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ORIGINAL PAPER

The Creation of the Workplace Social Courage Scale (WSCS): An Investigation of Internal Consistency, Psychometric Properties, Validity, and Utility

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Abstract

Purpose The current article reviews extant knowledge on courage and identifies a dimension of courage relevant to modern organizations, social courage, which is an (a) intentional, (b) deliberate, and (c) altruistic behavior that (d) may damage the actor's esteem in the eyes of others. Through a multiple-study process, quantitative inferences are derived about social courage, and the Workplace Social Courage Scale (WSCS) is created.

Design Four studies using seven samples analyze the WSCS's psychometric properties, internal consistency, method effects, discriminant validity, convergent validity, concurrent validity, and utility. Many of these are investigated or replicated in largely working adult samples.

Findings Each aspect of the WSCS approaches or meets specified guidelines. Also, social courage is significantly related to organizational citizenship behaviors, and the construct may relate to many other important workplace outcomes.

Implications The current study is among the first to quantitatively demonstrate the existence of courage as a construct, and the discovered relationships are the first statistical inferences about social courage. Future research and practice can now apply the WSCS to better understand the impact of social courage within the workplace.

Originality Despite many attempts, no author has created a satisfactory measure of courage, and the current article presents the first successful measure through focusing on a particular courage dimension—social courage. Future research should take interest in the created measure, the WSCS, as its application can derive future inferences about courage and social courage.

Keywords Courage · Social courage · Measurement · Scale creation · Psychometrics

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For centuries, philosophers and scholars have supported the importance of courage for highly stressful and difficult occupations, such as soldier and astronaut, but recent authors have likewise suggested that the construct influences common workplace interactions. Today, courage is believed to impact organizational citizenship behaviors (OCBs; Hannah et al. 2011), ethical decision making (Ayling 2006), whistleblowing (Bashir et al. 2011; Faunce et al. 2004), leadership (Snyder et al. 1994; Stefano and Wasylyshyn 2005), performance (Lindh et al. 2010; May 1994), and other important outcomes. Even popular magazines support courage. In 2002, Time selected Sherron Watkins (Enron), Coleen Rowley (FBI), and Cynthia Cooper (WorldCom) as its persons of the year, because they exemplified courage in the workplace (Time, 30 December 2002). While these examples draw attention to the importance of courage, few propositions have been

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empirically tested, and much is still unknown about the construct.

The most imposing barrier in courage research is likely the lack of valid measurement. Attempts have been made to create general courage scales, but the measures often possess concerning factor loadings, dimension labels, psychometric properties, and validity (Norton and Weiss 2009; Woodard and Pury 2007). To avoid these concerns, we do not focus on general courage in the current article. Instead, we identify a specific courage dimension with important workplace implications, social courage, and we create a psychometrically sound and valid scale through four studies using seven samples. In doing so, the scale's convergent, concurrent, and discriminant validity are examined, and it is shown to relate to important employee outcomes. Through this process, the existence of social courage as a construct is firmly supported, initial inferences about social courage are shown, a scale is created to allow further research and practice involving social courage, and the implications of each are further discussed.

Background

What is Courage?

Varying definitions of courage have been provided throughout history, resulting in disagreements about whether courage is a behavior or trait. Many studies apply operational definitions such as, "persistence despite fear," which describe a behavior, but create scale items akin to, "I am courageous" (Norton and Weiss 2009, p. 10), which describe a trait. Pury and Starkey (2010) label this the difference between courage as a process and an accolade. They note that defining courage as a process encapsulates a variety of behaviors, which can be attributed as courageous or not courageous based on predetermined guidelines, and people are considered courageous if they repeatedly perform these behaviors. Alternatively, when defining courage as an accolade, the label is reserved for those who are "different from the rest" (Pury and Starkey 2010, p. 85). People are considered courageous based on vague and changing notions, and it is difficult to ascribe the construct to anyone. In modern research, definitions that treat courage as a process are more common and desired (Norton and Weiss 2009; Rachman 1990; Rate et al. 2007; Rate 2010; Woodard 2004; Woodard and Pury 2007). These definitions are based on direct and observable behaviors, and create cutoffs between courageous and uncourageous individuals.

The most accepted process definition of courage was created by Rate et al (2007), which has been empirically and theoretically supported (Hannah et al. 2011; Howard

and Alipour 2014; Koerner 2014; Rate 2010; Sekerka et al. 2009). They define courage as "(a) A willful, intentional act, (b) executed after mindful deliberation, (c) involving objective substantial risk to the actor, (d) primarily motivated to bring about a noble good or worthy end" (p. 95). Although the term "noble" is ambiguous, most studies consider it synonymous with prosocial, and a courageous behavior must be primarily performed for the benefits of others (Howard and Alipour 2014; Rate 2010). Thus, Rate and colleagues' definition includes four primary aspects: (a) intention, (b) deliberation, (c) personal risk, and (d) prosocial motivation.

Once a behavior satisfies these four aspects, the act can be further recognized as a particular courage dimension. Identifying the dimensions of courage may be helpful in predicting important workplace outcomes, as specific constructs are often better at predicting outcomes than general constructs (Agarwal et al. 2000; Watson and Clark 1992). Thus, a dimension of courage with possible organizational implications is identified below.

Dimensions of Courage

Woodard and Pury (2007) provide three important inferences about courage dimensions. First, courage dimensions are most often labeled by the risks involved. For instance, soldiers and firefighters both show physical courage because they risk their physical well-being. Second, a person may be courageous when facing certain risks but retreat from others, suggesting that the dimensions are distinct. Third, general courage is often considered an aggregation of the various courage dimensions, and multiple second-order dimensions are subsumed in a first-order general construct. A visual representation of this conceptualization is presented in Fig. 1.

These three inferences can also be seen in modern theoretical models of courage created in the context of the workplace (Koerner 2014; Schilpzand et al. 2015). The process model of courage created by Schilpzand et al. (2015) proposes that courageous actions are responses to challenging events that pose substantial personal risk, and these risks greatly influence the likelihood of subsequent (in)action. Identifying certain categories of risks, as suggested by Schilpzand et al. (2015), may help identify when and why certain people perform courageous action, which suggests an underlying dimensionality of courage. Likewise, the identity process model of courage created by Koerner (2014) suggests that people see themselves as possessing several identities simultaneously (i.e., self-identity, relational identity, and organizational identity). These identities may conflict with each other when a challenging event occurs, and the tension between, and possible changes to, one's identities is believed to be the
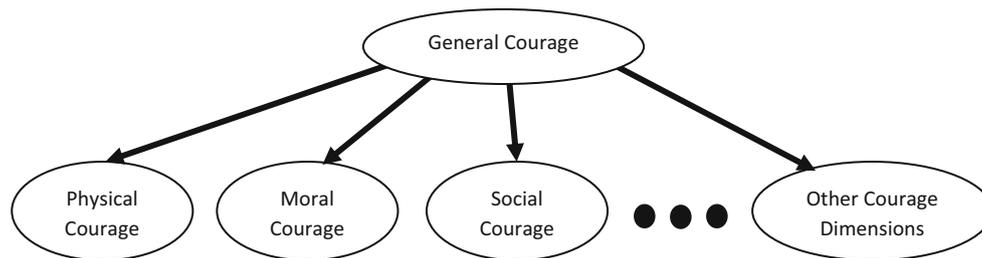
Fig. 1 Visual representation of courage conceptualization

personal risk involved with courageous action. Identifying the specific identities in opposition, and therefore the relevant risk, may help identify when and why certain people perform courageous action, again suggesting an underlying dimensionality to courage.

Integrating these theoretical models with prior research can identify dimensions of courage with particular relevance to the workplace. In the qualitative work of Schilpzand et al. (2015), they discovered that the most common cause of courageous action in the workplace was a response to abusive supervision, and interviewees repeatedly noted the threats to their interpersonal supervisor–subordinate relations in descriptions of these actions. The authors further suggest that the relative power of those involved is a primary determinant of courageous action or inaction, reflecting the inherent social nature of courage. Employees are more likely to perform courageous actions if they have a social power advantage over others. Thus, in the work of Schilpzand et al. (2015), overcoming threats to one's relationships is a major theme of workplace courage, and their model emphasizes that courage is a social phenomenon.

Further, in Koerner's (2014) analysis of workplace courage narratives, she discovered and detailed five different identity conflicts, two of which were social in nature. One was the conflict between self-identity and relational identity and the other was the conflict between two different social identities. When the former conflict occurs, individuals' values are pitted against their role-based interpersonal relationships, such as supervisor–subordinate. For example, a subordinate may feel the need to follow their supervisor's commands, even if they are unethical, but their personal values may conflict with such commands, resulting in tension and anxiety. When the latter conflict occurs, demands associated with one social identity, such as friend, threaten values associated with another social identity, such as manager. For example, a manager may struggle with disciplining a subordinate because of their friendship, resulting in tension and anxiety. In the work of Koerner (2014), actions involving risks and tensions to relationships and/or social standing were a major theme of workplace courage.

Lastly, several other authors have proposed dimensionalities of courage with varying theoretical sophistication (Geller and Veazie 2009; Rate 2010). Woodard and Pury (2007) suggested that the dimensions of courage may be defined by three risks: physical, emotional, and social. In her earlier work, Schilpzand (2008) also proposed that workplace courage can be defined by three risks: physical, entrepreneurial, and social. May (1994) likewise stated that courage may be differentiated by risks, suggesting the existence of physical, moral, and social courage. Thus, despite some variability, each typology includes physical and social courage.

Physical courage has been occasionally studied in specific organizations, such as military, firefighting, or police contexts, where overcoming risk of physical harm is required to perform one's job (Lopez and Snyder 2009; Schilpzand 2008). Less well studied is social courage, actions that overcome risks to relationships and/or social standing, which should be possible across a greater variety of organizational contexts (May 1994; Schilpzand et al. 2015). We focus on social courage, as an important and necessary form of courage that has been relatively ignored in organizational scholarship.

Social Courage

Drawing on the accepted social risk definition (Weber et al. 2002), social courage is a courageous behavior in which the risks involved could damage the actor's esteem in the eyes of others. Social courage can be displayed by two main types of behaviors. The first type includes those that could damage the actor's relationships (Schilpzand et al. 2015; Worline et al. 2002). For example, when confronting a coworker's problematic behaviors, the coworker may become hostile and angry. In turn, this could damage the relationship between the actor and coworker. Of the possible social courage behaviors, those that could damage relationships are the most commonly discussed in research (Koerner 2014; Schilpzand 2008; Worline et al. 2002). The second type includes actions that could damage the actor's social image, also called face-loss costs (Gupta et al. 1996; Madzar 2001). For example, if an employee asks for help

on their duties, he or she risks others believing the employee lacks knowledge or is attempting ingratiation. In this instance, the employee would lose esteem due to perceptions of incompetence or inauthenticity.

Qualitative research supports that social courage is linked to negative feedback giving, leading others effectively, organizational citizenship behaviors, and many other workplace outcomes (Bashir et al. 2011; Geller and Veazie 2009; Worline et al. 2002). These social behaviors can be deterred when there is fear of social consequences. Those with social courage, however, may be more likely to perform the required behaviors to achieve these outcomes. In turn, these behaviors improve performance, unit productivity, and organizational climate, drawing further attention to the importance of social courage. For this reason, a quantitative investigation into social courage would further benefit research and practice, as efforts could be made to overcome negative consequences and enable beneficial behaviors. In order to pursue such an investigation, a psychometrically sound and valid measure of social courage is necessary.

Measuring Courage and Social Courage

A few researchers have created scales to gauge general courage and/or its dimensions, but these scales have been problematic and seldom used after their initial publication (Kilmann et al. 2010; Schmidt and Koselka 2000). Many scales show concerns over content validity. For example, some studies have used single-item measures, which are unlikely to gauge the entire scope of courage or its dimensions. Also, some scales are not relevant to individual-level behavior or work settings. These scales are climate measures or contain items such as "When you have a panic attack, do you behave courageously?" Lastly, reliabilities of these scales are often below suggested levels, with Cronbach alphas around .60, such that observed relationships may be artificially decreased. To our knowledge, only two scales gauge courage of the individual, are applicable to workplace settings, and have been used in multiple studies.

The most widely used courage scale is The Courage Measure (TCM; Norton and Weiss 2009). This scale measures general courage, and consists of twelve "rationally-derived items to assess self-perceived courageousness" (Norton and Weiss 2009). Example items are, "I will do things even if they seem to be dangerous" and "I would describe myself as 'chicken'" (reverse coded). During its creation, the sole validation measure of TCM was a participant's ability to approach a spider, which does not involve all four aspects of courage. Further, a follow-up analysis showed that TCM likely does not gauge courage (Howard and Alipour 2014), possibly due to the authors' operational

definition, "persistence or perseverance despite having fear." Items developed from this definition may instead capture risk taking or trait persistence, as it does not include the prosocial requirement of courage. Thus, TCM may not actually gauge courage and certainly not social courage.

The other scale is the Woodard-Pury Courage Scale 23 (WP-23; Woodard and Pury 2007). Many of the scale's items load on multiple factors, and the creators express uncertainty toward appropriate factor labels. The cross-loadings may be due to a focus on general courage rather than specific dimensions, and the items may inadvertently represent a combination of several courage dimensions (i.e., I would go where I wanted to go and do what I wanted to do, even though I might be bullied as an ethnic minority). The noted item could gauge physical courage, as the person may risk physical assault; however, it could also gauge social courage, as the person may risk negative social interactions. The cross-loadings and unclear factor structure are problematic. Those applying the scale cannot be certain of the courage dimensions that they are gauging, and subsequent inferences could be misleading.

Overall, existing courage scales have problematic psychometric properties and/or differing conceptualizations of courage, and these measures do not effectively assess the most relevant type of courage in an organizational context, social courage. Although the various types of courage are likely interrelated, and multiple dimensions may be relevant to a single behavior (Geller and Veazie 2009; Rate 2010), a focus on one dimension that is most relevant to our context of interest is likely to be most fruitful. We turn our attention first for developing a measure of social courage, then discuss evidence for its predictive validity with social behaviors in organizations. We contribute to the existing literature by creating and providing validation evidence for the first, to our knowledge, social courage scale in the context of the workplace.

Scale Development

Four studies are performed to create the social courage scale. Study 1 creates the initial scale. Study 2 analyzes the scale's psychometric properties. Study 3 examines the scale's convergent validity (relation with other courage measures), concurrent validity (relation with theoretically related constructs), and discriminant validity (relation with theoretically unrelated constructs). Study 4 investigates the scale's utility.

Study 1: Item-Sort Task

To develop the social courage scale, an over-representative item list was created and subsequently reduced,

which helps ensure adequate content validity (Hinkin 1995, 1998). These items were formulated from previous qualitative studies on workplace courage that includes critical incidents (Koerner 2014; Schilpzand 2008; Worline et al. 2002) as well as formal and informal interviews with employees in various occupations including professor, nurse, factory worker, mechanic, and human resource manager. In total, 49 items were created to measure social courage in a workplace context (Appendix Table 6), and these items were evaluated through an item-sort task. Item-sort tasks are often used in scale development research to identify items that may not gauge the construct of interest (Anderson and Gerbing 1991; Howard and Melloy 2015).

Participants

Sample 1

Sample 1 consisted of 20 subject matter experts (SMEs) from two large mid-Atlantic universities. These SMEs were all research assistants or graduate students in I/O Psychology. The sample was primarily Caucasian and had a median age of 24 years.

Procedure

SMEs were given the definitions of social courage—damaging relationships, social courage—damaging social image, general courage, sociability, shyness, extraversion, public self-consciousness, and honesty. Then, SMEs were told to indicate which construct they believed each item gauged from the definitions provided, and an additional choice was given that read "other form of courage." Items consistently assigned to their corresponding construct display high levels of substantive validity, indicative of the overall measure's construct validity (Anderson and Gerbing 1991; Howard and Melloy 2015).

For the current study, the proportion of substantive agreement (p_{SA}) and the coefficient of substantive validity (c_{SV}) were used to assess the results of the item-sort task. p_{SA} refers to the proportion of respondents that indicated an item measures its intended construct, and c_{SV} is the extent that respondents indicate an item measures its intended construct more-so than any other construct (Anderson and Gerbing 1991). For a sample size of 20, items with a $c_{SV} > .50$ are statistically significant (Howard and Melloy 2015). Also, roughly equal numbers of items from each type of behavior were retained to ensure that the final measure did not solely measure only one. For example, if 20 items met the cutoffs in damaging relationships and 10

met the cutoffs in damaging social image, then 10 in each dimension would be retained.

Results/Discussion

Appendix Table 6 includes each item and their corresponding p_{SA} and c_{SV} values. Only items with $p_{SA} \geq .75$ and $c_{SV} \geq .60$ were retained, as these items were judged to gauge social courage and not other dimensions or constructs. This process removed 32 items from the original 49, resulting in an item bank of 17 items. Nine items were categorized under "Social Courage—Damaging Relationships," and eight were "Social Courage—Damaging Social Image." Henceforth, the resulting items are called the Workplace Social Courage Scale (WSCS).

Study 2: Psychometric Properties

In Study 2, the WSCS's reliability and factor structure were examined. As previous authors have noted (e.g., Hinkin 1995, 1998), it is critical that any measure is properly intercorrelated and has an identifiable factor structure.

Participants

To analyze the WSCS's psychometric properties, five samples were used. These samples are also used in Studies 3 and 4 to demonstrate the WSCS's validity, but they are only reported here. Also, these samples are not grouped together because each received separate measures.

Sample 2

Sample 2 consisted of 116 student participants ($M_{age} = $ 20.4, $SD_{age} = 2.34$; 46 % female; 80 % Caucasian) recruited from a large mid-Atlantic University, and given course credit for participation. Most were not currently employed (64 % unemployed).

Sample 3

Sample 3 consisted of 257 student participants ($M_{age} = -$ 19.43, $SD_{age} = 1.78$; 74 % female; 78 % Caucasian) recruited from a large mid-Atlantic university, and given course credit for participation. Most were not currently employed (65 % unemployed).

Sample 4

Sample 4 consisted of 148 student participants ($M_{age} = -$ 20.4, $SD_{age} = 1.22$; 56 % female; 77 % Caucasian)

recruited from a large mid-Atlantic university, and given course credit for participation. Most were not currently employed (60 % unemployed).

Sample 5

Sample 5 consisted of 408 adult participants ($M_{age} = 29.95$, $SD_{age} = 8.73$; 35 % female; 66 % Caucasian) recruited from Amazon's mTurk in return for a small amount of monetary compensation. This website is an online platform which connects individuals willing to perform small tasks on their computer, such as taking a survey, with those who need these tasks performed. Previous studies have shown results using mTurk to be valid (Paolacci and Chandler 2014; Shapiro et al. 2013). Most were currently employed (77 % employed), and almost all had been employed at some point during their lives (99 %).

Measures

WSCS

When administering the WSCS, the instructions direct participants to, "NOT answer these questions with your current job or workgroup in mind. Instead, respond based on how you would act in a workplace after working there for five years." The purpose of the WSCS is to gauge participants' social courage. If participants reported their propensity to perform behaviors in their current workplaces, organizational factors may impact their responses. For instance, a participant may work in a threatening environment and most any social behavior would incur risk, whereas a different participant may work in a relaxing environment and social risks are mostly nonexistent. These factors would prompt the two participants to report differing propensities to perform social courage behaviors, but the two participants may possess equal amounts of social courage. For this reason, the WSCS instructions ask participants to disregard their current workplaces and think of a workplace where they are relatively tenured.

Results/Discussion

To perform the EFA, a principal axis factoring method with a direct oblimin rotation was chosen using Sample 2. An analysis of the resulting Scree plot indicated that the scale is unidimensional. The eigenvalues greatly decreased after the first factor and then decreased at a consistent rate afterward, suggesting only one underlying factor (eigenvalues = 5.372, 1.355, 1.244, 1.201 …). A parallel analysis also supported the unidimensional interpretation (parallel analysis 95th percentile eigenvalues = 2.064,

1.848, 1.699, 1.586 …). Additionally, all but one factor loading exceeded the conventional cutoff of .35 (Hinkin 1998), and this one item was removed. Therefore, despite the creation of the WSCS including the possibility that the items may load on two separate factors, the results indicated that the scale is unidimensional.

These results were replicated with Samples 3 and 4, combined, through a Confirmatory Factor Analysis (CFA). When performing the CFA, a listwise deletion method was used for missing data. First, standardized item loadings were analyzed. Most item loadings were above .55, indicating that items loaded onto the latent factor well. One item had a standardized item lowing below .35, and also had a slightly concerning EFA loading (.42). For these reasons, this item was removed. Next, modification indices were analyzed. Items with the greatest summed modification indices were removed in a stepwise manner until no modification indices above 10 remained. This resulted in the removal of four items. Lastly, model fit was analyzed. The unidimensional model fit the data well. The CFI (.93) almost met its benchmark of .95, and GFI (.95) did. The SRMR (.05) was below its cutoff of .05, whereas the RMSEA (.06) almost met it. The ratio of degrees of freedom to χ^2 also indicates good model fit (2.35). The worst fit index, NFI, was .88. Although this did not meet the cutoff of .95, the surrounding support for model fit overcomes this single value. These results suggest that the unidimensional model fits well.

After confirming the factor structure in a student sample, it was necessary to confirm the factor structure in an adult, largely working sample (Sample 5). A CFA was performed on the 11 remaining WSCS items. Most item loadings were above .55, but one was below .40. As this item loaded well on the single factor in all previous analyses, it was retained. The overall model fit was also appropriate. The CFI (.93) and GFI (.94) approached the benchmark of .95. The NFI (.90) was below its cutoff but still acceptable. The SRMR (.05) and RMSEA (.07) similarly met or approached their cutoff of .05. The ratio of degrees of freedom to χ^2 was higher than expected (3.07), but not overly concerning. Overall, unidimensional model fits the data well. Appendix 2 contains the final WSCS. The means, standard deviations, standardized factor loadings, and corrected item-total correlations are included in Table 1. From the EFA and CFAs, each item of the WSCS appears to gauge social courage as only one dimension emerged in all analyses.

Lastly, the WSCS has a satisfactory internal consistency. Its Cronbach's alphas were .82 (Sample 2), .82 (Sample 3), .78 (Sample 4), .85 (Sample 5), .84 (Sample 6), and .85 (Sample 7). The scale means (standard deviations) were 5.09 (.84; Sample 2), 4.92 (.75; Sample 3), 5.20 (.70; Sample 4), 5.09 (.86; Sample 5), 5.06 (.85; Sample 6), and 4.98 (.86; Sample 7).

Table 1 WSCS item means, SD, standardized item loadings, and corrected item-total correlations (Sample 5)

Item number	Mean	SD	Standardized item loadings	Corrected item-total correlation
1. WSCS 1	4.78	1.37	.48	.43
2. WSCS 2	5.16	1.29	.60	.53
3. WSCS 3	5.30	1.36	.52	.48
4. WSCS 4	4.92	1.42	.57	.55
5. WSCS 5	5.26	1.37	.57	.52
6. WSCS 6	5.31	1.36	.66	.60
7. WSCS 7	5.21	1.28	.72	.65
8. WSCS 8	5.28	1.34	.72	.65
9. WSCS 9	5.29	1.34	.58	.53
10. WSCS 10	4.40	1.74	.37	.34
11. WSCS 11	5.22	1.26	.72	.67

Study 3: Validity

The goal of Study 3 is to examine the convergent, concurrent, and discriminant validity of the WSCS—a necessary part of the scale development process. The WSCS should be positively related to existing courage measures as well as the components of courage, such as risk taking and prosocial motivation (Peterson 2006; Rate et al. 2007; Rate 2010; Lopez and Snyder 2009).

Further, social courage should be related to several interpersonal tendencies (Cheek and Buss 1981; Crozier 2005). Certain personality traits may cause individuals to thrive in social situations and be drawn to social interaction (extroversion, sociability, and interpersonal trust), whereas others may cause individuals to overly focus on the risks involved with social interactions (neuroticism, shyness, and public self-consciousness). The WSCS should be positively related to the former constructs, but it should be negatively related to the latter constructs.

Also, constructs involving approach and avoid tendencies should be related to social courage (Ferris et al. 2011; Judge et al. 2003; Rate 2010; VandeWalle 1997). Of such constructs, the WSCS should be positively related to conscientiousness, core self-evaluations (CSE), and learning goal orientation—all approach-oriented tendencies. The scale should be negatively related to avoid and prove goal orientations—both avoidance-oriented tendencies.

Lastly, the WSCS should not be related to impulsivity, as there is little, if any, reason to believe that impulsive individuals are more or less courageous in social situations.

Measures

Courage

The 11-item WSCS was administered to measure *social courage* (Appendix 2). We also included *The Courage Measure* (TCM; Norton and Weiss 2009), which has some psychometric concerns but is better than alternatives (Howard and Alipour 2014). Finally, we included the *Personal Courage Scale* (PCS; Schilpzand 2008) which gauges physical, social, and entrepreneurial courage; however, the social courage dimension is confounded with items about moral courage.

Risk Taking

Global Risk Taking was measured with Westaby and Lee's (2003) scale. We also included the *Risk-Behavior Scale* (Weber et al. 2002) that distinguishes several types of risk, including ethical, financial, health/safety, recreational, and social.

Personality

To measure the *Big Five* traits, Saucier's (1994) Mini-markers was administered. The *Sociability Scale* was given to gauge sociability (Cheek and Buss 1981), and The Revised Cheek and Buss *Shyness Scale* was administered (Crozier 2005). *Public self-consciousness* was measured with the 12-item measure created by Goldberg et al. (2006). *Interpersonal trust* was measured through Goldberg et al.'s (2006) 10-item measure. Judge et al.'s (2003) 12-item *CSE* scale was administered. Finally, the Barratt *Impulsivity Scale* (Patton and Stanford 1995) was administered.

Motivational Tendencies

Prosocial motivation at work was measured with Grant's (2008) four-item measure. *Goal orientations* were measured with VandeWalle's (1997) scale.

Results/Discussion

The results of Study 3 are included in Table 2. To determine the WSCS's convergent, validity was determined with measures of courage, moral/social courage,

Table 2 Correlations of the WSCS testing convergent, concurrent, and discriminant validity

2	WSCS	TCM	PC	SC	EC
WSCS	.82				
TCM	.50**	.89			
PC	.39**	.51**	.90		
SC	.50**	.32**	.41**	.76	
EC	.44**	.59**	.36**	.36**	.56

3	WSCS	TCM	Extro	Neuro	Consc	Open	Agree	Soc	Shy	SoCon	Trust	Risk	CSE
WSCS	.82												
TCM	.44**	.86											
Extro	.35**	.35**	.87										
Neuro	−.16*	−.30**	−.23**	.84									
Consc	.20**	.14*	.18**	−.44**	.84								
Open	.32**	.38**	.08	−.19**	.22**	.74							
Agree	.14*	−.02	.24**	−.40**	.48**	.17*	.88						
Soc	.21**	.18**	.55**	−.12	.17**	.07	.36**	.84					
Shy	−.29**	−.39**	−.77**	.39**	−.33**	−.11	−.28**	−.48**	.87				
SeCon	−.21**	−.52**	−.36**	.54**	−.21**	−.25**	.00	−.12	.49**	.83			
Trust	.19**	.16*	.34**	−.35**	.24**	.06	.49**	.44**	−.34**	−.26**	.90		
Risk	.09	.48**	.22**	−.03	−.18**	.18**	−.18**	.23**	−.17**	−.23**	.01	.85	
CSE	.28**	.33**	.36**	−.52**	.46**	.12	.29**	.26**	−.49**	−.48**	.52**	.05	.87

4	WSCS	SocR	RecR	GamR	HeaR	EthR	IvstR	ProSo	Intri	Learn	Prov	Perfor	Impul
WSCS	.78												
SocR	.33**	.51											
RecR	.11	.18*	.77										
GamR	.02	.13	.43**	.80									
HeaR	.03	.27**	.45**	.40**	.70								
EthR	−.08	.29**	.31**	.36**	.54**	.78							
IvstR	.11	.11	.29**	.25**	.26**	.18*	.83						
ProSo	.30**	.28**	−.07	−.05	−.09	−.06	.03	.92					
Intri	.20**	.12	.00	−.06	−.09	−.03	.17*	.33**	.91				
Learn	.50**	.23**	.34**	.12	.04	−.00	.24**	.33**	.20*	.85			
Prov	.11	−.14	.09	.20*	.02	.02	−.05	.07	−.10	.05	.71		
Perfor	−.35**	−.18*	−.28**	.01	−.11	.09	−.11	−.00	.03	−.36**	.27**	.88	
Impul	−.13	.15	.18*	.34**	.44**	.36**	−.06	−.13	−.22**	−.18*	.18*	.09	.87

Reliabilities on diagonal

Correlations in the first section labeled 2 are obtained from Sample 2. Correlations in the second section labeled 3 are obtained from Sample 3. Correlations in the third section labeled 4 are obtained from Sample 4

WSCS Workplace Social Courage Scale, *TCM* The Courage Measure, *PC* Physical Courage (Personal Courage Scale), *SC* Social Courage (Personal Courage Scale), *EC* Entrepreneurial Courage (Personal Courage Scale), *Extro* Extroversion (Big Five), *Neuro* Neuroticism (Big Five), *Consc* Conscientious (Big Five), *Open* Openness (Big Five), *Agree* Agreeable (Big Five), *Soc* Sociability, *Shy* Shyness, *SeCon* Public Self-Consciousness, *Trust* Interpersonal Trust, *Risk* Global Risk Taking, *CSE* Core Self-Evaluations, *SocR* Social Risk Taking, *RecR* Recreational Risk Taking, *GamR* Gambling Risk Taking, *HeaR* Health Risk Taking, *EthR* Ethical Risk Taking, *IvstR* Investment Risk Taking, *ProSo* Prosocial Motivation, *Intri* Intrinsic Motivation, *Learn* Learn Goal Orientation, *Prov* Prove Goal Orientation, *Perfor* Perform Goal Orientation, *Impul* Impulsivity

* *p* < .01, ** *p* < .05

entrepreneurial courage, and physical courage. The WSCS correlated moderately to strongly with all four constructs, ranging from .39 to .50 (all $p < .01$), showing that the WSCS has adequate convergent validity.

Several variables were used to analyze the WSCS's concurrent validity. The first were those mandated by the definition of courage, risk, and prosocial motivation. The WSCS had a low correlation of .09 with risk taking ($p > .05$) and .30 with prosocial motivation ($p < .01$). While the correlation with prosocial motivation supports the WSCS, the correlation with risk taking is surprising. To further test this, a dimensional risk taking measure was administered. The WSCS moderately correlates with social risk taking ($r = .33$; $p < .01$), and has small correlations with all other types of risk taking. Thus, the WSCS's moderate correlation with social risk taking supports the scale's concurrent validity, while its low correlations with alternative types of risk taking support the scale's divergent validity.

Next, the WSCS was expected to be related to interpersonal tendencies. The WSCS had significant correlations with neuroticism ($r = -.16$; $p < .01$), extroversion ($r = .35$, $p < .01$), sociability ($r = .21$; $p < .01$), shyness ($r = -.29$; $p < .01$), interpersonal trust ($r = .19$; $p < .01$), and public self-consciousness ($r = -.21$; $p < .01$). Each of these relationships supports the WSCS's concurrent validity.

The WSCS was also predicted to be related to constructs involving approach and avoid tendencies. The scale was significantly correlated with conscientiousness ($r = .20$; $p < .01$), CSEs ($r = .28$; $p < .01$), learning goal orientation ($r = .50$, $p < .01$), and avoid goal orientation ($r = -.35$, $p < .01$). Prove goal orientation had a non-significant correlation of .11 ($p > .05$). Overall, a majority of these relationships support the validity of the WSCS. Lastly, the WSCS was not significantly correlated with impulsivity ($r = -.13$; $p > .05$), supporting its discriminant validity.

The repeated support for the observed relationships demonstrates the satisfactory validity of the WSCS for measuring workplace social courage. Nevertheless, additional analyses investigating the scale's relationship to valued organizational outcomes can bolster these results.

Study 4: WSCS Utility

In addition to demonstrating the psychometric properties and validity of a measure, it is important to demonstrate that social courage and the WSCS are significantly related to important workplace outcomes as indicators of concurrent validity and utility. For the current study, five important workplace outcomes were chosen. First, employee

voice describes the activity of employees actively impacting organizational decision making, and it is positively related to performance (Spencer 1986; Van Dyne and LePine, 1998). When employees voice their opinion, they face "going against the grain" and disrupting organizational norms to improve the company. Detert and Burris (2007) even demonstrated that employees are less likely to demonstrate employee voice when they perceive more risk. Due to the inherent prosocial nature and social risk involved in employee voice behaviors, it is believed to relate to social courage.

Hypothesis 1 Social courage is positively related to employee voice.

Second, OCBs are intentional behaviors that benefit an organization, and are outside formal job requirements (Lam et al. 2011; Madzar 2001; Williams and Anderson 1991). These behaviors include voluntarily working overtime and speaking positively about one's organization outside the workplace. OCBs are often performed for prosocial reasons, but may incur social risks such as damaged relationships with coworkers. For instance, several authors have noted that top performers are often targets of workplace aggression (Geller and Veazie, 2009; Lam et al. 2011). As Jensen et al. (2014) note, "coworkers are motivated to punish 'rate-busting' and thereby maintain the workgroup's current performance expectations, solidarity, and their individual positive self-regard (p. 298)." OCBs can contribute toward an employee being a top performer, causing the employee to disgruntle coworkers (Gupta et al. 1996; Madzar 2001). Social courage is expected to positively relate to OCBs, as employees high in social courage may be more likely to overcome social risks to perform prosocial behaviors for the organization.

Hypothesis 2 Social courage is positively related to OCBs.

Third, prosocial rule breaking (PSRB) involves violating official organizational rules with the intention of improving the company (Dahling et al. 2012). For example, an employee may give a coupon to an upset customer to ensure their continued patronage, although distributing coupons may be against organizational policies. PSRB can lead to positive organizational outcomes (Dahling et al. 2012; Morrison 2006; Vardaman et al. 2014), but employees may be reluctant to perform these behaviors. Going against organizational policies incurs interpersonal risks, such as harming relationships with supervisors, and certain employees may be unwilling to perform these behaviors for that reason. We believe that those high in social courage, which relates to positive behaviors despite social risk, are more likely to perform PSRB behaviors.

Hypothesis 3 Social courage is positively related to PSRB.

Fourth, counterproductive work behaviors (CWBs) are actions that damage organizations, and include theft, bullying, and cyberloafing (Bennett and Robinson 2000; Mount et al. 2006). Employees who perform CWBs endure risk for personal gain and disregard the well-being of their coworkers or organization. Self-centered actions are in direct opposition to social courage. CWBs are expected to be negatively related to social courage.

Hypothesis 4 Social courage is negatively related to CWBs.

Fifth, authors continuously relate social courage to better workplace performance, as employees with social courage are willing to perform difficult behaviors that benefit the organization. It is expected that social courage is, indeed, positively related to performance.

Hypothesis 5 Social courage is positively related to performance.

Lastly, the WSCS should be shown to predict these outcomes beyond other aspects of personality. We test the predictive ability of the WSCS beyond conscientiousness and moral courage, which has been suggested to be a courageous behavior that includes the use of inner principles and/or notable risks to others in addition to self (Sekerka et al. 2009; Simola 2015).

Participants

Sample 6

Sample 6 consisted of 101 adult participants ($M_{age} = 33.2$, $SD_{age} = 11.43$; 47 % female; 56 % Caucasian) recruited from mTurk in return for a small amount of monetary compensation. Most were currently employed (82 %), and all had been employed (100 %).

Sample 7

Sample 7 consisted of 248 currently working student participants recruited from a large mid-Atlantic university ($M_{age} = 19.42$; $SD_{age} = 2.05$; 84 % female; 67 % Caucasian) and 114 supervisors of these working students ($M_{age} = 36.71$; $SD_{age} = 12.48$; 66 % female; 87 % Caucasian). The students participated for course credit. As part of their participation, they sent a survey to their supervisors, and ID codes were used to match responses. Methods from prior articles were adapted to ensure that students did not complete the supervisors' surveys (Kuyumcu and Dahling 2014). IP addresses were used to confirm that the

same computer was not used for both surveys. If a student–supervisor pair had the same IP address, the supervisor responses were removed. Also, supervisor responses were removed if they started their survey within 30 min of the student starting their survey, as supervisors would be unlikely to receive study information that quickly. The reported statistics reflect the sample after removing these responses.

Measures

Each measure was administered to both students and supervisors in Sample 7.

Workplace Social Courage

The 11-item WSCS was administered (Appendix 2).

Employee Voluntary Behavior

Employee voice was measured using Van Dyne and LePine's (1998) six-item measure. *OCBs* were measured using Williams and Anderson's (1991) 13-item measure. *PSRB* was measured with Dahling and colleagues' (2012) 13-item measure. *CWBs* were measured with Bennett and Robinson's (2000) 19-item scale.

Performance

Performance was measured using a five–item measure created by Jensen et al. (2014). This measure was only administered to Sample 7.

Control Variables

Conscientiousness was measured through Goldberg et al.'s (2006) 10-item scale. Moral courage was measured using Sekerka et al.'s (2009) moral courage scale. These measures were only administered to Sample 7.

Results/Discussion

The correlations using Samples 6 and 7 are included in Tables 3 and 4. Regression results are included in Table 5. The WSCS demonstrated a strong correlation with employee voice in both samples when the variables were self-reported (Sample 6, $r = .60$, $p < .01$; Sample 7, $r = .49$, $p < .01$); however, the effect was very weak in the self-supervisor report correlation, which uses the student responses for the WSCS and supervisor responses for voice (Sample 7, $r = .07$, $p > .05$). The regression of self-reported WSCS predicting supervisor-reported employee

voice while controlling for self-reported conscientiousness and moral courage was not significant (Sample 7, $B = .091$, SE $= .127$, $\beta = .075$, $t = .714$, $p > .05$). A consistent moderate correlation of the WSCS with OCBs was observed in both samples and across measurement methods (Sample 6, $r = .31$, $p < .01$; Sample 7 Self–Self, $r = .34$, $p < .01$; Sample 7 Self-Supervisor, $r = .24$, $p < .05$). The regression of WSCS predicting supervisor-reported OCBs while controlling for conscientiousness and moral courage was significant (Sample 7, $B = .222$, SE $= .103$, $\beta = .226$, $t = 2.157$, $p < .05$). These results partially support Hypothesis 1 (voice) and fully support Hypothesis 2 (OCBs), demonstrating that social courage relates to positive organizational outcomes.

The correlation between the WSCS and PSRB varied across the samples and methods, but it was always negative (Sample 6, $r = -.03$, $p > .05$; Sample 7 Self–Self, $r = -.14$, $p < .01$; Sample 7 Self-Supervisor, $r = -.33$, $p < .01$). The regression of WSCS predicting supervisor-reported PSRB while controlling for conscientiousness and moral courage was significant (Sample 7, $B = -.500$, SE $= .170$, $\beta = -.298$, $t = -2.936$, $p < .01$). The correlation between the WSCS and CWBs also varied across the samples and measurement methods (Sample 6, $r = .03$, $p > .05$; Sample 7 Self–Self, $r = -.27$, $p < .01$; Sample 7 Self-Supervisor, $r = -.19$, $p < .05$). The regression of WSCS predicting supervisor-reported CWBs while controlling for conscientiousness and moral courage was not significant (Sample 7, $B = -.130$, SE $= .084$, $\beta = -.164$,

$t = -1.547$, $p > .05$). Together, Hypothesis 3 (PSRB) was not supported, but the WSCS demonstrated a significant and negative relationship with PSRB. Hypothesis 4 (CWBs) was partially supported.

Lastly, the correlation between the WSCS and performance was significant when self-reported (Sample 7, $r = .30$, $p < .01$), but it was not in the self-supervisor report (Sample 7, $r = .17$, $p < .10$). The regression of WSCS predicting supervisor-reported performance while controlling for conscientiousness and moral courage was not significant (Sample 7, $B = .469$, SE $= .287$, $\beta = .171$, $t = 1.634$, $p > .05$). Hypothesis 5 (performance) was not supported

These results demonstrate that the WSCS may be useful in predicting certain workplace outcomes, particularly OCBs and PSRB, even when controlling for conscientiousness and moral courage. Also, the partially supported hypotheses suggest that the relationship of the WSCS with voice and CWBs may merit future research. Together, Study 4 bolsters the previous results on the scale's psychometric properties and validity.

Overall Discussion

Although researchers have reached a general consensus about the definition of courage, previous research has seen particular struggles in creating an adequate measure of this construct (Norton and Weiss 2009; Woodard and Pury

Table 3 Self-report correlations of the WSCS and important workplace outcomes

6	WSCS	Voice	OCBs	PSRB	CWBs		
WSCS	.84						
Voice	.60**	.89					
OCBs	.31**	.40**	.66				
PSRB	−.03	−.01	−.04	.96			
CWBs	.03	.09	.12	.57**	.97		

7	WSCS	Consc	Moral C	Voice	OCBs	PSRB	CWBs	Perf
WSCS	.85							
Consc	.33**	.84						
Moral C	.47**	.52**	.95					
Voice	.49**	.26**	.42**	.87				
OCBs	.34**	.38**	.50**	.44**	.76			
PSRB	−.14*	−.29**	−.23**	−.05	−.07	.95		
CWBs	−.27**	−.42**	−.38**	−.16*	−.22**	.44**	.93	
Perf	.30**	.43**	.49**	.37**	.42**	−.13*	−.32**	.82

Reliabilities on diagonal

Correlations in the first section labeled 6 are obtained from Sample 6. Correlations in the second section labeled 7 are obtained from Sample 7

Voice Employee voice, *OCBs* organizational citizenship behaviors, *PSRB* prosocial rule breaking, *CWBs* counterproductive work behaviors, *Consc* conscientiousness, *Moral C* moral courage

* $p < .01$, ** $p < .05$

Table 4 Self-supervisor correlations of the WSCS, conscientiousness, moral courage, and important workplace outcomes in Sample 7

	WSCS	Consc	Moral C	Voice	OCBs	PSRB	CWBs	Perf
WSCS	.85							
Consc	.33**	.84						
Moral C	.47**	.52**	.95					
Voice	**.07**	**−.15**	**.09**	.86				
OCBs	**.24***	**.06**	**.14**	.33**	.77			
PSRB	**−.33****	**−.19***	**−.18**	−.06	−.04	.96		
CWBs	**−.19***	**−.13**	**−.11**	.05	.14	.40**	.98	
Perf	**.17**	**−.08**	**.12**	.12	.35**	.01	−.04	.89

Reliabilities on diagonal

Correlations in bold are self-supervisor correlations

* $p < .01$, ** $p < .05$

Table 5 Regression results of the WSCS predicting important workplace outcomes while controlling for conscientiousness and moral courage (Sample 7)

	B	SE	β	t	B	SE	β	t
	Step 1 Voice				Step 2 Voice			
Constant	5.908**	.620		9.529	5.659**	.712		7.945
Consc	−.254*	.112	−.234	−2.267	−.268*	.114	−.247	−.2351
Moral C	.185	.097	.196	1.898	.159	.104	.168	1.520
WSCS					.091	.127	.075	.714
R^2				.05				.06
	Step 1 OCBs				Step 2 OCBs			
Constant	4.984**	.512		9.741	4.374**	.578		7.574
Consc	−.005	.082	−.005	−.052	−.038	.092	−.043	−.414
Moral C	.107	.080	.139	1.328	.042	.085	.055	.500
WSCS					.222*	.103	.226	2.157
R^2				.02				.06
	Step 1 PSRB				Step 2 PSRB			
Constant	4.727**	.860			6.100**	.955		6.390
Consc	−.199	.155	−.132	−1.280	−.124	.152	−.082	−.811
Moral C	−.164	.135	−.125	−1.215	−.019	.140	−.015	−.137
WSCS					−.500**	.170	−.298	−2.936
R^2				.05				.12
	Step 1 CWBs				Step 2 CWBs			
Constant	1.797**	.412		4.360	2.153**	.470		4.583
Consc	−.073	.074	−.102	−.979	−.053	.075	−.075	−.711
Moral C	−.038	.065	−.062	−.594	−.001	.069	−.001	−.012
WSCS					−.130	.084	−.165	−1.547
R^2				.02				.04
	Step 1 Performance				Step 2 Performance			
Constant	4.299**	1.412		3.045	3.012	1.607		1.874
Consc	−.400	.255	−.163	−1.569	−.470	.257	−.192	−1.833
Moral C	.416	.222	.195	1.875	.280	.236	.131	1.188
WSCS					.469	.287	.171	1.634
R^2				.04				.06

* $p < .01$, ** $p < .05$

2007). Due to these measurement issues, courage has seen limited study, especially in relation to workplace contexts. Therefore, we created a psychometrically sound and valid measure of a particular dimension of courage, social courage, that theoretically has numerous implications for the workplace.

The current article included four separate studies across seven samples. In total, we collected data from 1412 participants. Study 1 involved the creation and reduction of an over-representative items list to gauge social courage. Study 2 showed that the resulting scale had a unidimensional factor structure and satisfactory internal consistency. Study 3 revealed that the WSCS has strong convergent validity with other courage measures, proper concurrent validity with theoretically related constructs, and divergent validity with unrelated constructs. Study 4 demonstrated the utility of the WSCS, as it had consistently significant relationships with OCBs and PSRB as well as occasionally significant relationships with voice and CWBs. The results of these phases show that the WSCS is a satisfactory measure of workplace social courage.

The current study provides important theoretical implications for courage. First, the current study is among the few to show that courage exists as a construct. Prior authors have repeatedly suggested the importance of courage (Hannah et al. 2011; Lindh et al. 2010; Stefano and Wasylyshyn 2005), but investigations have been largely theoretical. Further, empirical studies of courage have primarily investigated participants' labeling of courage (Lopez et al. 2003; Rate et al. 2007; Rate 2010; Woodard 2004). While these studies provide information about conceptualizations of courage, they do not actually show that courage exists as a construct. Also, extant studies have created courage measures with psychometric and validity concerns (Norton and Weiss 2009; Woodard and Pury 2007), and these studies are therefore unable to explicitly show that courage exists as a construct. In the current article, we demonstrated that the WSCS likely measures social courage, as determined through its numerous relationship with related measures, and courage is more than a label attributed to a certain type of behavior—it is a construct. Now, researchers can more reliability discuss the benefits of courage, as it is measureable.

Second, the definition and dimensionality of courage are generally agreed upon. Most authors adhere to Rate's (2010) definition, and courage is often categorized by the risks (Pury et al. 2007; Woodard 2004; Woodard and Pury 2007). The WSCS is based upon Rate's (2010) definition and is defined by social risks, and the scale demonstrated satisfactory psychometric properties and validity. This is the first courage measure that exhibits these qualities, and shows that the popular conceptualization of courage is appropriate for measurement purposes.

Third, the current study is important for quantitatively demonstrating that courage is separate from risk and prosocial motivation. While previous authors have suggested that these dynamics are involved in courage (Rate et al. 2007; Rate 2010), only theoretical justifications have been proposed for the distinctness of an overall courage construct. Now, empirical evidence supports this notion. Further, similar inferences were derived about social courage's relationship with several interpersonal tendencies and approach/avoid temperaments.

Fourth, prior research has discussed the importance of courage for workplace interactions, but the current study is the first to quantitatively support the relationships of social courage with certain workplace outcomes. For example, those higher in social courage were more likely to engage in OCBs, even when controlling for conscientiousness and moral courage. Practitioners should capitalize upon this finding and make efforts to elicit courage within their organizations.

Alternatively, several relationships of the WSCS were contrary to expectations. In correlations between self-report measures, a strong and positive relationship was observed between social courage and voice. When voice was gauged through supervisor-reports, however, the relationship between the two constructs was nonsignificant. Likewise, the relationship of the WSCS to CWBs was significant in self-report correlations, but the relationship became nonsignificant when using supervisor-reports of CWBs. Also, the WSCS demonstrated a consistent negative relationship with PSRB, although it was predicted to be positively related. These results indicate that social courage may be related to other important workplace outcomes, aside from OCBs, but more research is needed to determine their true nature.

A possible explanation for these unexpected findings is that supervisors tend to react negatively to antinorm behavior, such as PSRB and voice, although these behaviors may aid the organization (Dahling et al. 2012). Observers may perceive actors' intentions inaccurately, and may therefore be unable to appropriately distinguish between others' PSRB, voice, and CWBs (Dahling et al. 2012). Further, meta-analytic results find only moderate correlations between self- and supervisor-reports (Harris and Schaubroeck 1988). As Berry et al. note (2012), supervisor-reports of CWBs "account for little incremental variance" beyond self-reports, as supervisor ratings "capture a narrower subset of CWBs" (p. 613). This discrepancy between rating sources may also explain why we obtained some expected results among self-reports but not among supervisor-reports. These possibilities, however, should be explored in the future studies.

Fifth and lastly, our results may generalize across several areas of research. Positive Psychology scholars have repeatedly noted the importance of courage in day-to-day

interactions (Howard and Alipour 2014; Lopez and Snyder 2009), and they can now use the WSCS to analyze courage in working adults. Human Development researchers have shown interest in courage for healthy psychological growth (Norton and Weiss 2009; Rate 2010), and these authors can apply the WSCS to study healthy adult development. Other authors have noted that the study of courage extends to anthropology, sociology, and philosophy (Harbour and Kisfalvi 2014). Our findings likely generalize to these fields. Despite these strengths, limitations should be noted.

Limitations

Several samples in the current article were student samples. To alleviate this concern, the WSCS's psychometric properties were replicated in a largely employed adult sample (Sample 5). Also, the relationship of the WSCS with work-related variables was gauged in an adult sample (Sample 6) and through supervisor-reports (Sample 7). In the student samples (Samples 2, 3, and 4), the investigated relationships were limited to perceptions and personality characteristics that are not largely influenced by employment status. Further, supplemental analyses (available upon request) demonstrated that the student sample results largely did not differ when analyses were restricted to only currently employed students. It is possible that most students held previous employment, allowing them to answer with an appropriate frame-of-reference. Thus, the use of student samples within the current article is not believed to be overly concerning.

Some researchers may be initially discouraged by the wording of the WSCS, as each item is fairly complex. Each item, however, was created with a particular structure in mind. Given that courage involves risk and prosocial motives, each item consists of two parts that emphasize one or the other. For example, most individuals would surely "tell [their] coworkers when [they've] made a mistake," but they may not if they believe "it makes [them] look incompetent" (Item 9). Without this item format, the risks or prosocial aspects of the behaviors may be lost.

To ensure this notion, a supplemental sample was collected which included a version of the WSCS with only the behaviors noted (i.e., I would tell my coworkers when I have made a mistake). This version of the WSCS possessed an unclear factor structure and poor concurrent validity, causing concerns about its ability to measure courage (analyses available upon request). Thus, the WSCS would suffer without this particular item format.

Lastly, unreported analyses investigated the relationship of the WSCS with three indicators of method effects—social desirability, state affect, and trait affect. The WSCS did not demonstrate concerning correlations with any of these variables.

Future Directions

The creation of this measure opens several avenues for future research. Authors can now reliably measure social courage, and subsequent studies can investigate the nomological net and predictive validity of the construct. These investigations would benefit several fields of research (Harbour and Kisfalvi 2014; Lopez and Snyder 2009). Also, practitioners can now measure social courage to determine the importance of the construct in their organizations. In this regard, it is important for future research to demonstrate the influence of social courage on performance outcomes, especially in certain occupations such as salesperson or manager.

Further, practitioners should discover methods to elicit courage within their employees, which has shown to be an area of interest for many courage researchers (Ayling 2006; Faunce et al. 2004). These researchers have already proposed theoretical mechanisms to enhance workplace courage, and any subsequent attempt can incorporate these suggestions using the WSCS to test whether courage is actually developed with these methods.

Furthermore, Koerner (2014) recently investigated the impact of courageous behaviors on identity formation and demonstrated that courage could be used to shape an individual's identity. When individuals perform courageous acts, their perceptions about themselves become solidified and new identities may be adopted. This notion should be studied further. Now that a satisfactory measure exists for a particular dimension of courage, and Koerner's (2014) qualitative research can be complemented with a quantitative analysis.

Finally, authors have created a theoretical framework around courage, but further research is needed to empirically demonstrate the dimensionality of courage. A multitude of dimensions have been suggested, but the existence of these dimensions, aside from social courage, has yet to be shown. Through such efforts, an understanding of the courageous worker can be achieved.

Conclusion

Previous studies have attempted to create satisfactory measures of courage, but resultant scales often suffer from poor psychometric properties or questionable validity. The current article synthesized prior research and created a satisfying measure of workplace social courage, the WSCS. The results provide evidence that the WSCS is a psychometrically sound and valid measure of workplace social courage, as evident in its internal consistency, factor structure, convergent validity, concurrent validity, discriminant validity, and utility. These results also indicate

that social courage is a measurable construct with important organizational outcomes, and future studies should further investigate the importance of courage and its dimensions.

Appendix 1

See Table 6.

Table 6 Item-sort task results of the original 49 WSCS items

Question	Intended construct	p_{SA}	c_{SV}
1. If I thought a question was dumb, I would still ask it if I didn't understand something at work	DSI	.80	.70[a,b,*]
2. If I thought I may fail at a task at work, I would still volunteer to do it	DSI	.75	.55*
3. Despite making my coworker angry, I would tell him/her what they need to hear	DR	.95	.90[a,b,*]
4. Although it would make me look bad, I would admit to my mistakes at work	DSI	1.0	1.0[a,b,*]
5. Although my coworker may disagree, I would stand up to him/her when they are being unfair	DR	.85	.75[a,*]
6. If I was not confident in my abilities at work, I still wouldn't make excuses for my shortcomings	DSI	.30	−.10
7. I would not tolerate when a coworker is rude to someone, even if I make him/her upset	DR	.95	.90[a,b,*]
8. Although it may show how little I know about the topic, I would still volunteer for workshops and other learning opportunities at work	DSI	.80	.7[a,b,*]
9. Even if my coworkers could think less of me, I'd lead a project with a chance of failure	DSI	.85	.75[a,b,*]
10. If I failed at a task, I would still show to my coworkers that I tried my best	DSI	.30	0
11. Despite looking bad in the end, I would take control of a risky project	DSI	.80	.7[a,*]
12. Although it may damage our friendship, I would tell my superior when a coworker is doing something incorrectly	DR	1.0	1.0[a,b,*]
13. If a coworker asked me a question about my job that I didn't know, I would tell him/her that I am unsure	DSI	.45	−.10
14. Although my coworker may become offended, I would suggest to him/her better ways to do things	DR	1.0	1.0[a,b,*]
15. Although it draws attention to my faults, I would own up to my mistakes when I mess up at work	DSI	.75	.55*
16. Even if a coworker didn't ask for it, I would give him/her negative feedback	DR	.65	.35
17. Although my ideas may sound dumb, I share them with my coworkers	DSI	.75	.55*
18. Although my supervisor may get offended, I would question their orders if I disagreed with them	DR	.80	.70[a,*]
19. Even if it would make a bad impression on my coworkers, I would do what I should at work	DSI	.70	.50*
20. I would give coworkers my opinion, even if is an unpopular one	DR	.45	.15
21. Although it makes me seem like a "goodie–goodie," I would publically acknowledge someone for doing a good job	DSI	.85	.80[a,b,*]
22. Despite making my coworker angry, I would tell him/her my thoughts about him/her	DR	.65	.35
23. Although it makes me look incompetent, I would tell my coworkers when I've made a mistake	DSI	.80	.65[a,b,*]
24. I would tell a coworker my beliefs about our workplace, although (s)he disagrees with my thoughts	DR	.30	−.25
25. Despite appearing dumb in front of an audience, I would volunteer to give a presentation at work	DSI	.75	.65[a,b,*]
26. Despite upsetting my coworker, I would let him/her know when they've made me mad.	DR	.75	.60[a,*]
27. Although my coworkers may notice my mistakes and judge me for them, I would let them look over my work	DSI	.90	.85[a,b,*]
28. I would do what I think is best for the organization, although my coworkers may make fun of me for it	DSI	.70	.55*
29. Although my actions would be seen as impolite, I would criticize a coworker when (s)he has done a poor job	DR	.70	.50*
30. Although it makes my coworkers angry, I would do what is expected at work	DSI	.45	.05
31. Although it could make matters worse, I would try to "make up" with a coworker that does not like me	DR	.50	.05
32. Despite my subordinate disliking me, I would tell him/her when they're doing something against company policy	DR	.90	.85[a,b,*]
33. Despite my coworkers thinking I'm an overachiever, I would perform to the best of my abilities at work	DSI	.65	.50*
34. Even if my supervisor wouldn't like me as much, I would tell him/her when I think they are being unreasonable	DR	.85	.80*
35. Despite my coworkers thinking I'm just trying to look good, I would do extra things at work	DSI	.70	.55*
36. I would be stern to a coworker to get a point across, even if they'd think differently of me	DR	.70	.55*
37. Even if it may damage our relationship, I would confront a subordinate who had been disrupting their workgroup	DR	1.0	1.0[a,b,*]
38. I would let my coworkers know when I am concerned about something, even if they'd think I am too negative	DSI	.75	.65[a,b,*]
39. Although my coworkers would think I am a "suck-up," I would do more than what my boss expects me to do	DSI	.70	.60*

Table 6 continued

Question	Intended construct	p_{SA}	c_{SV}
40. I would go against the norms of my coworkers if they were against company policy, even if they might think I'm weird for it	DSI	.65	.45
41. Despite making other employees angry, I would do everything that I could to make my customers happy	DR	.65	.35
42. Although my coworker might become annoyed, I would correct him/her if they were being unsafe	DR	.90	.85[a,b,*]
43. Even if my subordinate would become unhappy with me, I would point out and correct them on a task s(he) did incorrectly	DR	.85	.80*
44. Although it may completely ruin our friendship, I would give a coworker an honest performance appraisal	DR	.90	.85[a,b,*]
45. I would do everything I can at work, despite my coworkers getting mad at me for making them look bad	DR	.60	.30
46. I would privately tell a coworker if I thought they were doing their job incorrectly, even if s(he) may get angry at me	DR	.80	.65[a,*]
47. I would follow company policy, even if all my coworkers were breaking it and may think I'm different for not doing so	DSI	.65	.50*
48. I would discreetly tell my coworker when (s)he has messed up, even if they think it'd be rude to tell them	DR	.80	.75[a,*]
49. I would tell a subordinate when they're not meeting my standards, even if s(he) may dislike me for it	DR	.80	.65[a,*]

* $p < .05$

[a] Met both chosen cutoffs

[b] Item retained for further analyses

Appendix 2: Workplace Social Courage Scale (WSCS)

There are many risks that could be involved in workplace interactions. These risks could range from minor to severe risks, depending on the behavior. For the following, please rate your agreement that you would perform the following behaviors despite the risks involved. Use the scale below:

1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Neutral
5 = Slightly Agree
6 = Agree
7 = Strongly Agree

You should NOT answer these questions with your current job or workgroup in mind. Instead, respond based on how you would act in a workplace after working there for five years.

1. Although it may damage our friendship, I would tell my superior when a coworker is doing something incorrectly.
2. Although my coworker may become offended, I would suggest to him/her better ways to do things.
3. If I thought a question was dumb, I would still ask it if I didn't understand something at work.
4. Even if my coworkers could think less of me, I'd lead a project with a chance of failure.
5. I would not tolerate when a coworker is rude to someone, even if I make him/her upset.
6. Despite my subordinate disliking me, I would tell him/her when they're doing something against company policy.
7. I would let my coworkers know when I am concerned about something, even if they'd think I am too negative.
8. Even if it may damage our relationship, I would confront a subordinate who had been disrupting their workgroup.
9. Although it makes me look incompetent, I would tell my coworkers when I've made a mistake.
10. Despite appearing dumb in front of an audience, I would volunteer to give a presentation at work.
11. Although it may completely ruin our friendship, I would give a coworker an honest performance appraisal.

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