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Team roles: Their relationships to character strengths and job satisfaction

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ABSTRACT

Well-functioning teamwork has frequently been linked to increased work satisfaction and performance. However, there is a paucity of research on the different types of roles in teams. Recently, a new model of role behavior in teams was proposed (comprising seven such team roles: Idea creator, information gatherer, decision-maker, implementer, influencer, energizer, and relationship manager), but an assessment instrument was lacking so far. The present study describes the construction of an instrument for the assessment of these roles in two samples ($N = 291$ and 274) and examines their relationships with character strengths and job satisfaction. Results show that the team roles are positively related to job satisfaction and most character strengths. The findings support the important role of character strengths in work-related settings and lay ground for further studies on team roles.

Introduction

Positive aspects and outcomes of work have been discussed within positive psychology since its beginnings (e.g. Henry, 2004; Turner, Barling, & Zacharatos, 2002) and the role of character strengths at work has been extensively studied (e.g. Gander, Proyer, Ruch, & Wyss, 2012; Harzer & Ruch, 2014, 2015; Peterson & Park, 2006). The moral aspect of teamwork, in the sense of being a loyal, dependable team member, has also been included as one of 24 character strengths in Peterson and Seligman's (2004) Values in Action (VIA) classification. However, most research within positive psychology focused on the individual level and did not consider other aspects of teamwork besides being a 'good team player'. Thus, there seems to be a scarcity of research on teams and successful teamwork in positive psychology. This is surprising since it has been suggested that 'teams will become the primary unit of performance in high-performance organizations' (Katzenbach & Smith, 2005, p. 171) and indeed, working in teams has become more frequent in a variety of sectors and settings (Mueller, Procter, & Buchanan, 2000). Well-functioning teamwork has been linked to increased perception of autonomy (Griffin, Patterson, & West, 2001), job satisfaction (Henry, 2004; Wilson, DeJoy, Vandenberg, Richardson, & McGrath, 2004), and performance (Hamilton, Nickerson, & Owan, 2003). This development can also be traced within science, where 'research is increasingly done in teams' and teams 'produce more frequently cited research than individuals'

(Wuchty, Jones, & Uzzi, 2007, p. 1036). Also, it has been argued that teamwork has become a moral imperative in a broad array of positions (Mueller et al., 2005). Thus, more research on teamwork from a positive psychology perspective is warranted.

Role theory and team roles

It has been suggested that the composition of a team is a relevant factor for successful teams (Belbin, 1981; Horwitz & Horwitz, 2007). Belbin (1981) argued that there are different team roles that should be balanced in a team for optimal team performance. Cattell (1963) already argued that it is important to distinguish between personality and roles while he acknowledged 'no action is ever performed entirely out of a role' (p. 4). He described a role as 'that, which causes a characteristic change in response to a whole complex of situations from the values characteristic of the person when he is not in the role or of others who are never in the role' (Cattell, 1963, p. 3). Thus, roles cause differences in behaviors that would be expected from an individual's personality. Biddle (1979) provided a broader definition describing roles as 'those behavior characteristics of one or more persons in a context' (p. 58). In accordance with Belbin (1981), we assume that roles are behavior patterns that are adopted, and performed, as a consequence of influences of personality, ability, values, motivations, experiences, learning, and context.

Belbin (1981) argued that for successful teamwork several functional (or formal) roles and (informal) team roles have to be present in a team. In his team role theory (Belbin, 1981, 1993), he suggested eight such team roles: Completer-finisher, coordinator, implementer, monitor-evaluator, plant, resource investigator, shaper, and team worker. Each of these roles encompasses several strengths and weaknesses. For example, the role of 'completer-finisher' is described as being painstaking and conscientious, but also anxious and prone to obsessional behavior. For the assessment of the preference of these eight roles, Belbin (1981) created the *Belbin Team Role Self-Perception Inventory*. While this inventory has frequently been used in research, it has often been criticized for being neither reliable nor valid (e.g. Batenburg, van Walbeek, & In der Maur, 2013; Broucek & Randell, 1996; Fisher & Hunter, 1998; Fisher, Macrosson, & Sharp, 1996; Furnham, Steele, & Pendleton, 1993a, 1993b; Manning, Parker, & Pogson, 2006). Others also argued that Belbin's team role model is problematic irrespective of the assessment method: Fisher, Hunter, and Macrosson (2001) suggested that Belbin's team roles lack convergent and discriminant validity and might in fact represent the big five dimensions of personality. Thus, Furnham (1997) concluded that there is a 'lack of psychometrically valid measures of how people behave in teams' (p. 456).

From a positive psychology perspective, it would be desirable to have a model focusing on the positive aspects of team behavior that describes and allows distinguishing among different team roles that are beneficial for the individual (e.g. in terms of work satisfaction) and for the team as a whole (e.g. in terms of team productivity). In 2013, the VIA Institute on Character suggested seven such positive team roles, described in Table 1.

These roles are considered to be distinct and exhaustive for most teams. In line with Belbin (1981), it is assumed that people filling these roles well are needed for teams to function optimally and that these roles should be balanced in a team (i.e. each role should be performed by at least one team member) for allowing the team to flourish. Thus, we would expect that all of these roles (or most of these roles, depending on the specific context) should be performed to a pronounced extent in a team. Having too many team members in the same role (e.g. idea generator) or too few (e.g. implementer) will prevent a team from flourishing. Since no assessment instrument for these seven team roles has been developed so far, the present study aimed at filling this gap.

Whereas measures such as Belbin's assess the *preferred* team role of an individual that can be used for selection processes and studying its relationships with personality, it also seems relevant to examine the *actual* team roles that have been assumed and are performed in the current

Table 1. Team roles and their description (VIA Institute on Character, 2013).

Team role	Description
Idea creator	When working in a team, the creation of new ideas to come up with a solution for a difficult problem or task is essential. Thereby, idea creators are people with unconventional ways of coming to solutions and great ideas
Information gatherer	Information gatherer search for information, for example on topics as best practices, new trends, potential vendors, competition, and so forth
Decision-maker	Decision-makers are processing all the information at hand, integrating it to make the best possible decision and clarifying the goals
Implementer	Once a team has arrived at a decision on its direction, it needs to implement it. Thereby the Implementer constantly controls the current status and takes measures to work towards the goal
Influencer	Commonly, the work product of the team needs to be presented by the Influencer for acceptance internally (supervisors, administrators) and/or externally (customers). This is a process of influencing and being persuasive
Energizer	In the process of getting work done, energizers are people that infuse energy into the work and others. Teams without enough energy can fall flat and struggle during times of pressure or prolonged projects that require endurance
Relationship manager	Since the working of a team is a dynamic interplay of people and their relationships, the relationship manager helps to run relationships smoothly and to resolve conflicts

team for studying ideal team compositions. This would also allow examining in future studies whether certain team roles are necessary or sufficient for a successful team. Furthermore, we postulate that not everyone performs a certain team role equally well; some will flourish in that role while others will not. For these reasons, we focused on the development of an instrument on the actual performance of a team role in the current team. Further, we aimed at studying relationships with positive traits that are conceptually expected to be related to team roles (i.e. character strengths), and relevant outcomes (i.e. job satisfaction).

Character strengths and team roles

Peterson and Seligman presented in their 2004 classification of character strengths 24 strengths that are expected – although they are morally valued in their own – to lead to positive outcomes that are also relevant for working in teams, such as competence, satisfying work, and good relationships with others. Several studies have provided empirical evidence for these expectations (e.g. Harzer & Ruch, 2014; Peterson & Park, 2006). We assume that a part of these positive relationships between character strengths and positive work-related outcomes can be explained by the team roles in the sense that character strengths might guide the preference for certain team

roles but also help taking on, and performing these roles. Although the study of the relationships between character strengths and team roles has to be considered exploratory, some specific hypotheses can be put forward.[1] Generally, we expect that all team roles are positively related to character strengths, whereas some strengths are assumed to be especially relevant in this context, such as teamwork, zest, and optimism – the ability to work well in teams, an energetic approach to work, and positive expectancies about the outcomes are assumed to be key characteristics of all team roles (see Peterson, Park, Hall, & Seligman, 2009). Other strengths are expected to be mostly relevant for specific team roles, such as creativity for the idea creator, bravery and leadership for the decision-maker, and social intelligence for the relationship manager.

The present study

The aims of the study were threefold: Firstly, we aimed at developing a self-report inventory for the assessment of *current* team roles based on the team roles suggested by the VIA Institute on Character (2013), examining its psychometric properties, and testing the relationships of team roles with different aspects of role behavior and teamwork as an initial validation. The inventory aims at assessing the degree to which one *masterfully performs* a team role, encompassing aspects of *ability* (i.e. being competent in this role), and aspects of *positive experiences* (i.e. experiencing enjoyment and flow while performing this role). Secondly, we were interested in studying the relationships of team roles with character strengths. Thirdly, we aimed at examining to what extent the team roles predict job satisfaction and to what extent the relationships between character strengths and job satisfaction might be explained by masterfully performing team roles.

Method

Participants

The development sample consisted of $N = 268$ participants (26.9% men) aged 18–77 ($M = 47.36$, SD = 12.18). The sample was rather well-educated but still diverse: 47.8% had post-college education, 28.3% had bachelor-level education, 2.3% had associate-level education, 8.2% had some college education, 2.6% had high school education, and 0.7% some high school education or less. The largest part of the sample was from the United States (41.8%) or other English-speaking countries (Australia: 14.6%, Canada: 9.7%, UK: 7.5%).

The replication sample consisted of $N = 250$ participants (26.7% men) aged 19–66 ($M = 45.05$, SD = 11.01). Again, the largest part of the sample had post-college education

(42.6%), 25.5% had bachelor-level education, 5.6% had associate-level education, 6.8% had some college education, 2.8% had high school education, and 0.4% had some high school education or less. Most participants were from English-speaking countries (US: 46.2%, Australia: 12.0%, Canada: 6.8%, UK: 5.6%). All participants in both samples were currently working in a broad array of occupations.

Instruments

For the development of the *VIA Team-Roles Inventory*, 63 face-valid items were drafted in English for the 7 team roles (9 items per scale) that assess the degree to which one masterfully performs a team role. Based on role theory (Biddle, 1979), for all team roles items were created that encompassed the *ability* to perform a role (e.g. 'I am able to be a great idea creator within my current team'), and the *enjoyment* and *engagement/flow* in performing the role as indicators of a 'fit' between the personality and the context (e.g. 'I enjoy creating ideas within my current team', and 'I have a feeling of energized focus when coming up with ideas within my current team'). All items use a 7-point Likert-style scale ranging from 1 ('strongly disagree') through 7 ('strongly agree'). Pretests were conducted with a German-speaking version of the questionnaire; the original English version was translated into German and then translated back into English, checked for comparability, and revised if necessary. Two German-speaking samples ($N = 147$ and 172) completed the questionnaires and analyses revealed that all items were adequate (all yielded internally consistent, one-dimensional scales), but that the scales could be reduced in order to avoid overlap. Further, preliminary factor analyses have revealed that the negatively keyed items (one per scale) built one factor due to shared method variance. For these reasons, four items per scale were discarded (one negatively keyed item and three items that overlapped with other items were deleted per scale) and the remaining 35 items formed the final version of the inventory (the items are given in Table 1).

Additionally, we included single items for assessing specific aspects of role behavior, that is (a) the *frequency* of performing a role (7-point scale: 'never', '≤10% of the time', '30% of the time', '50% of the time', '70% of the time', '90% of the time', 'Every time'), (b) the *relevance* of the role in the current team (0 = 'not relevant', 1 = 'relevant'), (c) who *has* the role in the current team (1 = 'me alone/me and others', 0 = 'nobody/someone else'), and general aspects of teamwork, that is (d) the percentage of time spent with teamwork, and (e) the number of subordinates.

The *Values in Action Inventory of Strengths* (VIA-IS; Peterson, Park, & Seligman, 2005) is a questionnaire for the subjective assessment of the 24 character strengths of the VIA classification of Peterson and Seligman (2004).

All items are positively keyed and use a 5-point Likert-style scale ranging from 1 ('very much unlike me') through 5 ('very much like me'). A sample item is 'Being able to come up with new and different ideas is one of my strong points' (creativity). In the present study, a shortened version with 5 items per scale was used (VIA-IS 120; Littman-Ovadia, 2015), whereas the original version uses ten items per scale. Internal consistencies were all ≥0.70, except for leadership, $\alpha = 0.61$ (median = 0.76).

The *Job Satisfaction Questionnaire* (Andrews & Withey, 1976) is a 5-item questionnaire for the subjective assessment of the satisfaction with different aspects of a job. All items use a 7-point Likert-style scale ranging from 7 ('delighted') to 1 ('terrible'). Rentsch and Steel (1992) report good convergent validity for the scale. Internal consistency in the present sample was high ($\alpha = 0.87$).

Procedure

Both samples were recruited over the Internet and completed the questionnaires on a website affiliated with the VIA Institute on Character. They were prompted to volunteer for this study after they filled in the VIA-120. No additional incentive for participation was offered. The study was in line with the ethical standards of the APA.

Results

Scale construction and initial validation

In the construction sample, all items were subjected to a principal component analysis. Seven factors exceeded unity (the first ten Eigenvalues were 13.98, 3.65, 2.76, 2.14, 1.92, 1.81, 1.48, 0.96, 0.68, and 0.63) and also a parallel analysis suggested the extraction of 7 factors (randomly generated Eigenvalues with 95% CI were 1.86, 1.71, 1.64, 1.56, 1.52, 1.46, 1.40, 1.36, 1.31, and 1.28). These seven factors explained 79.24% of the variance in the items. These seven factors were extracted and rotated obliquely (PROMAX; Kappa = 4). The factor loadings are given in Table 2.

Table 2 shows that a clear, simple structure was obtained: All items had high loadings (all ≥ 0.65) on the intended factor, while no noteworthy secondary loadings were observed (all ≤ 0.25). The factors were moderately intercorrelated (correlations ranging from $r = 0.24$ [IG and EN] to $r = 0.54$ [EN and DM]; median = 0.44).

In the replication sample, a confirmatory factor analysis was conducted with MPLUS (WLSMV estimator). Results show that the assumed model fit the data well, χ^2 (539, $N = 227$) = 1082.24, $p < 0.001$; CFI = 0.97; RMSEA = 0.067, 95% CI [0.061, 0.072]; SRMR = 0.055. Since the factorial solutions in both samples were highly parallel (Tucker's $\phi > 0.95$ for all factors), the samples were merged for the subsequent analyses.

Descriptive statistics

We computed the team-role scales by averaging the assigned items. Descriptive statistics are given in Table 3.

Table 3 shows that all scales were slightly negatively skewed but not deviating from a normal distribution (skewness and kurtosis did not exceed absolute values of 1.36 and 2.09, respectively). Also, the means were above the theoretical center (i.e. the midpoint of 4) of the scale (scores could range from 1 to 7) but still showed substantial variance. All scales had good internal consistencies (all above or close to 0.90). Further, there were small relationships with demographic variables: Men reported higher scores for the roles of idea creator and decision-maker than women, older people reported higher scores for most roles (except for information gatherer and relationship manager), and those with higher education levels reported lower scores for the energizer and relationships manager roles. However, all demographic variables explained less than 4% in the variance of the roles and were therefore considered negligible. All roles were moderately intercorrelated (ranging from $r = 0.26$ [IG and DM] to $r = 0.59$ [IN and DM]), suggesting that people tend to masterfully perform more roles and are enjoying doing so. However, the correlations are far from indicating redundancy (see Table 4).

As a next step, we examined the relationships of the team roles with different aspects of role behavior, namely the frequency of performing a specific role, the relevance of a specific role (relevant vs. non-relevant) in the current team, and who performs the role in the current team (me alone/me and others vs. someone else/nobody), and general aspects of teamwork, namely the percentage of working time spent with teamwork, and the number of subordinates. Results are given in Table 5.

Table 5 shows that that those who reported high scores in a role, performed this role frequently, considered the role to be relevant, and also considered themselves to be the ones (or among the ones) that have this role in the current team. Further, those with high scores in team roles (with the exceptions of idea creator and information gatherer) also spent a larger percentage of working time with teamwork, and had more subordinates (i.e. people directly reporting to them). Thus, the team roles are robustly related to role-behavior in teams and are also related to more objective reports of the team structure.

Relationships to character strengths

The zero-order correlations of character strengths with team roles are given in Table 6.

Table 6 shows that overall, team roles were positively related to – and well explained by – character strengths;

Table 2. PROMAX-rotated item loadings of the team-role inventory items.

	IC	IG	DM	IM	IN	EN	RM
1. In my current team, I'm at my best when coming up with ideas	**0.73**	−0.05	−0.18	−0.12	0.02	−0.10	0.25
2. I enjoy creating ideas within my current team	**0.81**	0.00	0.07	0.04	−0.06	0.11	−0.04
3. I am able to be a great idea creator within my current team	**0.65**	−0.03	0.23	0.11	−0.01	−0.02	−0.03
4. I have a feeling of energized focus when coming up with ideas within my current team	**0.85**	−0.06	0.12	0.04	0.02	−0.04	−0.07
5. It makes me feel good to create ideas within my team	**0.92**	0.05	−0.02	−0.08	0.01	−0.05	0.03
6. In my current team, I'm at my best when gathering information	−0.18	**0.88**	0.04	−0.05	−0.08	−0.13	0.17
7. I enjoy gathering information within my current team	0.11	**0.87**	−0.09	0.09	−0.09	0.05	0.04
8. I am able to be a great information gatherer within my current team	0.01	**0.76**	0.15	0.03	0.06	−0.04	−0.11
9. I have a feeling of energized focus when gathering information within my current team	−0.04	**0.89**	0.05	−0.02	0.05	0.01	0.00
10. It makes me feel good to gather information within my team	0.05	**0.92**	−0.10	−0.01	0.07	0.09	−0.10
11. In my current team, I'm at my best when making decisions	−0.08	0.00	**0.99**	0.00	−0.05	−0.20	0.05
12. I enjoy making decisions within my current team	0.11	0.03	**0.84**	−0.08	−0.06	0.07	0.01
13. I am able to be a great decision-maker within my current team	−0.07	0.03	**0.77**	0.10	0.15	0.04	−0.07
14. I have a feeling of energized focus when making decisions within my current team	0.03	−0.06	**0.79**	0.04	0.02	0.07	0.05
15. It makes me feel good to make decisions within my team	0.16	0.04	**0.78**	−0.09	0.01	0.08	−0.01
16. In my current team, I'm at my best when implementing goals	−0.18	0.02	0.00	**0.91**	−0.02	−0.06	0.06
17. I enjoy implementing goals within my current team	0.11	0.03	−0.09	**0.92**	−0.02	−0.01	−0.01
18. I am able to be a great implementer within my current team	−0.14	0.01	0.15	**0.83**	−0.02	−0.03	0.06
19. I have a feeling of energized focus when implementing goals within my current team	−0.02	−0.08	0.06	**0.92**	0.01	0.02	0.02
20. It makes me feel good to implement goals within my team	0.19	0.06	−0.16	**0.87**	0.05	0.05	−0.07
21. In my current team, I'm at my best when representing the work/opinion of the team and convincing others of it	−0.10	−0.03	0.03	0.00	**0.95**	−0.05	0.05
22. As a member of my current team I enjoy representing the work/opinion of the team and convincing others of it	−0.02	0.03	0.08	−0.05	**0.90**	−0.01	0.01
23. I am able to be a great influencer within my current team	0.01	−0.02	0.01	0.04	**0.78**	0.06	0.05
24. I have a feeling of energized focus when representing the work/opinion of my current team and when convincing others of it	0.02	−0.05	−0.03	0.04	**0.90**	0.03	−0.02
25. It makes me feel good to represent the work/opinion of my current team and convince others of it	0.09	0.08	−0.09	−0.03	**0.92**	−0.01	−0.01
26. In my current team, I'm at my best when energizing	−0.15	−0.06	0.05	0.01	0.04	**0.87**	0.09
27. I enjoy energizing within my current team	0.06	0.02	−0.06	0.01	−0.06	**0.93**	0.08
28. I am able to be a great energizer within my current team	−0.11	0.04	0.16	0.02	−0.03	**0.78**	0.11
29. When I focus on infusing energy into work and others of my current team, I feel energized too	−0.01	−0.05	−0.10	−0.01	0.05	**0.99**	−0.07
30. It makes me feel good to energize within my team	0.04	0.04	−0.05	−0.05	−0.01	**0.99**	−0.06
31. In my current team, I'm at my best when managing relationships	0.00	0.01	0.08	0.01	0.00	0.01	**0.86**
32. I enjoy managing relationships within my current team	0.03	0.03	0.04	−0.07	−0.02	0.07	**0.91**
33. I am able to be a great relationship manager within my current team	0.11	0.03	−0.02	0.06	0.04	0.02	**0.79**
34. I have a feeling of energized focus when I managing relationships within my current team	−0.03	−0.04	0.03	0.08	0.00	0.02	**0.88**
35. It makes me feel good to manage relationships within my team	0.08	−0.01	−0.09	0.00	0.05	−0.02	**0.91**

Notes: N = 243. Intended Item loadings are printed in boldface. IC = Idea Creator, IG = Information Gatherer, DM = Decision-Maker, IM = Implementer, IN = Influencer, EN = Energizer, RM = Relationship Manager.

Table 3. Descriptive characteristics and correlations with demographic variables.

	IC	IG	DM	IM	IN	EN	RM
M	5.59	4.94	5.11	4.97	4.98	5.00	4.56
SD	1.19	1.37	1.34	1.33	1.44	1.45	1.49
Skewness	−1.36	−0.58	−0.74	−0.64	−0.69	−0.60	−0.44
Kurtosis	2.09	−0.43	0.06	−0.08	−0.20	−0.38	−0.44
α	0.87	0.92	0.92	0.92	0.94	0.94	0.94
Sex	−0.10*	0.04	−0.10*	0.08	−0.05	0.02	−0.01
Age	0.17***	0.08	0.12**	0.11*	0.14**	0.13**	0.06
Education	0.07	0.07	0.03	−0.01	0.05	−0.01	−0.02

Notes: $N = 439–518$. IC = Idea creator, IG = Information gatherer, DM = Decision-maker, IM = Implementer, IN = Influencer, EN = Energizer, RM = Relationship manager. Sex: 1 = Man, 2 = Woman.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Table 4. Intercorrelations among the team roles (scales).

	IC	IG	DM	IM	IN	EN
IG	0.27					
DM	0.56	0.26				
IM	0.35	0.45	0.51			
IN	0.44	0.26	0.59	0.46		
EN	0.42	0.26	0.55	0.46	0.55	
RM	0.27	0.26	0.47	0.41	0.47	0.51

Notes: $N = 501–518$. IC = Idea creator, IG = Information gatherer, DM = Decision-maker, IM = Implementer, IN = Influencer, EN = Energizer, RM = Relationship manager.
All correlations are significant at $p < 0.001$.

the roles of idea creator and energizer were explained best (≥0.30% of variance explained) by all character strengths together, whereas comparatively less variance was explained in the team role of information gatherer (16%). Further, all character strengths were involved in the prediction of team roles overall. Creativity, zest, teamwork, leadership, and hope yielded the numerically largest relationships with team roles overall (≥15% explained variance). Whereas zest, teamwork, leadership, and hope seemed to be strong predictors for most roles, some strengths predicted specific roles. Creativity, curiosity, bravery, and gratitude were further relevant predictors for the team role of idea creator; persistence, modesty, prudence, and self-regulation for the information gatherer; bravery,

persistence, and authenticity for the decision-maker; persistence, authenticity and self-regulation for the implementation manager; bravery and social intelligence for the influencer; gratitude, love, kindness, social intelligence, and persistence for the energizer; and social intelligence, kindness, and fairness for the relationships manager.

Other strengths, such as open-mindedness, love of learning, modesty, prudence, self-regulation, beauty and excellence, humor, and spirituality explained comparatively less variance in team roles overall (≤8% shared variance). Nonetheless, most of them were relevant predictors for specific team roles, such as modesty and prudence with the role of information gatherer ($r[517] = 0.20$, and $r[517] = 0.23$, respectively), or humor and spirituality with the role of energizer ($r[511] = 0.20$, and $r[511] = 0.22$, respectively).

Finally, separate analyses (not shown in detail) also revealed that those with higher scores in character strengths also tended to have more roles in the current team; all character strengths showed positive correlations with the number of roles, whereas highest relationships were found for the strengths of zest, teamwork, leadership, and hope (all $r ≥ 0.20$).

Relationships with job satisfaction

We were next interested in the relationships of the team roles with job satisfaction (see Table 7).

Table 7 shows that all team roles were positively related to job satisfaction and explained together 30% of its variance. Analyses of the single team roles revealed that all roles explained a substantial part of the variance in job satisfaction, whereas the role of the idea creator showed the strongest relationships (22% shared variance), and the role of the information gatherer showed the weakest relationships (7% shared variance) with job satisfaction. Further, the more roles were performed by an individual, the higher levels of job satisfaction were reported (15% shared variance). Further analyses revealed that the *level* of team roles (i.e. the absolute score) is more important for

Table 5. Correlations of team roles with specific aspect of role behavior, the frequency of team work, and the number of subordinates.

	Frequency of performing the role	Relevance of the role in the current team	Who has the role in the current team	% of Time spent with teamwork	No. of subordinates
IC	0.58***	0.46***	0.54***	0.10*	0.07
IG	0.55***	0.24***	0.45***	0.02	0.06
DM	0.57***	0.27***	0.47***	0.12**	0.13**
IM	0.49***	0.26***	0.33***	0.12*	0.10*
IN	0.64***	0.34***	0.55***	0.22***	0.12**
EN	0.70***	0.41***	0.60***	0.17**	0.13**
RM	0.56***	0.34***	0.49***	0.13**	0.09*

Notes: $N = 504–518$. Frequency of performing the role: 1 = *Never* through 7 = *Every Time*; Relevance of the role in the current team: 0 = *Not relevant*, 1 = *Relevant*; Who has the role in the current team: 0 = *Nobody/Someone else*, 1 = *Me alone/Me and others*. IC = Idea creator, IG = Information gatherer, DM = Decision-maker, IM = Implementer, IN = Influencer, EN = Energizer, RM = Relationship manager.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Table 6. Zero-order correlations and explained variance of character strengths with team roles.

	R^2	Correlations						
		IC	IG	DM	IM	IN	EN	RM
Creativity	0.20	**0.41**	0.04	0.16	0.06	**0.20**	0.17	0.08
Curiosity	0.11	**0.29**	0.16	0.16	0.14	**0.23**	**0.23**	0.11
Open-mindedness	0.07	0.13	0.19	0.10	0.12	0.11	−0.02	0.01
Love of learning	0.06	0.10	0.13	0.00	−0.04	0.06	−0.04	−0.03
Perspective	0.10	**0.22**	0.10	0.19	0.07	**0.21**	0.10	**0.21**
Bravery	0.13	**0.23**	0.04	**0.28**	0.14	**0.33**	**0.24**	0.14
Persistence	0.12	0.14	**0.20**	**0.28**	**0.29**	**0.24**	**0.26**	**0.23**
Authenticity	0.09	0.17	0.11	**0.23**	**0.22**	**0.23**	**0.24**	**0.22**
Zest	0.26	**0.35**	0.19	**0.32**	**0.30**	**0.39**	**0.47**	**0.28**
Love	0.09	**0.20**	0.10	0.17	0.14	**0.22**	**0.26**	0.18
Kindness	0.13	0.12	0.13	0.09	0.10	0.13	**0.26**	**0.28**
Social intelligence	0.15	0.07	0.09	0.16	0.13	**0.27**	**0.28**	**0.33**
Teamwork	0.17	**0.27**	**0.22**	**0.20**	**0.27**	**0.28**	**0.30**	**0.31**
Fairness	0.09	0.10	0.14	0.08	0.16	**0.20**	**0.20**	**0.23**
Leadership	0.19	**0.20**	0.10	**0.27**	**0.20**	**0.26**	**0.35**	**0.40**
Forgiveness	0.09	0.18	0.10	0.04	0.15	0.16	0.14	0.19
Modesty	0.08	0.01	**0.20**	0.01	0.12	0.03	−0.01	0.15
Prudence	0.08	0.03	**0.23**	0.06	0.16	0.02	−0.03	0.13
Self-regulation	0.08	0.07	**0.20**	0.18	**0.22**	**0.21**	0.17	**0.20**
Beauty and excellence	0.05	0.08	0.12	0.00	0.08	0.10	0.14	0.05
Gratitude	0.11	**0.22**	0.15	0.17	0.18	**0.25**	**0.28**	0.17
Hope	0.19	**0.28**	0.17	**0.33**	**0.25**	**0.35**	**0.36**	**0.28**
Humor	0.05	0.13	0.04	0.12	0.09	0.17	**0.20**	0.16
Spirituality	0.07	0.10	0.12	0.11	0.18	0.17	**0.22**	**0.20**
R^2	–	0.30	0.16	0.24	0.19	0.25	0.31	0.27

Notes: N = 506–518. IC = Idea creator, IG = Information gatherer, DM = Decision-maker, IM = Implementer, IN = Influencer, EN = Energizer, RM = Relationship manager. Correlations ≥0.20 are printed in boldface. Coefficients of determination (R^2) are printed in italics.
All R^2 are significant at $p < 0.001$. All $r \geq 0.08$ are significant at $p < 0.05$; all $r \geq 0.11$ are significant at $p < 0.01$ and all $r \geq 0.14$ are significant at $p < 0.001$.

Table 7. Explained variance of team roles in job satisfaction.

	Explained variance (R^2) in job satisfaction
All roles together	0.30
IC	0.22
IG	0.07
DM	0.17
IM	0.12
IN	0.13
EN	0.18
RM	0.09
No. roles performed	0.15

Notes: N = 506–518. IC = Idea creator, IG = Information gatherer, DM = Decision-maker, IM = Implementer, IN = Influencer, EN = Energizer, RM = Relationship manager. No. roles performed = Number of roles that are performed by an individual.
All R^2 are significant at $p < 0.001$.

Table 8. Total, unique, and common explained variance of team roles and character strengths in job satisfaction.

	Explained variance (R^2) in job satisfaction			
	Total	Unique variance role(s)	Unique variance strengths	Common variance
All roles together	0.44	0.13	0.14	0.17
IC	0.40	0.09	0.18	0.13
IG	0.34	0.03	0.27	0.04
DM	0.38	0.08	0.21	0.09
IM	0.36	0.05	0.24	0.07
IN	0.35	0.04	0.22	0.09
EN	0.36	0.05	0.19	0.12
RM	0.36	0.04	0.27	0.05
No. roles performed	0.37	0.06	0.23	0.08

Notes: N = 506–518. IC = Idea creator, IG = Information gatherer, DM = Decision-maker, IM = Implementer, IN = Influencer, EN = Energizer, RM = Relationship manager. No. roles performed = Number of roles that are performed by an individual.
All R^2 are significant at $p < 0.001$.

job satisfaction, whereas the *structure* of team roles within an individual (i.e. the score relative to the other team roles) is of lesser importance: analyses using ipsatised team roles (i.e. z-transformed scores within each individual) showed that those who had higher scores in the role of the energizer – relative to the other team roles – were more satisfied with their job ($r[508] = 0.13, p = 0.003$), whereas those with relatively higher scores in the role of the information gatherer were less satisfied with their job ($r[514] = -0.13, p = 0.005$), while no relationships for the other team roles were found.

The degrees of unique contributions of team roles and character strengths in the prediction of job satisfaction (i.e. the variance one predictor explains over and above the influence of the other one), and the shared exploratory power of team roles and character strengths (i.e. the difference between the total explained variance in both predictors and both unique contributions) were examined next (see Table 8).

Table 8 shows that overall, character strengths and team roles explained almost half of the variance in job satisfaction (44%), whereas 17% of this explained variance can be attributed to the shared contribution of both, whereas character strengths showed 14% and team roles 13% unique variance in the prediction of job satisfaction.

Also, the single roles explained unique variance in job satisfaction (ranging from $R^2 = 0.03$ [IG] to $R^2 = 0.09$ [IC]), but there was also a shared contribution of each team role and character strengths (ranging from $R^2 = 0.04$ [IG] to $R^2 = 0.13$ [IC]). Thus, it can be concluded that team roles are relevant for job satisfaction independently from character strengths, but that a substantial part of job satisfaction can be attributed to the shared contribution of both, team roles and character strengths.

Discussion

The present study is the first in considering team roles from a positive psychology perspective and in studying their relationship to character strengths and work satisfaction. The study provides initial support for the notion that the VIA Team-Roles Inventory is a highly reliable measure for assessing the degree to which one masterfully performs one or more of the seven team roles as suggested by the VIA Institute on Character (2013). The items of the VIA Team-Roles Inventory yielded a clear factor structure in two samples and the team role scales are, in line with expectations, related, but far from indicating redundancy. Also, the team roles showed the expected relationships to different aspects of role behavior (e.g. the frequency of performing a role, or the relevance of the role in the current team) and aspects of teamwork (e.g. the amount of time spent with teamwork).

Further, masterfully performing the team roles was found to be robustly related to character strengths: All character strengths were involved in the prediction of team roles. Whereas the strengths of zest, teamwork, leadership, and hope seemed to play a crucial part for most roles, several other strengths such as creativity, persistence, self-regulation, or social intelligence were important predictors for specific roles. Other strengths, such as appreciation of beauty and excellence or love of learning showed only small relationships with team roles and are therefore considered of lesser importance for team behavior (but still might be important for other work-related aspects). Nonetheless, all team roles were positive predictors of job satisfaction; explaining together 30% of its variance. Whereas all roles were predictive for job satisfaction over and above the influence of character strengths, a substantial part of job satisfaction was predicted by the shared variance of team roles and character strengths. Since strengths are trait-like and permanent (Peterson & Seligman, 2004) and therefore expected to be more stable personal characteristics than the more temporary and situation-specific team roles (Cattell, 1963), one might assume that this shared variance is the part of job satisfaction that character exerts via role behavior. Thus, character strengths (i.e. especially the strengths of

creativity, zest, curiosity, and hope) might foster the performance of the role of the *idea creator* that in turn might lead to an increase in job satisfaction. However, although character strengths are very strongly related to role behaviors, they are not sufficient for explaining the team roles, and it can be assumed that other factors (i.e. other personal characteristics and situation-specific aspects), are also involved. However, these possible relationships have to be examined in future studies in more detail. Nonetheless, the study further corroborated earlier findings (e.g. Harzer & Ruch, 2015) on the crucial role of character strengths for work-related aspects.

The present study only focuses on *current* team roles and does not consider *ideal* team roles. One might assume that current roles are stronger depending on situation-specific aspects and environmental conditions, whereas ideal roles should be stronger related to personality and character. Future studies might also consider ideal team roles and the 'fit' between ideal and current team roles, since this fit could be especially relevant for job satisfaction, but also to other positive work-related outcomes, such as considering one's work as a calling. However, we would also expect strong relationships between current and ideal team roles since people might select their jobs that fit their ideal team roles, but also that they might *craft* their jobs (Wrzesniewski & Dutton, 2001) in order to increase this fit.

The present study also showed positive relationships of character strengths and job satisfaction with the number of team roles an individual has. It would be highly interesting to study whether the number of roles that are present in a team are also predictive for the satisfaction and the performance of the whole team (Belbin, 1981), and whether specific (or a minimum number of) team roles have to be present in a team for allowing it to flourish.

Of course, also several limitations of the present study have to be noted. Firstly, only self-report measures and cross-sectional data were used. Future studies should also consider peer or supervisor ratings of team roles and more objective outcome measures (such as work attendance, supervisor-rated work performance, or similar) for ruling out possible method effects. Longitudinal studies might allow for examining the direction of the relationships between strengths, roles, and outcomes. Secondly, we did only study individuals in teams – it would be necessary to study complete teams to see whether it is also beneficial for the team when an individual assumes the team roles. Thirdly, we did not differentiate among different occupations and teamwork situations in the present study. Although we expect that the suggested team roles are relevant in and exhaustive for most teams, we would also assume that the relevance of these roles increases with higher skill levels of an occupation and be

of lesser importance for blue-collar or production teams. Nonetheless, it would be interesting to study the contribution of team roles in different occupations and teamwork situations in future studies. Finally, we did not ask or check for English language proficiency.

Nonetheless, the present study provides initial findings on the potential relevance of team roles at work place. Further, we argue that current research within positive psychology on work and organizations should be complemented by more research on teams. Important next steps in this line of research would be studying the contribution of team roles and character strengths to outcomes such as work satisfaction, productivity, and teamwork quality on the level of teams. If these studies corroborate our expectations, positive psychology constructs, such as team roles or character strengths, might help in designing teams for the benefit of the employee as well as the organization.

Note

1. Note that some hypotheses regarding the involvement of strengths in roles were made on an a priori pass already (see VIA Institute on Character, 2013). However, these hypotheses are not considered here due to the exploratory nature of the present study. Instead, we formulated our hypotheses on a conceptual basis.

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References

Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being: Americans' perceptions of life quality*. New York, NY: Plenum Press.

Batenburg, R., van Walbeek, W., & In der Maur, W. (2013). Belbin role diversity and team performance: Is there a relationship? *Journal of Management Development, 32*, 901–913. doi:10.1108/JMD-08-2011-0098

Belbin, R. M. (1981). *Management teams*. Oxford: Elsevier.

Belbin, R. M. (1993). A reply to the Belbin Team-Role Self-Perception Inventory by Furnham, Steele and Pendleton. *Journal of Occupational & Organizational Psychology, 66*, 259–260.

Biddle, B. J. (1979). *Role theory: Expectations, identities, and behaviors*. New York, NY: Academic Press.

Broucek, W. G., & Randell, G. (1996). An assessment of the construct validity of the Belbin Self-Perception Inventory and observer's assessment from the perspective of the five-factor model. *Journal of Occupational and Organizational Psychology, 69*, 389–405. doi:10.1111/j.2044-8325.1996.tb00625.x

Cattell, R. B. (1963). Personality, role, mood, and situation-perception: A unifying theory of modulators. *Psychological Review, 70*, 1–18. doi:10.1037/h0042006

Fisher, S. G., & Hunter, T. A. (1998). The structure of Belbin's team roles. *Journal of Occupational & Organizational Psychology, 71*, 283–288.

Fisher, S. G., Hunter, T. A., & Macrosson, W. D. K. (2001). A validation study of Belbin's team roles. *European Journal of Work and Organizational Psychology, 10*, 121–144. doi:10.1080/13594320143000591

Fisher, S., Macrosson, W. D. K., & Sharp, G. (1996). Further evidence concerning the Belbin Team Role Self-Perception Inventory. *Personnel Review, 25*, 61–67. doi:10.1108/00483489610110096

Furnham, A. (1997). *The psychology of behaviour at work: The individual in the organization*. Hove: Psychology Press.

Furnham, A., Steele, H., & Pendleton, D. (1993a). A psychometric assessment of the Belbin Team-Role Self-Perception Inventory. *Journal of Occupational & Organizational Psychology, 66*, 245–257.

Furnham, A., Steele, H., & Pendleton, D. (1993b). A response to Dr Belbin's reply. *Journal of Occupational & Organizational Psychology, 66*, 261–261.

Gander, F., Proyer, R. T., Ruch, W., & Wyss, T. (2012). The good character at work: An initial study on the contribution of character strengths in identifying healthy and unhealthy work-related behavior and experience patterns. *International Archives of Occupational and Environmental Health, 85*, 895–904.

Griffin, M. A., Patterson, M. G., & West, M. A. (2001). Job satisfaction and teamwork: The role of supervisor support. *Journal of Organizational Behavior, 22*, 537–550. doi:10.1002/job.101

Hamilton, B. H., Nickerson, J. A., & Owan, H. (2003). Team incentives and worker heterogeneity: An empirical analysis of the impact of teams on productivity and participation. *Journal of Political Economy, 111*, 465–497. doi:10.1086/374182

Harzer, C., & Ruch, W. (2014). The role of character strengths for task performance, job dedication, interpersonal facilitation, and organizational support. *Human Performance, 27*, 183–205. doi:10.1080/08959285.2014.913592

Harzer, C., & Ruch, W. (2015). The relationships of character strengths with coping, work-related stress, and job satisfaction. *Personality and Social Psychology, 6*, 165. doi:10.3389/fpsyg.2015.00165

Henry, J. (2004). Positive and creative organization. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 269–286). Hoboken, NJ: Wiley.

Horwitz, S. K., & Horwitz, I. B. (2007). The effects of team diversity on team outcomes: A meta-analytic review of team demography. *Journal of Management, 33*, 987–1015. doi:10.1177/0149206307308587

Katzenbach, J. R., & Smith, D. K. (2005). The discipline of teams. *Harvard Business Review, 83*, 162–171.

Littman-Ovadia, H. (2015). Short form of the VIA inventory of strengths: Construction and initial tests of reliability and validity. *International Journal of Humanities, Social Sciences and Education, 4*, 229–237.

Manning, T., Parker, R., & Pogson, G. (2006). A revised model of team roles and some research findings. *Industrial and Commercial Training, 38*, 287–296. doi:10.1108/00197850610685590

Mueller, F., Procter, S., & Buchanan, D. (2000). Teamworking in its context(s): Antecedents, nature and dimensions. *Human Relations, 53*, 1387–1424. doi:10.1177/00187267005311001

Peterson, C., & Park, N. (2006). Character strengths in organizations. *Journal of Organizational Behavior, 27*, 1149–1154.

Peterson, C., Park, N., Hall, N., & Seligman, M. E. P. (2009). Zest and work. *Journal of Organizational Behavior, 30*, 161–172. doi:10.1002/job.584

Peterson, C., Park, N., & Seligman, M. E. (2005). Assessment of character strengths. In G. P. Koocher, J. C. Norcross, & S. S. Hill III (Eds.), *Psychologists' desk reference* (2nd ed., vol. 3, pp. 93–98). New York, NY: Oxford University Press.

Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Oxford: Oxford University Press.

Rentsch, J. R., & Steel, R. P. (1992). Construct and concurrent validation of the Andrews and Withey Job Satisfaction Questionnaire. *Educational and Psychological Measurement, 52*, 357–367. doi:10.1177/0013164492052002011

Turner, N., Barling, J., & Zacharatos, A. (2002). Positive psychology at work. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 715–728). New York, NY: Oxford University Press.

VIA Institute on Character. (2013). *Team report*. Retrieved from http://www.viacharacter.org/www/Reports-Courses-Resources/Reports/The-VIA-Pro-Team-Report

Wilson, M. G., DeJoy, D. M., Vandenberg, R. J., Richardson, H. A., & McGrath, A. L. (2004). Work characteristics and employee health and well-being: Test of a model of healthy work organization. *Journal of Occupational & Organizational Psychology, 77*, 565–588.

Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review, 26*, 179–201. doi:10.5465/AMR.2001.4378011

Wuchty, S., Jones, B. F., & Uzzi, B. (2007). The increasing dominance of teams in production of knowledge. *Science, 316*, 1036–1039. doi:10.1126/science.1136099