. The presented results advance the conceptual and empirical understanding of ambition in several ways. Based on previous theoretical elaborations, we defined ambition as a general personal disposition that represents a persistent and generalized striving for success, attainment, and accomplishment (Judge & Kammeyer-Mueller, 2012). We then derived and validated a brief, reliable measure

Table 8
Fit of two-wave CFA models to test longitudinal measurement invariance of the new ambition scale.

Model	Model fit indices						Model comparison		
	χ^2	df	CFI	TLI	RMSEA	SRMR	$\Delta\chi^2$	Δdf	p
1) Ambition scale at T1 and T2: no constraints	59.07***	29	0.989	0.983	0.051	0.029			
2) Ambition scale at T1 and T2: factorial invariance	65.06***	33	0.988	0.984	0.050	0.041	5.99	4 ^a	0.199
3) Ambition scale at T1 and T2: strong invariance	73.01***	38	0.987	0.985	0.048	0.046	7.95	5 ^b	0.159
4) Ambition scale at T1 and T2: strict invariance	97.04***	43	0.980	0.979	0.056	0.048	24.03	5 ^c	0.000
5) Ambition scale at T1 and T2: partial strict invariance	82.09***	42	0.985	0.984	0.049	0.039	9.08	4 ^d	0.059

Note. $N = 394$. Maximum likelihood parameter estimates. $\chi^2 =$ chi-square; $df =$ degrees of freedom; CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

^a Model was compared with model 1.
^b Model was compared with model 2.
^c Model was compared with model 3.
^d Model was compared with model 3.
 *** $p < .001$.

Table 9
Results of regression analysis of ambition as predictor of career success, phase 6.

Predictor	Salary T2				Promotions T2				Career satisfaction T2			
	<i>B</i>	<i>SE B</i>	β	<i>p</i>	<i>B</i>	<i>SE B</i>	β	<i>p</i>	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Step 1												
Achievement striving T1	0.30	0.24	0.07	0.11	0.12	0.12	0.06	0.17	0.34	0.07	0.28	0.00
Trait competitiveness T1	0.35	0.13	0.15	0.01	0.16	0.07	0.13	0.01	0.08	0.04	0.12	0.01
Future time perspective T1	0.14	0.13	0.06	0.15	0.07	0.07	0.05	0.17	-0.06	0.04	-0.09	0.05
R^2	0.048				0.036				0.107			
<i>F</i> in R^2	<i>F</i> (3, 390) = 6.52				<i>F</i> (3, 390) = 4.91				<i>F</i> (3, 390) = 15.64			
Step 2												
Achievement striving T1	0.03	0.27	0.01	0.45	-0.03	0.14	-0.01	0.46	0.22	0.07	0.19	0.00
Trait competitiveness T1	0.24	0.14	0.10	0.04	0.10	0.07	0.08	0.08	0.04	0.04	0.05	0.18
Future time perspective T1	0.09	0.14	0.04	0.26	0.04	0.07	0.03	0.48	-0.09	0.04	-0.12	0.01
Ambition T1	0.53	0.24	0.15	0.02	0.29	0.12	0.16	0.01	0.23	0.07	0.23	0.00
ΔR^2	0.01				0.02				0.03			
<i>F</i> change in R^2	<i>F</i> (1, 389) = 4.91				<i>F</i> (1, 389) = 5.65				<i>F</i> (1, 389) = 11.84			

Note. $N = 394$; p values are for 1-sided tests due to directed hypotheses.

consistent with this definition that should be useful for future research to improve the theoretical and empirical understanding of the nature of ambition. In a multi-phase process including four distinct samples encompassing university students and employees, we moreover presented diverse insights into the nomological net of ambition, including its incremental relation to career success outcomes. We specifically showed that the new measure is related to, but not redundant with, existing ambition measures. Moreover, we clarified the theoretical and empirical relation of ambition to related general dispositions in terms of achievement striving, trait competitiveness, and future time perspective. These results clarified that ambition as a general trait is positively related to more context-specific expressions of ambition and that this general disposition includes aspects of being achievement-oriented, competitive, and future-focused. These analyses and results help to better theoretically describe the nature of ambition while also supporting the empirical distinctiveness of ambition from these related vocationally and organizationally relevant personal traits.

Finally, we clarified some contradictions in existing research by showing that ambition is generally positively related to career success. The positive relation of ambition and career attainment could be explained based on the theory of purposeful work behavior (Barrick et al., 2002; Barrick et al., 2013). Ambitious people are likely to actively pursue accomplishment and status goals in their careers, which allows them to realize various extrinsic and intrinsic career goals. Ambition can thus be seen as a form of psychological-motivational capital that enables people to be more successful in their careers (Judge & Kammeyer-Mueller, 2012; Ng & Feldman, 2014a). By applying a more stringent measure of ambition that is not confounded with tangible constructs (e.g., desire to get promoted), we were also able to address an existing controversy in the literature regarding the potential positive or negative relation of ambition with satisfaction. We found that ambitious employees are generally more satisfied with their careers, which implies that because ambitious people are more likely to achieve various career goals due to their increased investment in their career, they also feel more satisfied with their career attainments. Moreover, this result is in line with the theory of purposeful work behavior (Barrick et al., 2013), that engagement in intrinsically motivating goal pursuits enhances satisfaction, independent of ultimate goal attainment. Our results thus suggest that there is a generally positive relation of ambition with career satisfaction despite the eventual dissatisfaction that ambitious people might feel because their objects of desire can never be fully achieved (Judge et al., 1995; Pettigrove, 2007).

8.1. Limitations and future research

In our studies, we have measured ambition as a general disposition, consistent with its definition (Judge & Kammeyer-Mueller, 2012). We thereby avoided confounding its measurement with tangible constructs as frequently done in other studies. We thus purposefully did not apply a work-specific measure of ambition (e.g., desire for promotion), and it is likely that effects of ambition are mediated by various, more proximal variables (e.g., specific goals, behaviors) that we did not assess in our studies. Future research could thus examine in more detail *why* the general disposition of ambition leads to specific outcomes (e.g., career success, in-role performance, citizenship behavior, or organizational commitment), and through which more context-specific motivational (e.g., work goals) or behavioral mediators (e.g., networking or influence tactics) ambition exerts its effects. Relatedly, research could explore to what degree the specific goals a person pursues in their career (e.g., high salary vs. work-life balance) could moderate the extent to which ambition can predict career satisfaction.

Moreover, future research could examine factors that affect stability and change in ambition. Current conceptualizations of personality acknowledge that personality shows normative as well as idiosyncratic change over the lifespan, based on processes of maturation and life experiences (Wrzus & Roberts, 2016). Future research might thus examine early childhood predictors of ambition as well as how, when, and why ambition changes over the lifespan. Such research could also examine between- and within-person changes in ambition over time to obtain a more complete picture of how ambition might fluctuate across and within individuals and how such changes are related to work and career outcomes.

The substantial relations of ambition with career success in our study suggests that the work domain is, on average, a life domain

where ambition is highly relevant, and hence might become activated. However, because we conceptualized ambition as a general disposition that is not work-specific, future research could also examine how and when ambition is expressed in nonwork domains, such as family (e.g., aspiring to be seen by others as an exceptionally caring mother), leisure (e.g., aspiring to become the captain of the community soccer team), or community service (e.g., aspiring to be regarded as the most successful fundraiser in a local community group). Relatedly, it would be important to examine how ambition is linked to the work–nonwork interface, such as experienced work–nonwork conflict.

Finally, although this study used different samples, all came from Germany. It would thus be important that future studies examine ambition in other cultural contexts, where ambition might have different connotations and consequences.

8.2. Implications for practice

Our study has implications for employees and career counseling practices. Our finding that ambition predicts objective and subjective career success is important information for employees and career counselors as it provides more knowledge on which personal attributes facilitate success. This also renders ambition a highly relevant disposition to assess in career counseling. The herein developed and validated measure could thus be included in career assessment practice as an economic and reliable indicator of the extent to which a client has a self-concept as being ambitious. Based on this assessment, counselors could discuss with clients in what ways they express their ambition and what the specific states or objects of their ambition are. These desirable states and objects could then be included in career counseling as potential (career) goals to support clients in a purposeful striving for personally valued goals. Career counselors could help clients formulate and pursue ambitious goals, for example, by promoting pro-active, confident, future-focused actions towards career goals that are desirable and challenging to attain. In this way, clients could be supported in their career development and the attainment of more objective and subjective career success.

8.3. Conclusions

Based on a conceptualization of ambition as a general personal disposition we developed and validated a new 5-item scale to assess ambition. In a series of steps, we clarified the nomological net of ambition and its relation to career success outcomes. Our studies and new measure should thereby provide useful reference for future studies that aim to examine how, why, and when ambition affects career and work outcomes.

CRedit authorship contribution statement

Andreas Hirschi: Conceptualization, Methodology, Formal analysis, Writing – original draft, Writing – review & editing. **Daniel Spurk:** Conceptualization, Methodology, Formal analysis, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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