RESEARCH

The Effect of Character on Stress Coping Responses Through Motivation to Lead

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ABSTRACT

There have been calls to elevate character alongside competencies and commitment in leadership research. Given the potential importance of character in leadership, it is surprising that the construct has not been more fully integrated into the nuanced nomological network of leadership processes. We built out the nomological network and, specifically, examined the relationship between character and stress coping responses in two field studies involving law enforcement officers. The results of our structural equation models revealed that character had both direct and indirect effects on coping responses through motivation to lead. Furthermore, our results indicated that character was discriminably different from related, empirically validated constructs of personality traits and psychological capital.

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The correlation between character and psychological capital was positive and significant, and they both predicted stress coping responses.

Keywords: Character, Personality Traits, Psychological Capital, Motivation to Lead, Stress Coping Responses

Leadership is a critical success factor in today's public, private, and not-for-profit sector organizations including the military. Effective leadership is a function of competencies, character, and commitment to the role of leadership (Gandz et al., 2010; Thompson et al., 2008). The competency-based perspective toward leadership—focusing attention on those activities, functions, and processes that facilitate the development of strategic, organizational, business, and people competencies—remains a dominant force in the disciplines of human resource management and organizational behavior. Competencies alone, however, are insufficient for leadership to achieve sustainable excellence in organizations. Character has emerged as an indispensable component of good, effective leadership (Hannah & Jennings, 2013; Newstead et al., 2021; Sosik et al., 2019). The focus of character is concerned with who someone is—that is, their habit of being (Crossan et al., 2017; Pike et al., 2021). Character is an expression of virtues, values, and personality traits that manifest in observable behaviors that facilitate human excellence and produce social betterment (Newstead et al., 2021; Peterson & Seligman, 2004). Lastly, commitment to the role of leadership refers to doing the hard work of leadership and continuing to develop as a leader. Such commitment is forged from individual aspirations, and the preparedness to be fully engaged in the leadership role and make personal sacrifices in return for the opportunities and the rewards associated with the leadership role.

There have been numerous calls to elevate character alongside competencies and commitment in leadership research and practice (Hannah & Avolio, 2011; Newstead et al., 2021; Sturm et al., 2017). However, there remain theoretical and practical questions about the relevance of character in organizational behavior and its overlap with other individual difference variables such as personality traits and psychological capital. This observation calls for more extensive research into how character influences outcomes that have implications for individual and organizational effectiveness and, importantly, how the effects of character may operate parallel to, yet distinct from, other related constructs.

The purpose of our study is threefold. First, we build out the nomological network of character and, specifically, examine the relationship between character and stress coping responses. We used police recruits as participants because as in military contexts, potentially traumatic event exposures occur frequently in policing, and studies have shown that post-traumatic stress disorder in police populations represents a significant health concern (Chan & Andersen, 2020; Horswill et al., 2021). For example, Saunders et al. (2019) found that police officers across the United States experienced increased fear and stress due to recent changes in the socio-political environment, which were characterized by (1) strained police—community relations; (2) increased scrutiny associated with the 24-h news cycle, and the partisan reporting creating an appetite for polarizing stories about law enforcement; and (3) the ubiquity of personal recording devices and the sharing of videos on social media so that virtually every police action could be reviewed out of context with the poten-

tial to become a viral news story. Hence, the question as to whether individuals are willing to take up a leadership role and engage in effective leadership behaviors in a high stress environment—and the role that character plays—is a salient one for both police recruits and those serving in the military.

Second, we explored motivation to lead as a potential mediator of the relationship between character and stress coping responses. Chan and Drasgow (2001) described motivation to lead as an individual difference variable that, among other things, influences individuals' willingness to assume leadership roles and the associated responsibilities as well as their persistence to grow and develop as leaders. By investigating how character may support motivation to lead, we integrate two robust yet separate leadership constructs and their associated academic literatures in a much-needed effort to develop a more holistic understanding of the process of leadership (Dansereau et al., 2013; Meuser et al., 2016).

Third, we included two variables in our research design—personality traits and psychological capital—that are often considered similar to character. The relative lack of research on character often leads to questions about construct validity. We argue that there are fundamental differences between character, psychological capital, and personality traits that justify the treatment of them as distinct constructs. Furthermore, we provide empirical evidence, showing that these constructs are related yet different, which is important for both theoretical and practical advancement of character research.

Our paper proceeds as follows: We begin by providing a brief overview of existing research on character and motivation to lead. Next, we focus on the relationships among character, motivation to lead, and stress coping responses. We then introduce the design of Study 1 and present our results. We also discuss the challenges with construct proliferation and outline the conceptual differences between character, personality traits, and psychological capital—this is largely the focus of Study 2. We conclude our paper with a discussion of the theoretical and practical significance of the results that we obtained and outline areas for future research.

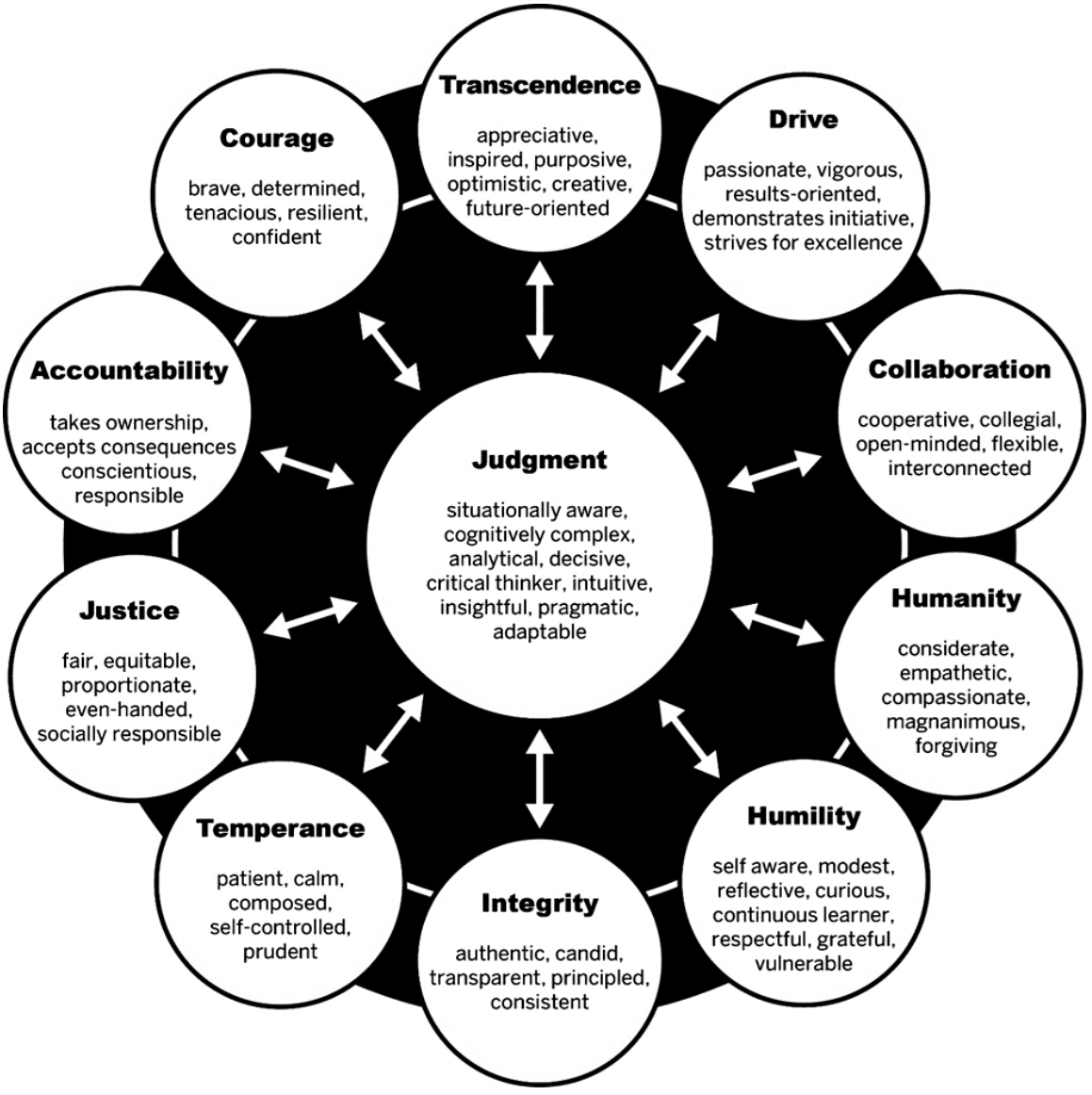
Character

Many scholars examining the origin, antecedents, and consequences of character anchor their discussion of character in virtue ethics. The science and practice of virtue ethics seeks to guide and promote the habitual display of positive behaviors that enable human flourishing and produce social betterment. The foundational research program led by Peterson and Seligman (2004) led to the formulation of six universal virtues (courage, humanity, justice, practical wisdom, temperance, and transcendence) and 24 character strengths grounded in behavioral indicators. The character strengths reflect the six domains of virtuous conduct. For example, the character strengths of forgiveness, humility, prudence, and self-regulation comprise the virtue of temperance. Character, then, can be considered as a set of behaviors that reflect habits through the internalization of virtues.

Crossan and her colleagues (2016, 2017) extended the research by Peterson and Seligman (2004) to organizational settings. Their engaged scholarship approach built on prior academic studies from various disciplines (e.g., psychology, philosophy, management, education, theology, and sociology) and led to the identification of 11 dimensions of character (or virtues) and 62 supportive behaviors—character elements (or character strengths)—that are widely considered by leaders from the public, private, and not-for-profit sectors to be exemplars of virtuous leadership and, importantly, meet the original criteria for virtues and character strengths offered by Peterson and Seligman (2004). Their theoretical framework of character is shown in Figure 1 and provides the basis for our study.

Figure 1

Framework of Leader Character, Adapted from Crossan et al. (2017)



We used the Crossan et al. (2017) framework because their multi-year investigation of character was motivated by the observation that many organizational leaders (1) had difficulty relating to some of the language (e.g., zest and love) used in the Values in Action Character Strengths survey designed by Peterson and Seligman and (2) felt that the classification structure proposed by Peterson and Seligman did not include key virtues and character strengths perceived as important for leadership in organizations. Therefore, Crossan et al. captured the voice of organizational leaders to develop and then validate a framework of character.

Figure 1 shows that judgment exists at the center of the interconnected set of dimensions. The effective application of any of the dimensions is context-sensitive, thereby creating cross-situational variance in behaviors (Crossan et al., 2017; Hannah & Avolio, 2011; Schwartz & Sharpe, 2006). Consequently, judgment is placed at the center of the character framework because good judgment (or the Aristotelian concept of phrónēsis or practical wisdom) is the outcome of applying the dimensions of character (and their supporting behaviors) in situationally appropriate ways (Crossan et al., 2017; Eikeland, 2006; Schwartz & Sharpe, 2010). Effective leaders are those who are able to activate each of the dimensions at the right time and in the right amount to guide their decision-making and call forth the right set of behaviors to address the challenges with which they are confronted. Prior research has shown that the 11 dimensions are unique yet highly correlated (Crossan et al., 2017; Monzani et al., 2021; Seijts et al., 2022).

Research has and continues to investigate how character relates to outcomes for leaders, managers, and employees, thereby building a nomological network for character. We link character to stress coping responses through the construct of motivation to lead.

Motivation to Lead

It is easy to envision why academics and practitioners take great interest in the construct of motivation to lead: a well-executed research program helps to answer the question of who is most attracted to leadership roles and whether those individuals who are motivated to pursue leadership roles actually become more effective leaders through fulfilling the requirements associated with leadership (Badura et al., 2020; Chan & Drasgow, 2001; Schyns et al., 2020). This question seems to be an especially relevant one for professions with a heightened risk of stress including individuals serving in the armed forces. Our research contributes to the motivation to lead literature by identifying relevant antecedents and consequences of the construct, seen as a critical area to push research on leadership motivation forward. For example, Badura et al. (2020) observed that we know relatively little about the processes that underpin the motivation to lead.

Chan and Drasgow (2001) formulated motivation to lead as a construct that has three dimensions. The *affective-identity* dimension represents an intrinsic enjoyment of opportunities to lead and is characterized by a tendency to take charge and view oneself as a leader. The *social-normative* dimension of motivation to lead reflects a willingness to lead out of a sense of obligation, honor, or duty. Lastly, the *non-calculative* dimension reflects a willingness to lead without regard to the personal costs and benefits of leading; hence, the less calculating individuals are about leading, the more they are inclined to embrace the leadership role.

Research on the antecedents of motivation to lead has mainly considered fixed individual differences such as personality traits, cognitive ability, vocational interests, and gender. However, Chan and Drasgow (2001) conceptualized motivation to lead as an individual difference variable that is likely to be developed over time through leadership experiences and subsequent development. We therefore advocate for taking a wider, more holistic view of the possible antecedents that may shape motivation to lead.

We posit that motivation to lead is fed by character, which is an important personal resource that contributes to individual excellence and can be developed over time (Byrne et al., 2018; Lindsay et al., 2020; Ramos et al., 2019; Sosik, 2015). For example, those individuals with deep reservoirs of courage (e.g., showing an unrelenting determination, confidence, and perseverance in confronting difficult situations; and rebounding quickly from setbacks) and transcendence (e.g., having a strong sense of personal mission or orientation in life, and seeing possibilities where others do not) can be expected to have high affective-identity

motivation to lead. Furthermore, although leadership is generally viewed as an attractive and rewarding endeavor, it may also entail certain risks and sacrifices that may discourage individuals from taking on a leadership role (De Cremer & Van Knippenberg, 2004; Zhang et al., 2020). Therefore, individuals who can activate the behaviors associated with humanity (e.g., demonstrating genuine concern and care for others) and accountability (e.g., stepping up and taking ownership of challenging decisions and actions, and reliably delivering on expectations) are likely to display a sense of duty to serve and fulfill the obligations associated with the role of leadership that is characteristic of social-normative motivation to lead. Therefore, we hypothesize that character contributes to the prediction of motivation to lead (Hypothesis 1).

Character, Motivation to Lead, and Coping

The degree to which a stressful event results in distress or negative outcomes is related to the coping responses individuals use. Lazarus and Folkman (1984) defined coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). Long (1990) identified three specific categories of coping: avoidance (e.g., behavioral disengagement, self-blame, or venting); problem reappraisal or appropriate reassessment of the experience (e.g., stressful events are reconstrued as benign, valuable, or beneficial); and active problem-solving (e.g., seeking emotional support, engaging in problem-solving and planning, or exercising self-care and seeking hobbies). Our research extends previous studies by examining the relationship between character, motivation to lead, and the use of effective (problem reappraisal and active problem-solving) and ineffective (avoidance) coping responses.

Seijts et al. (2022) argued that character is a personal resource that contributes to beliefs of personal mastery and helps individuals deal more effectively with stressful events, which, in turn, prevents them from making poor decisions, engaging in unethical behaviors, and experiencing negative outcomes such as emotional exhaustion. Specifically, they asserted that individuals who have strong, well-developed character are better equipped to handle the demands in their environment—whether they be physical, mental, emotional, or otherwise—and to support positive behaviors that facilitate leader excellence. For example, individuals who are able to activate the positive thoughts, feelings, and behaviors associated with character elements identified by Crossan et al. (2017) such as self-control, confidence, resilience, gratitude, open-mindedness, optimism, reflection, and patience to handle stressful life events may believe they are capable of handling unforeseen events and actively deal with the circumstances they face—more so than individuals who lack these elements of character (Harzer & Ruch, 2015; Seligman & Csikszentmihalyi, 2000; Sosik et al., 2019).

Seijts et al. (2022) tested their hypotheses using students in a business education setting as participants. Their results revealed that character dampened the perceived stressfulness of life events commonly reported as stressful by students. The results imply that it is essential for faculty and students at educational institutions to fully appreciate the importance of character for effective functioning and to develop the various character dimensions to address adverse personal, social, and environmental situations in a positive fashion.

We think this advice is as valuable for individuals in actual military/work settings as it is for students. For example, law enforcement officers, firefighters, and military personnel experience significant levels of stress, which may contribute to dysfunctional behaviors and poor decision-making (Gershon et al., 2009; Obuobi-Donkor et al., 2022; Perez-Floriano & Gonzalez, 2019). Hence, the question as to whether individuals – including professionals such as police recruits and military service members – engage in effective leadership

behaviors in a high stress environment, and what role character plays is a salient one. Based on the findings reported by Seijts et al. (2022), we hypothesize significant positive relationships between character and active problem-solving (Hypothesis 2-a) and problem reappraisal (Hypothesis 2-b), and a significant negative relationship between character and avoidance (Hypothesis 2-c).

Furthermore, we posit that motivation to lead will have a direct effect on how individuals cope with stressful situations. Motivation to lead is a predictor of a range of positive leadership behaviors and leadership effectiveness (Badura et al., 2020; Chan & Drasgow, 2001; Kark & Van Dijk, 2007). This implies that individuals with high motivation to lead are more likely to invest time and energy to fulfill the demands associated with leadership and to sustain efforts under stressful conditions. Motivation to lead, therefore, helps individuals to select and persist with suitable coping responses. Specifically, individuals with higher affective-identity motivation to lead tend to have more positive emotions, are more confident in their abilities, and may even welcome the challenges associated with stressful situations because these challenges strengthen their self-identity as a leader (Badura et al., 2020; Kennedy et al., 2021). Similarly, individuals with higher social-normative motivation to lead are likely to have a stronger sense of duty and higher purpose associated with their role, which can help them overcome personal discomforts and stressors encountered in their professional lives (Hannah et al., 2014; Maurer et al., 2017). Finally, non-calculative motivation to lead implies a tendency for other-orientation and willingness to incur personal costs. This willingness to take risks and incur costs suggests an inclination for an approach-oriented coping strategy: to accept the stressor, to understand its underlying causes, and to actively find a solution to the stressor (Healy & McKay, 2000; Taylor & Stanton, 2007). Taken together, we hypothesize that motivation to lead will be positively associated with problem-solving (Hypothesis 3-a) and problem reappraisal (Hypothesis 3-b), and negatively associated with avoidance (Hypothesis 3-c).

Finally, we hypothesize that motivation to lead will mediate the effect of character on coping strategies such that character increases motivation to lead, which, in turn, facilitates active problem-solving (Hypothesis 4-a) and problem reappraisal (Hypothesis 4-b), and character increases motivation to lead, which, in turn, decreases avoidance (Hypothesis 4-c).

Study 1

Method

Sample

The participants were recruited from a Canadian police college. Every police recruit in the province where we collected the data is mandated by legislation to attend the college and successfully complete the program on their ongoing journey to become a law enforcement officer. The training includes three broad areas: legislation (e.g., knowledge concerning all statutes relevant to the province and hence police officers); policing skills (e.g., defensive skills and control tactics, patrol driving, and safe and lawful use of firearms); and a broad set of topics identified through formal inquests and political recommendations (e.g., diversity and inclusion, death notification, and accountability for actions). The college is committed to offering unique and innovative learning opportunities for both newly hired and seasoned police officers to prepare them well for the myriad on-the-job challenges in urban and nonurban centers. The college also offers non-mandated training programs as part of ongoing professional development. The average age of the participants was 30.02 years (SD = 5.88). Seventy males and 60 females completed the full set of surveys.

Design and Procedure

The police recruits received an email from the senior leadership inviting them to participate in a study framed

around character and well-being. The participants were asked to complete two surveys at different time intervals. The first survey included a self-assessment of character. Upon completion of the self-assessment, the participants received a detailed report summarizing their character scores so as to provide developmental feedback that could assist them in their professional development. Leadership and effective leadership behaviors are topics that are discussed extensively in professional development programs offered by the college and hence a deeper insight into a critical component of leadership—character—was seen by the senior leadership as something of interest to the college and its stakeholders. The report was provided free of charge and included free online resources (e.g., books, practitioner articles, blogs, podcasts, and videos) to access if the participants wanted to learn more about one or more behaviors associated with strong, well-developed character. The second survey, sent to the recruits 6 weeks later, included measures of motivation to lead and stress coping responses. It was anticipated that each of the surveys would take about 20 min to complete. We randomized the order in which the participants completed the items for each scale to prevent any order effects. Furthermore, we employed different response scales to avoid automatic-pilot responses. These procedures were utilized to strengthen the internal validity of our results.

We separated the surveys to limit the challenges associated with cross-sectional research designs. This was especially important because all measures we collected were self-report due to the nature of our variables and the relationships we studied: intra-psychological and behavioral processes. The surveys were connected by the research team through the use of a unique ID provided to the participants during the completion of the first survey.

Participation in the study was voluntary, and the surveys could be completed on the participant's own time. All the data collected were confidential and accessed only by the research team. Studies involving sensitive topics for respondents have shown that the promise of anonymity generates higher response rates and more honest answers in survey research (Gnambs & Kaspar, 2015; Warner et al., 2011).

There were three cohorts from which we collected data. The college typically hosts three cohorts annually for the training program. The program lasted 12 weeks. Cohorts 1, 2, and 3 had 387, 431, and 408 police officers, respectively. We encountered challenges in linking the surveys even though we sent out specific instructions to the recruits on how to retrieve their unique ID from previous emails. We had 562 individuals complete the first survey and 316 individuals complete the second survey indicating slippage. Our final sample with complete (and linked) cases for cohorts 1–3 consisted of 130 participants or a 11% effective response rate.

Instruments

Character. We used the revised and shortened self-report version of the Leader Character Insight Assessment (LCIA) developed by Seijts et al. (2022) to measure character. The LCIA asks individuals to self-rate the likelihood of demonstrating 33 specific behaviors that reveal strength of character within a leadership role. These leader behaviors can be classified into one of the 11 dimensions of character: accountability, collaboration, courage, drive, humanity, humility, integrity, judgment, justice, temperance, and transcendence. Sample items are "Holds and pursues high standards of performance" (drive) and "Does not call undue attention to one's accomplishments" (humility). The scale scores ranged from *extremely unlikely* (1) to *extremely likely* (5); the midpoint of the scale was *unsure* (3). As mentioned previously, studies have shown that the dimensions of character tend to be highly correlated. Consequently, we combined the total score on the dimensions as a single indicator of character. From a practical point of view, the high correlations indicate substantial overlap

among the dimensions and, thus, restrict their use as separate dimensions.

Motivation to lead. Motivation to lead was assessed through 10 items taken from the scale developed by Chan and Drasgow (2001). The scale has three dimensions: affective-identity (four items); social-normative (three items); and non-calculative motivation to lead (three items). A sample item of the motivation to lead scale is "I would agree to lead others even if there are no special rewards or benefits with that role" (non-calculative motivation). The scale scores ranged from *strongly disagree* (1) to *strongly agree* (7); the midpoint of the scale was *neither agree* nor *disagree* (4). As explained previously, individuals with high motivation to lead stay committed to conquering personal and professional challenges. Although we might find different effect sizes for the dimensions of motivation to lead on our outcome variables, we expect that the directional effects are the same. We, therefore, treated motivation to lead as a uniform construct and aggregated 10 items into a single score.

Coping responses. We used the stress coping response scale developed and validated by Long (1990) to measure the different ways to cope with stressful life events. The scale has three unique dimensions: avoidance (14 items); problem reappraisal (12 items); and active problem-solving (10 items). Participants were asked to focus on a major stressful event during the previous 2 to 4 weeks and then to respond to each coping response according to the degree to which they used it to deal with the stressor. A sample item of the active problem-solving scale is "I talked to someone who could do something concrete about the problem" (active problem-solving). The scale scores ranged from *not at all* (0) to *used a great deal* (3); the middle scores were *sometimes* (1) and *often* (2).

Table 1

Means, Standard Deviations, and Reliabilities for Variables Measured in Studies 1 and 2

Measure	Study 1			Study 2		
	M	SD	α	M	SD	α
Gender	1.46	0.50		1.29	0.46	
Age	30.02	5.88		27.81	5.05	
Character	4.42	0.29	0.90	4.45	0.31	0.92
Motivation to lead	6.02	0.58	0.84	5.76	0.82	0.91
Active problem-solving	1.63	0.59	0.84	1.60	0.61	0.85
Avoidance	0.70	0.47	0.86	0.59	0.42	0.87
Problem reappraisal	2.00	0.50	0.83	1.89	0.61	0.89
Psychological capital				5.46	0.68	0.92
Agreeableness				4.86	1.00	
Conscientiousness				6.27	0.82	
Emotional stability				6.00	0.89	
Extraversion				4.94	1.31	
Openness to experience				5.48	0.95	

Note: Reliability shown as Cronbach's alpha (α) for Study 1 (N = 130) and Study 2 (N = 255).

Table 2

Correlations Among Variables Measured for Studies 1 and 2

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender		0.02	-0.05	0.01	0.05	0.17**	0.06	-0.02	0.12	0.16*	-0.08	0.14*	0.13*
2. Age	0.12		0.18**	0.06	-0.02	-0.23**	-0.05	0.02	0.19**	0.07	0.14*	0.05	0.16*
3. Char	0.01	0.14		0.44**	0.29**	-0.24**	0.20**	0.40**	0.20**	0.24**	0.32**	0.12	0.38**
4. MTL	0.08	0.03	0.30**		0.18**	-0.16*	0.18**	0.50**	-0.12*	0.15*	0.05	0.26**	0.19**
5. APS	-0.05	-0.02	0.22*	0.19*		0.09	0.58**	0.14*	0.06	0.07	0.03	-0.02	0.14*
6. Avoi	0.13	0.03	-0.18*	-0.26**	0.12		-0.02	-0.28**	-0.04	-0.28**	-0.41**	-0.21**	-0.17**
7. PR	-0.12	-0.02	0.12	0.29**	0.43**	-0.07		0.22**	0.14*	0.05	0.08	-0.10	0.01
8. PsyCap									0.03	0.28**	0.16*	0.19**	0.20**
9. Agr										0.18**	0.32**	-0.02	0.28**
10. Con											0.48**	0.20**	0.33**
11. ES												0.11	0.34**
12. Ext													0.35**
13. Open													

Note: Study 1 is depicted in the bottom triangle (N = 130). Study 2 is depicted in the top triangle (N = 255). Char = character, MTL = Motivation to lead, APS = Active problem-solving, Avoi = Avoidance, PR = Problem reappraisal, PsyCap = Psychological capital, Agr = Agreeableness, Con = Conscientious, ES = Emotional stability, Ext = Extraversion, Open = Openness.
* $p < 0.05$. ** $p < 0.01$.

Results

Descriptive Statistics

Tables 1 and 2 show the means, standard deviations, reliabilities, and correlations among the measures we collected. The participants self-reported high character across the 11 dimensions; the average score was 4.42 (SD = 0.29) on a 5-point scale. Furthermore, the participants reported high motivation to lead (M = 6.02, SD = 0.58) on a 7-point scale. The most frequently used coping response was problem reappraisal (M = 2.00, SD = 0.50), followed by active problem-solving (M = 1.63, SD = 0.59) and avoidance (M = 0.70, SD = 0.47) on a 4-point scale.

Confirmatory Factor Analysis

We conducted reliability and confirmatory factor analyses on the measures for character, motivation

Table 3

Goodness-of-Fit Indicators of Models for Character, Motivation to Lead, Coping Responses, and Psychological Capital for Studies 1 and 2

Model	χ^2	df	χ^2 diff	RMSEA	SRMR	CFI	TLI
Study 1							
All Items							
1-Factor	10580.03**	3,002		0.14	0.16	0.64	0.63
3-Factor	7143.20**	2,999	3436.83**	0.10	0.14	0.80	0.80
5-Factor	4804.07**	2,992	2339.13**	0.07	0.12	0.91	0.91
7-Factor	4362.62**	2,981	441.45**	0.06	0.12	0.93	0.93
Revised[a]							
1-Factor	10269.27**	2,849		0.14	0.16	0.64	0.63
5-Factor	4587.97**	2,926	5681.3**	0.07	0.12	0.92	0.91
7-Factor	4146.51**	2,828	441.46**	0.06	0.12	0.94	0.94
Study 2							
All Items							
1-Factor	31201.84**	3,827		0.17	0.16	0.73	0.73
4-Factor	15586.53**	3,821	15615.31**	0.11	0.13	0.86	0.88
6-Factor	8727.57**	3,812	6858.96**	0.07	0.10	0.95	0.95
8-Factor	7512.57**	3,799	441.46	0.06	0.09	0.96	0.96
Revised[b]							
1-Factor	30667.98**	3,740		0.17	0.16	0.74	0.73
6-Factor	8388.61**	3,725	22279.37**	0.07	0.10	0.95	0.95
8-Factor	7170.82**	3,712	1217.79**	0.06	0.09	0.97	0.97

Note: RMSEA = root mean square error of approximation, SRMR = standardized root mean square residual, CFI = comparative fit index, and TLI = Tucker–Lewis index.

[a] Two items were removed due to low factor loading and poor inter-item correlations.

[b] One item was removed due to low factor loading.

* $p < 0.05$. ** $p < 0.01$.

to lead, and coping responses to address convergent and discriminant validity of the measures. First, the solutions for a single-factor with all items loading onto the same underlying factor and a 3-factor model were compared to investigate whether the measures are truly distinct or measure the same latent variable. Second, we explored whether the items loaded more strongly on their corresponding construct than on the other constructs we measured. Third, we considered the results of the reliability analysis for each measure. The results of the confirmatory factor analysis are shown in Table 3.

The chi-square difference test showed that there was a significant difference between the single- and 3-factor model, where the 3-factor solution showed a better fit. However, the results also indicated that the 3-factor solution could be much improved. First, our initial 3-factor model suggested that the coping response items should be split into their respective dimensions: active problem-solving, problem reappraisal, and avoidance responses (thus creating a 5-factor model). Second, we investigated the model fit when we split the respective dimensions for motivation to lead: affective-identity, non-calculative, and social-normative motivation to lead (thus creating a 7-factor model). Third, we removed two items (one each from active problem-solving and avoidance coping responses) from the coping response scale for subsequent analyses because their factor loadings were low and/or because of poor reliability as shown by the inter-item correlation matrix and the item-total statistics that the SPSS statistical package provides. The fit indices of our final 5-factor model are shown in Table 3. The RMSEA; standardized root mean square residual or SRMR; comparative fit index or CFI; and Tucker–Lewis index or TLI. were satisfactory. There was little indication that including the additional dimensions for motivation to lead provided substantially better fit as the 5- and 7-factor models reached comparable fit indices. We therefore proceeded using the more parsimonious 5-factor model.

Analytical Approach

We constructed structural equation models to test our hypotheses captured in Figure 2A. A maximum likelihood-revised estimator with 10,000 iterations and 20 starts was used. We completed an initial model and observed both the fit indices—chi-square, RMSEA, SRMR, CFI, and TLI—and the modification indices provided by the Mplus 8.8 statistical software package to consider the best-fitting model to our data. First, the fit indices were compared to cutoff points from established recommendations (cf. Cheung & Rensvold, 2002). Second, the modification indices were inspected to improve the overall fit of the model while remaining theoretically sound. Third, the INDIRECT command in Mplus was used to test the significance of the indirect effect of character on coping responses as mediated by motivation to lead. Fourth, gender was added as a covariate in our structural equation model, loading onto our outcome measures.

Hypothesis Testing

Our model showed an acceptable fit to our data—$\chi^2(1) = 0.90$, $p = 0.34$; SRMR = 0.02; RMSEA = 0.00; CFI = 1.00; and TLI = 1.00. We next observed the direct and indirect paths that tested our hypotheses (Figure 3A). Our results indicated that character significantly and positively predicted motivation to lead, $\beta = 0.30$, $p < 0.01$, and active problem-solving, $\beta = 0.18$, $p < 0.05$. These results support Hypotheses 1 and 2-a. There was, however, no direct relationship between character and two dimensions of coping responses: problem reappraisal and avoidance. Next, we considered motivation to lead as a predictor of coping strategies. Results indicated that consistent with Hypotheses 3-b and 3-c, motivation to lead significantly and positively predicted problem reappraisal, $\beta = 0.29$, $p < 0.01$, and significantly and negatively predicted avoidance, $\beta = -0.24$, $p < 0.01$. However, no direct relationship was found between motivation to lead and active problem-solving.

The indirect path from character through motivation to lead was significant and positive for problem

Figure 2A

Model Depicting the Impact of Character on Coping Responses through Motivation to Lead.

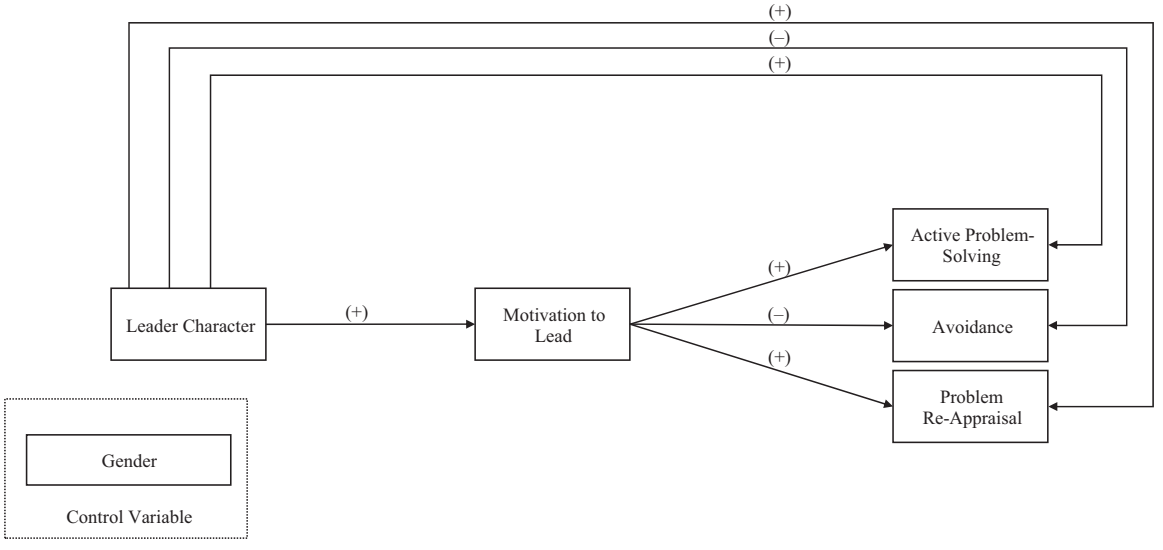


Figure 2B

Model Depicting the Impact of Character on Coping Responses through Motivation to Lead Controlling for Psychological Capital and the Big Five Personality Dimensions.

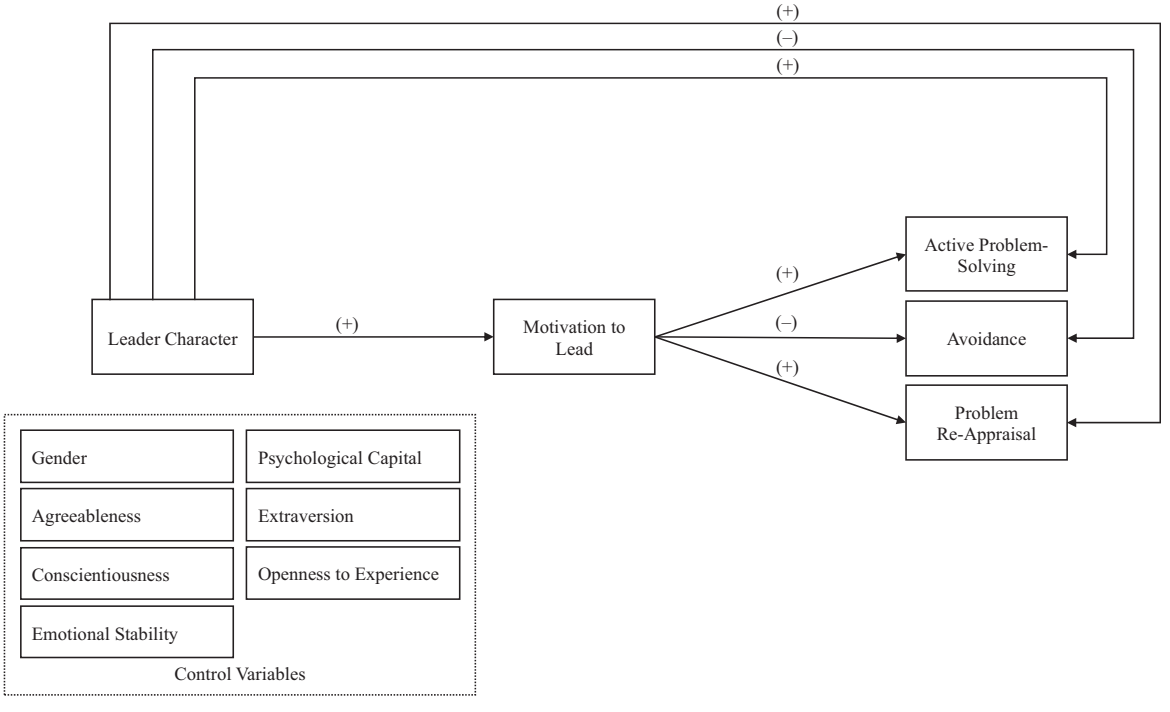
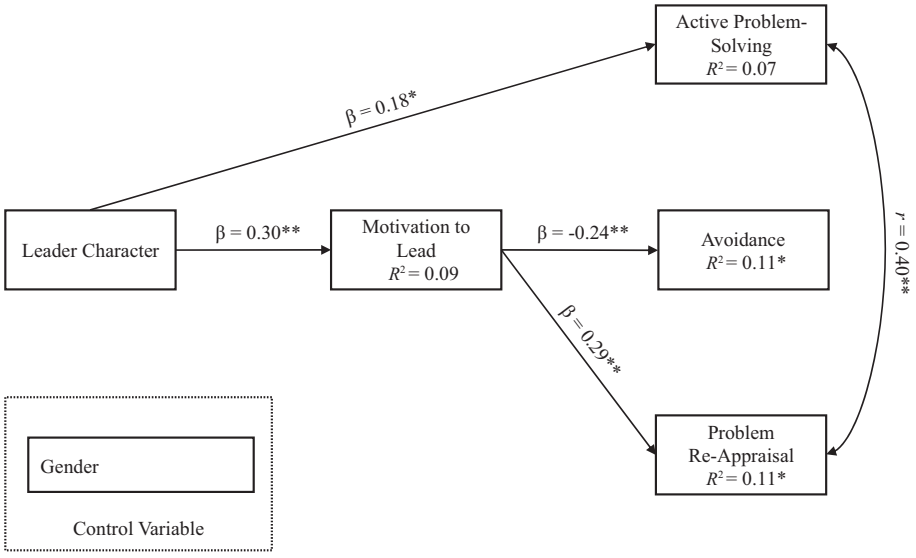


Figure 3A

Structural Equation Model Depicting the Impact of Character on Coping Responses through Motivation to Lead and Controlling for Gender.

Note: Paths are depicted with straight lines. For parsimony, only significant paths are shown. Correlational relationships are depicted with curved lines.

* $p < 0.05$. ** $p < 0.01$.



reappraisal (Θ = 0.09, SE = 0.03, $p < 0.01$), supporting Hypothesis 4-b, and significant and negative for avoidance (Θ = −0.07, SE = 0.03, $p < 0.05$), supporting Hypothesis 4-c. However, motivation to lead did not mediate the relationship between character and active problem-solving. Our outcome measures showed one significant correlation: active problem-solving was significantly and positively associated with problem reappraisal ($r = 0.40$, $p < 0.01$). Gender was not a predictor for any of the coping responses in our model even though the correlation between gender and the avoidance coping response approached significance.

Study 2

The results of Study 1 are consistent with prior studies that revealed that character is an important individual difference variable associated with motivation, learning, and the activation of effective leadership behaviors. Hence, our findings help to build out the nomological network of leadership processes. The purpose of Study 2 was to replicate and extend our findings with a slightly different design and a larger sample. Replication is a natural and critical part of the scientific process (Cook & Campbell, 1979; Pashler & Wagenmakers, 2012) in particular with relatively new constructs such as character (Van Zyl et al., 2024). Furthermore, in Study 2, we explicitly address the issue of construct proliferation and empirically show that character is separate from related constructs such as personality traits and psychological capital. This need for differentiation has been largely ignored by researchers who study character.

Construct Proliferation

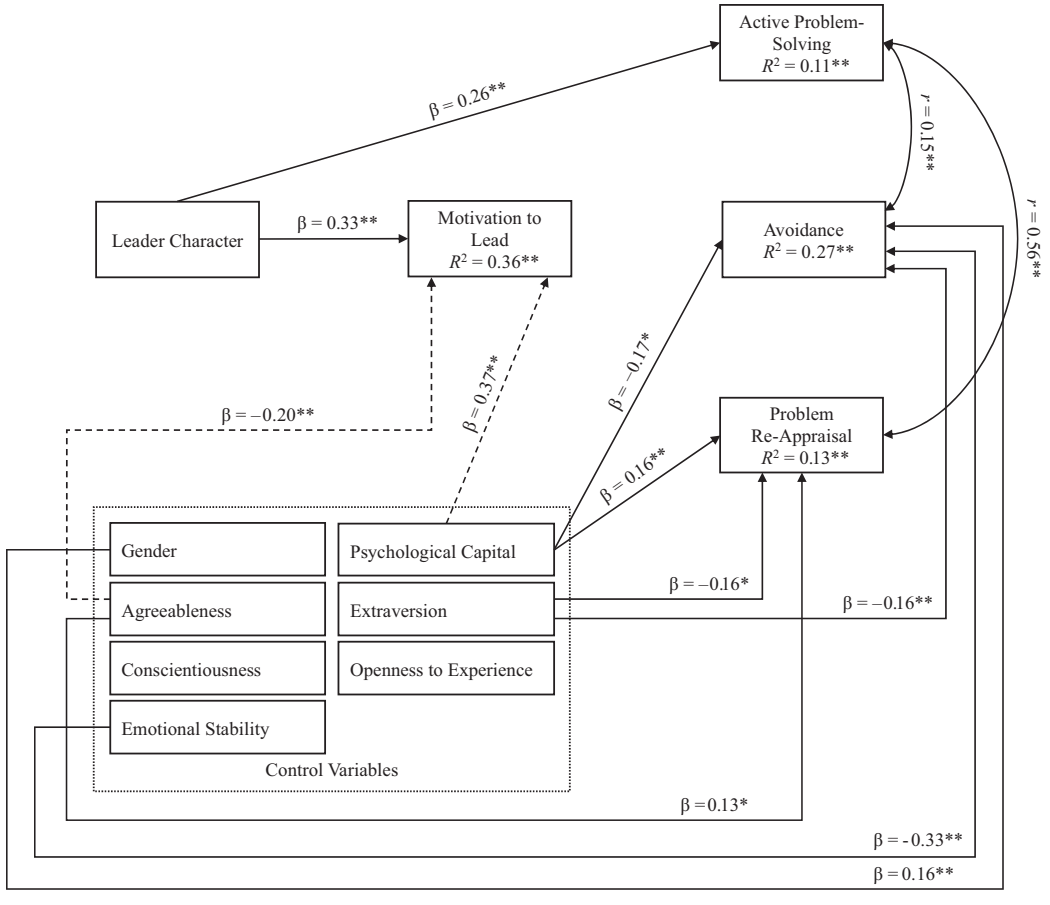
The accumulation of ostensibly new constructs that are theoretically and empirically indistinguishable from established constructs has been identified as an issue of concern in the field of organizational behavior. For

Figure 3B

Structural Equation Model Depicting the Impact of Character on Coping Responses through Motivation to Lead and Controlling for Gender, Psychological Capital, and the Big Five Personality Dimensions.

Note: Paths are depicted with straight lines. For parsimony, only significant paths are shown. Correlational relationships are depicted with curved lines. Dashed lines depict additional paths or correlations added based on the modification indices.

$^{*}p < 0.05.$ $^{**}p < 0.01.$



example, Le et al. (2010, p. 112) explained that construct proliferation should be considered "... a major failure to adhere to the canon of parsimony in science ... The problem is a serious one because a science that ignores the mandate for parsimony cannot advance its knowledge base and achieve cumulative knowledge."

Two constructs that appear to be conceptually close to character are personality traits and psychological capital—both of which have a deep, rich literature. For example, Wright and his colleagues (Wright & Klotz, 2017; Wright & Lauer, 2013) observed that some scholars have defined character as personality. Therefore, the question of what value is added by the construct of character over personality is a predictable (and important) one. Furthermore, like character and its associated virtues and character strengths, the construct of psychological capital has its roots in positive

psychology; because both constructs focus on "who you are" and "who you can become" (Crossan et al., 2016; Luthans & Broad, 2022), people may see these two constructs as highly complementary. For example, studies and meta-analyses revealed that psychological capital is a personal resource that promotes desirable employee and organizational outcomes (e.g., organizational commitment, organizational citizenship behaviors, or employee creativity) as well as buffers against negative employee and organizational outcomes (e.g., turnover intentions, burnout, or cynicism) (Loghman et al., 2022; Wu & Nguyen, 2019). Studies have also shown that psychological capital, like character, can be developed in individuals through micro-interventions lasting from 1 to 3 h (Lupșa et al., 2020; Luthans et al., 2006; Luthans & Youssef-Morgan, 2017). How then is character truly different from psychological capital?

We believe there are fundamental differences between character, psychological capital, and personality traits, which justify the treatment of them as distinct constructs in both research and applied settings. The first difference involves the epistemology and ontology of the constructs. Some virtues and character strengths may be trait-like individual differences, but character and personality traits are by no means equivalent. For example, character is anchored in virtuous behaviors and can be developed, as opposed to personality traits, which are relatively stable and, importantly, mostly agnostic to virtue (Cawley et al., 2000; Seijts et al., 2019). Character involves a set of habits of behaviors that can be strengthened through deliberate practice, the impact of context and, sometimes, because of some intense, crucible experience (Byrne et al., 2018; Peterson & Seligman, 2004). Moreover, character addresses strengths and deficiencies, whereas personality traits just are as they are. For example, we typically do not talk about a good or bad extrovert; however, we do emphasize strengths, excesses, and deficiencies in humanity or temperance (Potosky et al., 2023; Seijts et al., 2019). We also note that character—and presumably psychological capital—is heavily influenced by the work context, including an organization's systems and cultural values. Such factors have less influence on personality traits. For example, personality traits operate quite independently of context and culture (Monzani et al., 2023; Van Zyl et al., 2024). And whereas character is a malleable trait or disposition, psychological capital is a state, highly influenced by the situation or mindset of the respondent when taking the survey (F. Luthans, personal communication, August 6, 2006).

A second critical difference between the character as it relates to personality traits and psychological capital centers around their operationalization. For example, the character framework that forms the basis for our study is often treated as a network structure that recognizes the interdependencies among the dimensions of character as well as its constitutive elements (Crossan et al., 2017; Seijts et al., 2022). In contrast, personality traits and the four resources that comprise psychological capital—efficacy, optimism, hope, and resilience—are typically treated as relatively independent without expecting that a weakness or strength in a dimension would undermine or support other dimensions. For example, developing strength in accountability and integrity without the support of humility and humanity could turn virtuous behavior into a vice—being dogmatic and arrogant (Crossan et al., 2016; Schwartz & Sharpe, 2006). Because of the interconnected nature of the dimensions of character, leaders cannot arbitrarily choose which dimensions to demonstrate without risking their virtuous behavioral expression turning into a vice (e.g., courage turning into recklessness in the absence of temperance). The virtue-and-vice problem is understood as lack of connection across dimensions (Crossan et al., 2016; Monzani et al., 2021; Potosky et al., 2023). Thus, deficiencies in any of the character dimensions may compromise leaders' judgment (Schwartz & Sharpe, 2006, 2010), given that judgment acts as the network's hub. No such interre-

lationships are typically defined (or explored) with psychological capital and personality traits.

Lastly, psychological capital has four resources: (1) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success (Luthans et al., 2015; Luthans & Youssef-Morgan, 2017). These resources are, in fact, reflected in the character framework albeit under a different vocabulary (e.g., efficacy versus confidence or optimism). Luthans and Youssef-Morgan (2017, p. 25) wrote that their list of resources was never meant to be conclusive and "... that other positive psychological resources have considerable potential to be included in PsyCap [positive psychological capital]." Thus, it appears that, at least for now, the character framework is a more comprehensive, inclusive constellation of positive behaviors or personal resources.

Shaffer et al. (2016) argued that to establish a new construct or to validate an existing construct, researchers must demonstrate at least two things. First, they must show that the construct is conceptually distinct from related constructs. We articulated conceptual distinctions between character on the one hand versus personality traits and psychological capital on the other hand. Second, researchers must demonstrate that the construct is empirically distinct from related constructs. Thus, in Study 2, we controlled for psychological capital and personality traits when we examine the effect of character on stress coping responses through motivation to lead. For example, we expect to see a positive and significant correlation between the character and psychological capital. However, we also expect that character predicts significant variance in our variables of interest while including psychological capital and personality traits as control variables in our analyses. Doing so may also address the problem that omitted variables such as demographics, personality traits, and psychological capital might influence the results (Hill et al., 2021; Sackett et al., 2003). Our hypotheses are summarized in Figure 2B.

Method

Sample

We obtained permission from the senior leadership at the police college to collect additional data from an incoming cohort. The same procedures were used to recruit participants for our study. The cohort had 422 officers enrolled.

Design and Procedure

We used identical materials and procedures in our data collection as Study 1 with two important differences. First, we collected data through a single survey. We did so because the slippage in the collection of data experienced in Study 1 was a major problem. We were often unable to link the surveys the participants completed. Second, we added measures of psychological capital and personality traits to the survey. No changes were made to the measures we used in Study 1. Interestingly, our results indicated that there were neither substantial differences in the means and standard deviations for the measures we collected using the two formats (Studies 1 and 2) nor the pattern of relationships among the variables we obtained. Our final sample size after filtering for complete cases was 255 participants or a 60% effective response rate. The average age of the participants was 27.81 years (SD = 5.05). One-hundred-and-eighty-one males and 74 females completed the full surveys.

Instruments

Psychological capital. We measured psychological capital or PsyCap with 10 items taken from Luthans et al. (2007). We slightly rewrote some of

the items to make them domain specific; for example, we replaced "at work" with "in the program" (see Luthans & Youssef-Morgan 2017).[1] A sample item of the PsyCap scale is: "If I should find myself in a jam in the program, I could think of many ways to get out of it" (hope). The scale scores ranged from *never* (1) to *always* (6); the middle scores were *once a month or less* (3) and *a few times a month* (4). Empirical studies typically use the overall (or single) score for psychological capital in the analyses (Luthans et al., 2006, 2014).

Big Five personality dimensions. We used the 10-item inventory of the Big Five personality dimensions developed by Gosling et al. (2003). The Big Five personality framework has become the most widely used model of personality (Feher & Vernon, 2021; Gosling et al., 2003). The framework suggests that personality can be classified into five broad, empirically derived domains. Specifically, the traits or dimensions are agreeableness, conscientiousness, emotional stability, extraversion, and openness. Each dimension is captured by two items (e.g., for extraversion: extraverted and enthusiastic, or reserved and quiet). The participants were given 10 statements and told that these personality traits "may or may not apply to you." They were then asked to indicate the extent to which they agreed or disagreed with that statement. The scale scores ranged from *strongly disagree* (1) to *strongly agree* (7); the midpoint of the scale was *neither agree* nor *disagree* (4).

Results

Sample Statistics

Tables 1 and 2 show the means, standard deviations, reliabilities, and correlations among the measures we collected for Study 2. The means and standard deviations for the two studies were highly similar (see Cohen, 1988). Furthermore, the pattern of correlations among the measures was consistent in that most were in the same direction and similar in magnitude. Our results also indicated that multi-collinearity does not appear to be a problem. Notably, the correlation between character and psychological capital was 0.40 ($p < 0.001$) or a medium effect (Cohen, 1988). The magnitude of the correlations between character and the Big Five personality dimensions was medium at best, ranging from 0.12 ($p > 0.05$) to 0.38 ($p < 0.001$).

The overall score for psychological capital (M = 5.46, SD = 0.68) on a 6-point scale was relatively high. Across the Big Five personality dimensions, the participants scored highest on conscientiousness (M = 6.27, SD = 0.82) and emotional stability (M = 6.00, SD = 0.89) and lowest on extraversion (M = 4.94, SD = 1.31) and agreeableness (M = 4.86, SD = 1.00) on a 7-point scale.

Confirmatory Factor Analysis

We conducted reliability and confirmatory factor analyses on the measures for character, motivation to lead, coping responses, and psychological capital to address convergent and discriminant validity of the measures. The fit indices of the models we tested are shown in Table 3. The RMSEA, SRMR, CFI, and TLI for our 6- and 8-factor models were satisfactory. As in Study 1, there was little indication that including the three facets for motivation to lead as separate dimensions (thus creating an 8-factor model) provided substantially better fit of the 6-factor model. Therefore, we proceeded with the more parsimonious 6-factor model. We removed one item (from the active problem-solving coping response) from subsequent analyses because the factor loading was low. Overall, the confirmatory factor analysis indicated that our measures for character, motivation to lead, the three dimensions for coping responses, and psychological capital represent related but distinct constructs.

1. PCQ Copyright © 2007 by Fred Luthans, Bruce J. Avolio and James B. Avey. All rights reserved in all media. Published by Mind Garden, Inc. at www.mindgarden.com. The survey was altered with the permission of the publisher.

Hypothesis Testing

We first tried to replicate the model we tested in Study 1 without the two additional control variables. We found that our model showed excellent fit to our data, $\chi^2(1) = 0.38$, $p = 0.54$; RMSEA = 0.00; SRMR = 0.01; CFI = 1.00; and TLI = 1.00. Consistent with Study 1, character significantly and positively predicted motivation to lead, $\beta = 0.44$, $p < 0.01$, and active problem-solving, $\beta = 0.27$, $p < 0.01$. Furthermore, character significantly and positively predicted problem reappraisal, $\beta = 0.16$, $p < 0.05$, and negatively predicted avoidance, $\beta = -0.19$, $p < 0.01$. These results supported Hypotheses 1, 2-a, 2-b, and 2-c. In contrast to Study 1, there were no significant relationships between motivation to lead and any of the coping responses. Gender significantly and positively predicted the avoidance coping response, $\beta = 0.16$, $p < 0.05$. This finding suggests that women engage more in the negative response to stressful situations than men. No significant indirect paths from character to coping responses, through motivation to lead, were found. Therefore, Hypotheses 4a-c were not supported.

We then tested the model with the added control variables. We observed the fit indices of our initial model and found a suboptimal fit to our data, $\chi^2(7) = 61.28$, $p < 0.001$; RMSEA = 0.17; SRMR = 0.07; CFI = 0.82; TLI = 0.03, and one start without convergence. We then explored the modification indices. We added two additional paths that improved the model fit while remaining theoretically sound. Specifically, we added paths from psychological capital and agreeableness to motivation to lead. Our final structural equation model showed acceptable fit to our data, $\chi^2(5) = 10.39$, $p = 0.06$; RMSEA = 0.06; SRMR = 0.03; CFI = 0.98; and TLI = 0.87. We next observed the direct and indirect paths that tested our hypotheses (Figure 3B).

Again, consistent with Study 1, character significantly and positively predicted motivation to lead ($\beta = 0.33$, $p < 0.001$) and active problem-solving ($\beta = 0.26$, $p < 0.001$). These results support Hypotheses 1 and 2-a. There was no direct relationship between character and two dimensions of coping responses: problem reappraisal and avoidance. Furthermore, in contrast to Study 1, no significant relationships were found between motivation to lead and any of the coping responses. Finally, we considered our planned indirect paths which tested whether motivation to lead mediated the relationship between character and the coping responses. No significant indirect paths from character through motivation to lead were found. Therefore, Hypotheses 4a-c were not supported.

The results also revealed that gender positively and significantly predicted the avoidance coping response ($\beta = 0.16$, $p < 0.01$). Psychological capital significantly and positively predicted motivation to lead ($\beta = 0.37$, $p < 0.01$) and problem reappraisal ($\beta = 0.16$, $p < 0.01$), and significantly and negatively predicted avoidance ($\beta = -0.17$, $p < 0.05$). Agreeableness significantly and negatively predicted motivation to lead ($\beta = -0.20$, $p < 0.01$) and positively predicted problem reappraisal ($\beta = 0.13$, $p < 0.05$). Emotional stability significantly and negatively predicted avoidance ($\beta = -0.33$, $p < 0.01$). Extraversion significantly and negatively predicted problem reappraisal ($\beta = -0.16$, $p < 0.05$) and avoidance ($\beta = -0.16$, $p < 0.01$).

Our outcome measures showed some significant correlations. Active problem-solving was significantly and positively associated with the two other coping responses: avoidance ($r = 0.15$, $p < 0.01$) and problem reappraisal ($r = 0.56$, $p < 0.01$) (as in Study 1).

Discussion

We expanded the existing body of research on character by examining both its direct and indirect effects through motivation to lead on stress coping responses, using two samples of law enforcement officers. We studied character as a personal resource to tackle stress

because post-traumatic stress disorder in law enforcement populations represents a significant health concern (Chan & Andersen, 2020; Horswill et al., 2021). Furthermore, we integrated the empirical literatures on character and motivation to lead, thereby bringing a deeper understanding of how and why individuals may choose to invest in leadership roles. Additionally, we included two variables closely related to character, namely, personality traits and psychological capital, as control variables in our analyses. Our aim was to demonstrate that character explains variance in the prediction of stress coping responses that may not be accounted for by established, empirically validated constructs that are seen as conceptually close to character.

The results we obtained revealed that character was positively associated with motivation to lead. This suggests that character is a personal resource that supports motivation. The results also indicated a robust direct positive effect of character on active problem-solving. Furthermore, our findings showed a direct and indirect positive effect of character on problem reappraisal through motivation to lead as well as a direct and indirect negative effect of character on avoidance. The pattern of results obtained in Studies 1 and 2 suggests that developing character may help to navigate personal and professional challenges. The direct effect of character on active problem-solving remained after including personality traits and psychological capital in our model (see Study 2). However, the direct effects on problem reappraisal and avoidance disappeared. We note that psychological capital was a positive predictor of motivation to lead, as well as a positive predictor of problem reappraisal and a negative predictor of avoidance. An unexpected yet interesting finding was that women tended to display the avoidance coping response more so than men. Emotional stability, extraversion, and agreeableness were related to two stress coping responses: avoidance and problem reappraisal.

Our results add to the understanding of the construct of character: its relationship with individually and organizationally relevant variables such as motivation to lead and stress coping responses, as well as how character is different—conceptually and empirically—from related constructs such as psychological capital and personality traits.

Our study is unique in that no prior research has explored the effect of character on the activation of stress coping responses by individuals who have a high likelihood to be exposed to potentially traumatic events, such as law enforcement officers, military personnel, firefighters, nurses, and social workers. However, continued programmatic research to develop a better understanding of the correlates and consequences of character is warranted. This is because a more robust understanding of character helps scholars and practitioners raise awareness of the importance of the construct, ensure it is brought to the forefront of leadership development, and initiate evidence-based practices to unlock sustained excellence in individuals and organizations through the exercise of effective leadership. We also feel it is important that current and emerging research discoveries pertaining to character based on a rich, diverse, and cumulative body of research be more fully integrated into existing leadership theories. Furthermore, our research contributes to the motivation to lead literature by identifying relevant antecedents and consequences of the construct, seen as a critical area to push research on leadership motivation forward.

The findings we obtained provide practical implications in particular for occupations with heightened risk of stress that could affect job satisfaction, job performance, absenteeism, teaming behaviors, and outcomes related to physical and psychological well-being, such as anxiety, burnout, depression, and suicide (Harzer & Ruch, 2015; Queirós et al., 2020; Sosik et al., 2020). Character is an important personal resource that

facilitates the use of effective stress coping responses (active problem-solving and problem reappraisal) and lessens the activation of dysfunctional coping responses (avoidance). Studies have shown that character can be developed in people through deliberate practice (Lindsay et al., 2020; Sosik, 2015). Hence, it is essential for organizations to fully appreciate the importance of character for effective personal functioning and, therefore, to support training and developmental opportunities to strengthen the various character dimensions in individuals to help them address adverse personal and professional situations. For example, reflecting on leadership development in the United States Air Force Academy, Lindsay et al. (2020) articulated that organizations must purposely engage the individual in a comprehensive manner to develop character that assesses, challenges, and supports them through a host of experiences and roles. Individuals – or cadets – should reflect on these learnings and then begin to practice habits of thought and action to exercise character and tackle the challenges that are presented to them. Such developmental opportunities may not only facilitate the use of effective coping responses and maintain well-being but may also build individuals' enthusiasm for accepting leadership roles through motivation to lead. There is a well-documented phenomenon in the practitioner literature that suggests that talented, high-potential individuals may be reluctant to take on leadership roles. Hence, interventions aimed at strengthening the dimensions that comprise motivation to lead – affective-identity, social-normative, and non-calculative – are of relevance in particular for those leadership roles that involve risk and sacrifice that may discourage individuals from taking on a leadership role.

Strengths, Limitations, and Areas for Future Research

Our studies have several strengths. First, the studies were conducted in a field setting involving law enforcement professionals who encounter both personally and professionally stressful situations while serving their communities. The research setting, therefore, allowed us to investigate the relationships among character, motivation to lead, stress coping responses, psychological capital, and personality traits in a meaningful way. Second, we tried to avoid the challenges associated with a cross-sectional design by collecting data in two waves with a 6-week time lag. We found no meaningful differences in the descriptive statistics between cohorts 1 and 3 in Study 1, whose data were collected with a time lag, and cohort 4 in Study 2, whose data were collected in a single sitting. However, we did obtain some differences in our structural equation models between the two studies. For example, unlike Study 1, there were no statistically significant relationships between motivation to lead and any of the stress coping responses in Study 2; in contrast, character was related to all three coping responses. Third, we used established, validated scales in our design. We used different response scales and randomized the order in which the items were presented to the participants. These procedures enhanced the internal validity of our results. Fourth, in examining the effect of character on coping responses through motivation to lead, we included several control variables in our design, including personality traits and psychological capital.

A limitation of our studies is that we did neither utilize an experimental design nor manipulate any of our variables. Consequently, we cannot firmly establish causal relationships. Furthermore, we measured our main variables of interest—character, motivation to lead, and coping responses—only once. It is highly likely that these variables are reciprocally related. For example, the effective use of coping responses in stressful situations may enhance character and motivation to lead, and an increase in motivation to lead may positively affect character through such dimensions as drive, courage, and accountability. Put differently, there may be positive feedback loops that we did not capture in our design. Furthermore, the data were self-reported. Our results did not indicate that there

were serious concerns with multi-collinearity. However, future studies should include other-evaluations of character and objective outcomes of stress to more firmly establish the results we obtained. Studies should also replicate and extend our findings, thus testing the generalizability of the results to other professions and settings. Importantly, the Crossan et al.'s (2017) framework is one of several models of character. Other frameworks include the Values in Action Character Strengths survey (Peterson & Seligman, 2004), the virtues-centered moral identity framework (Wang & Hackett, 2020), and the Character Strengths Rating Form (Ruch et al., 2014). These frameworks are based on different assumptions or theoretical perspectives. Scientific knowledge and theories are developed gradually based on accumulated research findings from quantitative and qualitative studies, both inductively and deductively. This requires humility and an open mind from researchers as opposed to what Locke and Latham (1990) label "barricade" theorists who are rigid in their thinking, deny the validity of disconfirming studies, and refuse to make any revisions to their theories. Future studies should aim to integrate and build on the findings and limitations of the different approaches to character. Also, researchers may want to probe the dimensionality of motivation to lead and its association with character, stress coping responses, and other work-related behaviors. For example, Badura et al. (2020) reported that the affective-identity dimension of motivation to lead tends to explain most of the variance in leader behavior and outcomes. This is because those individuals with high affective-identity motivation view holding a leadership role—and the ability to perform it effectively—as an important part of their identity. We expected that the directional effects of motivation to lead on the stress coping responses would be the same; furthermore, given sample size limitations, we chose the parsimonious model with fewer parameters as our final model and hence treated motivation to lead as a single or uniform construct. Future studies may want to consider in more detail the main and interactive effects of the individual dimensions of motivation to lead on stress coping responses and other outcome variables. Nevertheless, and despite these limitations, we believe that our results contribute to a deeper understanding of how character, a foundational personal resource, affects motivational processes and subsequent leadership behaviors and outcomes.

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