



Identifying social courage antecedents and mediating effects: Applying the HEXACO and approach/avoidance frameworks

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ABSTRACT

Social courage behaviors are risky actions performed primarily for the benefit of others, and they relate to many beneficial personal (e.g., well-being) and organizational (e.g., performance) outcomes. Much is unknown about social courage antecedents, however, and only initial studies have assessed the ability of relevant theory to explain the dynamics of social courage. We address these concerns in two manners. We study the HEXACO dimensions as antecedents to social courage behaviors, and we apply the approach/avoidance framework to test whether approach and avoidance motivations are mediators of these relationships. Our results demonstrate that five of the six HEXACO dimensions had either direct or indirect effects on social courage, but honesty-humility surprisingly did not demonstrate significant direct or indirect effects. Approach but not avoidance motivations served as a mediator in four of these five significant relationships, in which two were full mediating effects. These results identify novel antecedents of social courage and support that the approach/avoidance framework is useful in identifying mediating effects. At the same time, this framework did not fully explain all observed effects, and we provide many recommendations for future research on social courage and the integration of relevant theory – both involving the applied frameworks and beyond.

1. Introduction

Social courage refers to intentional, deliberate, and prosocial actions that could damage the social esteem of the actor, and it is evident in many workplace interactions (Detert & Bruno, 2017; Howard et al., 2017; Pury & Saylor, 2017). For instance, employees demonstrate social courage when admitting to mistakes, as they could then appear incompetent to their workgroup; and supervisors demonstrate social courage when providing accurate performance appraisals of their subordinates, as they could risk their relationships with those subordinates. Many authors have stressed the importance of social courage to modern work (Howard & Cogswell, 2019; May, 1994; Schilpzand et al., 2015; Worline, 2010). These authors argue that social courage is required for ideal organizational functioning, as social courage can be considered a type of core performance or organizational citizenship behavior. Some authors have even suggested that social courage can save lives, as it may take social courage to correct the unsafe behaviors of a coworker (e.g., wearing a hardhat; Geller, 2016, 2017). Social courage has also been speculated to produce a ripple effect (Geller, 2016, 2017; Jinpa, 2016; Koerner, 2014). That is, the social courage of one employee may subsequently prompt others to perform social courage behaviors, which exponentially increases the impact of social courage. Social courage is thereby believed to be a beneficial behavior that produces other beneficial behaviors, giving it the potential to dramatically improve the bottom-line of organizations. Due to its power, understanding the

antecedents to social courage poses many important implications for organizational success.

The Big Five is the most common framework to assess the relation of personality and social courage, and multiple relationships between Big Five dimensions and social courage have been empirically supported (Howard, 2019; Howard et al., 2017; Howard & Holmes, 2019); however, we argue that an alternative conceptualization of personality is more relevant to social courage: the HEXACO framework. The HEXACO framework is named for its six primary dimensions: Honesty-humility, Emotionality, eXtraversion, Agreeableness, Conscientiousness, and Openness (Ashton & Lee, 2007, 2009; Lee & Ashton, 2014). While five of these dimensions largely overlap with those proposed in the Big Five framework (Ashton et al., 2014; Lee & Ashton, 2014; Lee, Ashton, et al., 2005), the sixth dimension, honesty-humility, is particularly relevant to social courage. Honesty-humility refers to a tendency to avoid manipulating others, show a disinterest in wealth, feel no entitlement to social status, and abide by rules (Ashton & Lee, 2007, 2009; Lee, Ogunfowora, et al., 2005). As apparent from these descriptors, honesty-humility includes overt ethical and interpersonal aspects, and it relates to treating others with compassion (Ashton et al., 2014; Ashton & Lee, 2005). These aspects are also reflected in social courage via its prosocial motivation component, suggesting that honesty-humility has a particular relevance to social courage. Therefore, while we investigate all dimensions of the HEXACO as antecedents to social courage, the study of honesty-humility poses particularly noteworthy implications.

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Additionally, Howard (2019) applied the approach/avoidance framework to investigate the outcomes of social courage, and he called for future research to conduct further integrations of the approach/avoidance framework with social courage. We heed this call in the current article, and we assess whether approach and avoidance motivations serve as mediators in the relationship between the HEXACO dimensions and social courage. Approach motivations refer to systematic tendencies to approach desirable stimuli, whereas avoidance motivations refer to systematic tendencies to avoid undesirable stimuli (Elliot et al., 2001; Elliot et al., 2006; Elliot & Thrash, 2002). By testing these explanatory mechanisms, we can provide further support that the approach/avoidance framework is an appropriate lens to study social courage, which is needed to supplement existing initial support for this integration (Howard, 2019).

Given these considerations, the current article poses many implications for research and practice. First, research on social courage is still in its infancy, whereas the HEXACO dimensions have been studied alongside a wide array of constructs. Identifying relationships between social courage and the HEXACO dimensions also links social courage to these other constructs, broadening the nomological net surrounding social courage. Second, initial support has been provided for the integration of the approach/avoidance framework and social courage, but the current results can solidify that this integration is useful for understanding the construct. Subsequent investigations can more reliably use the framework to assess the relationships of social courage. Third, social courage is pivotal to organizational success (Detert & Bruno, 2017; Geller, 2016, 2017; Howard et al., 2017; Howard & Holmes, 2019), and discovering the antecedents of social courage can enable organizations to be more effective. Organizations could identify and select candidates more likely to demonstrate social courage and/or encourage states that prompt social courage. Together, the current article further develops multiple streams of study surrounding social courage, which produces several additional avenues for future research.

2. Background

2.1. Social courage

In the current article, we apply the conceptualization of social courage created by Howard et al. (2017), who incorporated research on general courage in creating their construct definition. These authors adapted Rate's et al. (2007) and Rate (2010) definition of general courage, which specifies that courage is an intentional, deliberate, and noble action with substantial personal risk. Studies using this definition often consider noble to be largely synonymous with prosocial (Detert & Bruno, 2017; Howard & Fox, 2020; Koerner, 2014; Schilpzand et al., 2015; Sekerka et al., 2009), which Howard et al. (2017) likewise assumed when creating their conceptualization. Howard et al. (2017) also defined social courage by the involved risks – the potential harm to social esteem – which is the most common approach to differentiating courage dimensions (Detert & Bruno, 2017; Howard & Reiley, 2020; Pury & Lopez, 2010; Pury & Starkey, 2010; Woodard & Pury, 2007). The combination of these prior assertions regarding courage led Howard et al. (2017) to define social courage as intentional, deliberate, and prosocial actions that could damage the social esteem of the actor.

This definition describes a behavior, and we likewise study behavioral social courage in the current article. It should be noted, however, that this definition can also be used to identify the trait of social courage, which has been repeatedly done in prior research (Detert & Bruno, 2017; Geller, 2016, 2017; Pury & Starkey, 2010; Schilpzand et al., 2015). A common approach to measuring traits is to assess the frequency of their representative behaviors, as seen in many popular measures of widespread personality conceptualizations (e.g., HEXACO-100, Ashton & Lee, 2009; Howard, 2020; Lee & Ashton, 2018). Similarly, those who frequently perform social courage behaviors are believed to possess the trait of courage. While we do not study trait social courage in the current

article, the current results may provide insights into this alternative treatment of social courage. For example, linking behavioral social courage to approach and/or avoidance motivations may also provide further support for the association between trait social courage and approach and/or avoidance motivations. Thus, results regarding one type of social courage (e.g., behavior) may generalize to the other type (e.g., trait), and prior results regarding one type of social courage can inform future research regarding the other type.

Further, much is currently unknown about the antecedents of social courage. Howard and Cogswell (2019) supported that aspects of personality, demographics, leadership, and culture influences the performance of social courage. These authors only investigated a limited number of constructs within each of these categories, however, and they called for future research to identify further antecedents of social courage – specifically dimensions of personality. They also called for future research to identify mediators of these antecedent relationships, as their tested mediators, perceived courage risks and benefits, were not supported for most effects. Further, Howard et al. (2017) supported that each of the Big Five dimensions related to social courage, with extraversion and openness having the strongest relationships. They too called for future research to investigate other antecedents and mediating effects, as they did not test for any mediators in their studies. We heed these calls in the current article by assessing the HEXACO dimensions as antecedents as well as approach and avoidance motivations as mediators.

2.2. Approach/avoidance framework

The approach/avoidance framework proposes that humans have the innate tendencies to approach positive stimuli and avoid negative stimuli, which represent the two primary regulatory systems (Amodio et al., 2008; Elliot et al., 2013; Elliot & Thrash, 2002; Ferris et al., 2013). These differing – but not opposing – regulatory systems are labeled the behavioral activation system and the behavioral inhibition system, associated with the evaluation of positive and negative stimuli, respectively. These systems operate independently, and they emerge in many different manners. Perhaps the most essential emergence is their association with differing brain structures. Different areas of the brain become active when assessing positive or negative stimuli (Hietanen et al., 2008; Spielberg et al., 2012; Spielberg et al., 2013), suggesting the brain dedicates differing resources to evaluating these different stimuli categories.

Further, these tendencies emerge in two other manners with particular relevance to the current article. First, these systems produce differing sensitivities towards positive or negative stimuli, which are respectively labeled approach and avoidance temperaments (Elliot et al., 2001; Elliot et al., 2006). These temperaments are relatively stable individual differences, and neither exclusively relates to positive or negative outcomes. A person with an avoidance temperament may be more likely to avoid negative outcomes because they are more sensitive to negative stimuli (e.g. fear of failure), whereas a person with an approach temperament may be more likely to obtain positive outcomes because they are more sensitive to positive stimuli (e.g. hope for success) (Elliot et al., 2001). Authors have argued that these temperaments can be observed in personality traits, and all traits can be categorized as approach- or avoidance-oriented (Elliot & Thrash, 2010; Simon et al., 2010; Zimmerman et al., 2012). We do not study the development of personality in the current article, but we instead utilize the previously supported associations of the HEXACO dimensions with respective temperaments to hypothesize their associations with the second manner in which approach and avoidance tendencies emerge – motivational states.

Second, people can possess approach and avoidance motivations, wherein they are temporarily more sensitive towards positive and negative stimuli, respectively (Covington & Müeller, 2001; Elliot & Thrash, 2002; Updegraff et al., 2004). For example, an approach

motivation may cause an employee to focus on being promoted, whereas an avoidance motivation may cause an employee to focus on not being fired. Therein, approach and avoidance motivations result in differing patterns of behaviors. The former employee may take more risks and volunteer for more difficult assignments, as they want to make a good impression and be promoted; and the latter employee may be more careful and double-check their assigned duties, as they do not want to make a mistake and be fired. Accordingly, we predict that approach and avoidance motivations will have differing effects on social courage.

We propose that approach motivations positively relate to social courage. Those with an approach motivation are more driven by the possible positive outcomes of their behaviors, and they may be more likely to value the prosocial benefits of social courage. Alternatively, we also propose that avoidance motivations negatively relate to social courage. Those with an avoidance motivation are more driven by avoiding possible negative outcomes of their behaviors, and they may be more likely to detest the risks of social courage. Thus, we propose the following:

Hypothesis 1. Approach motivations positively relate to social courage.

Hypothesis 2. Avoidance motivations negatively relate to social courage.

While approach and avoidance motivations can waver, they are systematically influenced by temperaments and associated personality traits (Amodio et al., 2008; Elliot et al., 2013; Elliot & Thrash, 2002; Ferris et al., 2013). A person with an approach temperament is more likely to express an approach motivation, whereas a person with an avoidance temperament is more likely to express an avoidance motivation. As mentioned, approach and avoidance temperaments are associated with differing personality traits, causing certain personality traits to more strongly relate to either approach or avoidance motivations. Some such personality traits are included within the HEXACO framework, as detailed below.

2.3. HEXACO

The HEXACO framework was created by Ashton and Lee (2005, 2007, 2009) as an alternative to the Big Five framework after observing that lexical studies of personality regularly produce six dimensions rather than five. These six dimensions are: honesty-humility, which includes the facets of sincerity, fairness, greed avoidance, and modesty; emotionality, which includes the facets of fearfulness, anxiety, dependence, and sentimentality; extraversion, which includes the facets of social self-esteem, social boldness, sociability, and liveliness; agreeableness, which includes the facets of forgivingness, gentleness, flexibility, and patience; conscientiousness, which includes the facets of organization, diligence, perfectionism, and prudence; and openness, which includes the facets of aesthetic appreciation, inquisitiveness, creativity, and unconventionality. Since its creation, many studies have supported the validity of the HEXACO framework and showed that the HEXACO dimensions uniquely predict outcomes when all are simultaneously included in analyses (Anglim et al., 2018; Ashton & Lee, 2005, 2007, 2013; Lee & Ashton, 2014; Lee, Ashton, et al., 2005; Lee et al., 2019; Louw et al., 2016). These outcomes include core performance, organizational citizenship, and voice behaviors; however, no researcher has linked the HEXACO framework with social courage.

We suggest that each HEXACO dimension relates to social courage due to associations with approach and avoidance motivations. Prior authors have proposed that all personality dimensions, including the HEXACO, emerge from the behavioral activation and inhibition systems, which is supported by the dimensions' relationships with associated temperaments and motivations (Corr, 2001; Franken et al., 2006; Matthews & Gilliland, 1999). Although personality dimensions have notable differences, they may also share underlying similarities and associations

with other constructs due to their emergence from these two systems. Specifically, these dimensions may systematically predict certain motivational states, such as approach and avoidance motivations, which may subsequently influence outcomes, such as social courage. Such proposals are typical in the study of personality, wherein traits are believed to produce states and states are believed to produce behaviors (Dinger et al., 2015; Howard, 2019).

Arising from these proposals, some authors have supported the relationship of the HEXACO dimensions with approach and avoidance motivations (De Vries, 2013; Dinger et al., 2015; Elliot & Thrash, 2002; Louw et al., 2016). In general, honesty-humility, extraversion, agreeableness, conscientiousness, and openness are positively related to approach motivations and negatively related to avoidance motivations. Emotionality is negatively related to approach motivations and positively related to avoidance motivations. While more nuance can be seen in prior studies, no other result is consistent enough to propose as an a priori hypothesis. For instance, emotionality has been shown to not significantly relate to approach motivations (Louw et al., 2016), but this effect has not been widely replicated. Therefore, because these personality dimensions systematically influence emergent motivations and these motivations are believed to impact social courage, we propose the following hypotheses:

Hypothesis 3. (a) Honesty-humility, (b) emotionality, (c) extraversion, (d) agreeableness, (e) conscientiousness, and (f) openness significantly relate to social courage. The effect of emotionality is negative, whereas all others are positive.

Hypothesis 4. Approach motivations mediate the relationships of (a) honesty-humility, (b) emotionality, (c) extraversion, (d) agreeableness, (e) conscientiousness, and (f) openness with social courage.

Hypothesis 5. Avoidance motivations mediate the relationships of (a) honesty-humility, (b) emotionality, (c) extraversion, (d) agreeableness, (e) conscientiousness, and (f) openness with social courage.

3. Method

3.1. Participants

Participants ($N = 705$, $M_{age} = 34.36$, $SD_{age} = 9.93$, 39% female, 76% American) were recruited from Mechanical Turk (MTurk) and provided monetary compensation. MTurk is a website that connects individuals willing to perform tasks on a computer, such as taking a survey, with those requesting the tasks to be completed. Prior studies have supported that results obtained via MTurk are reliable and valid (Chambers & Nimon, 2019; McDuffie, 2019; Robinson et al., 2019). Because we included many attention checks (10), we removed participants that failed more than one attention check (reflected in the sample sizes above and below). We felt that participants failing none or one attention check had sufficient motivation.

3.2. Procedure

Participants gained access to the study via the MTurk online platform. They provided their informed consent, and they completed the first survey that included the HEXACO measure and demographic questions ($T1$, $n = 705$, 6 attention checks). One week later, they were emailed a link to the second survey, which included the approach/avoidance motivation measures ($T2$, $n = 297$, 1 attention check). The following week, they were emailed a link to the third survey, which included the social courage measure and other scales not relevant to the current article ($T3$, $n = 236$, 3 attention checks). They were lastly disclosed the purpose of the study.

3.3. Measures

All responses were obtained on a 1 (Strongly Disagree) to 7 (Strongly Agree) scale.

3.3.1. HEXACO

We administered the HEXACO-100 (Lee & Ashton, 2018; Thielmann et al., 2019), which consists of 16 items for each primary dimension of the HEXACO. Example items are: "Having a lot of money is not especially important to me" (honesty-humility) and "I clean my office or home quite frequently" (conscientiousness). Each dimension demonstrated appropriate Cronbach's alphas: honesty-humility (0.83), emotional stability (0.75), extraversion (0.82), agreeableness (0.77), conscientiousness (0.83), and openness (0.82).

3.3.2. Workplace approach/avoidance motivation

We administered the approach/avoidance scale of Ferris et al. (2013), which contains six items to measure approach motivation and six items to measure avoidance motivation. Example items are: "I am focused on successful experiences that occur while working" (approach motivation) and "In general, I tend to think about the negative aspects of my work" (avoidance motivation). The approach motivation dimension had a Cronbach's alpha of 0.91, and the avoidance motivation dimension had a Cronbach's alpha of 0.84.

3.3.3. Workplace social courage

We administered the Workplace Social Courage Scale (WSCS) of Howard et al. (2017), which contains 11 items to measure social courage at work. An example item is, "Although it makes me look incompetent, I would tell my coworkers when I've made a mistake". We used modified scale instructions, as done in Howard and Cogswell (2019), to measure social courage as a behavior. Instead of asking participants to respond independently of their current job, we asked them to respond specifically in regard to how they act in their current work environment. The scale had a Cronbach's alpha of 0.85.

4. Results

Table 1 includes the correlations and Cronbach's alphas of all study variables, and Table 2 includes all regression analyses conducted to test our hypotheses. The skewness and kurtosis of all variables was below the common cutoff of two, and VIF values were also all below the common cutoff of two for all regression analyses (Hair et al., 1998). Both approach motivations ($r = 0.40, p < .01$) and avoidance motivations ($r = -0.29, p < .01$) had significant relationships with social courage. When included in a regression predicting social courage with all HEXACO dimensions, however, approach motivations still predicted social courage ($\beta = 0.29, t = 4.26, p < .01$) whereas avoidance motivations did not ($\beta = 0.05, t = 0.70, p > .05$). These results fully support Hypothesis 1, but they only partially support Hypothesis 2.

Next, we assessed the relationships of the HEXACO dimensions with

social courage. Because the HEXACO dimensions are most often studied together, we only interpreted the regression results including all HEXACO dimensions in determining their relationship with social courage. Emotionality ($\beta = -0.19, t = -3.14, p < .01$), extraversion ($\beta = 0.24, t = 3.47, p < .01$), conscientiousness ($\beta = 0.25, t = 2.23, p < .05$), and openness ($\beta = 0.27, t = 4.43, p < .01$) had significant relationships with social courage, whereas honesty-humility ($\beta = 0.05, t = 0.72, p > .05$) and agreeableness ($\beta = -0.06, t = -0.87, p > .05$) did not. These results support Hypotheses 3b, 3c, 3e, and 4f; however, they fail to support Hypothesis 3a and 3d.

We also conducted a regression analysis with all variables predicting social courage (Table 2), which could be compared to the above results to determine any mediating effects (Baron & Kenny, 1986). Instead, we utilized a much more statistically sound approach by calculating bootstrapped estimates of indirect effects and confidence intervals using Hayes's PROCESS macro (Hayes, 2017). In calculating these results, we only included approach motivations as a mediator. Avoidance motivation was not a significant predictor of social courage when all variables were included in the regression analysis (detailed above), precluding it as a mediator between the HEXACO dimensions and social courage. Therefore, Hypotheses 5a through 5f were preemptively not supported.

Table 3 presents the indirect effect results of the HEXACO dimensions on social courage via approach motivations. The indirect effect of extraversion ($ab = 0.08, S.E. = 0.03, 95\%C.I.[0.04, 0.14]$), agreeableness ($ab = 0.04, S.E. = 0.02, 95\%C.I.[0.01, 0.11]$), and conscientiousness ($ab = 0.06, S.E. = 0.03, 95\%C.I.[0.02, 0.15]$) were significant. The indirect effect of emotionality very closely approached significance ($ab = 0.02, S.E. = 0.02, 95\%C.I.[-0.001, 0.07]$), whereas the indirect effects of honesty-humility ($ab = -0.02, S.E. = 0.02, 95\%C.I.[-0.06, 0.01]$) and openness ($ab = -0.00, S.E. = 0.02, 95\%C.I.[-0.04, 0.03]$) were not significant. These results supported Hypotheses 4c, 4d, and 4e. They partially supported Hypothesis 4b, and they failed to support Hypothesis 4a and 4 f. It should also be noted that the direct effect of emotionality ($B = -0.19, S.E. = 0.05, 95\%C.I.[-0.28, -0.09]$), extraversion ($B = 0.11, S.E. = 0.05, 95\%C.I.[0.00, 0.21]$), and openness ($B = 0.22, S.E. = 0.05, 95\%C.I.[0.13, 0.32]$) were still significant in these analyses, whereas the direct effect of honesty-humility ($B = 0.03, S.E. = 0.05, 95\%C.I.[-0.07, 0.14]$), agreeableness ($B = -0.06, S.E. = 0.06, 95\%C.I.[-0.17, 0.06]$), and conscientiousness ($B = 0.08, S.E. = 0.07, 95\%C.I.[-0.05, 0.21]$) were not. Therefore, agreeableness and conscientiousness had fully mediated effects; emotionality and extraversion had partially mediated effects; openness had a direct effect alone; and honesty-humility had no effect on social courage. These results are visually summarized in Fig. 1.

5. Discussion

The goal of the current article was to assess the relationship of the HEXACO dimensions with social courage as well as test whether approach and avoidance motivations mediated these relationships. We suggested that the HEXACO framework was particularly relevant to

Table 1
Correlations and Cronbach's alphas.

	1	2	3	4	5	6	7	8	9
1.) Honesty-Humility	0.83								
2.) Emotionality	0.04	0.75							
3.) Extraversion	0.08*	-0.24**	0.82						
4.) Agreeableness	0.30**	-0.19**	0.46**	0.77					
5.) Conscientiousness	0.53**	0.08*	0.34**	0.25**	0.83				
6.) Openness	0.39**	-0.01	0.30**	0.29**	0.48**	0.82			
7.) Approach Motivations	0.07	-0.01	0.49**	0.34**	0.38**	0.20**	0.91		
8.) Avoidance Motivations	-0.27**	0.32**	-0.53**	-0.39**	-0.36**	-0.22**	-0.39**	0.84	
9.) Social Courage	0.14*	-0.25**	0.40**	0.23**	0.27**	0.37**	0.40**	-0.29**	0.85

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

Table 2
Regression results with approach motivations, avoidance motivations, and social courage as outcomes.

	Approach motivations		Avoidance motivations		Social courage			
	Step 1		Step 1		Step 1		Step 2	
	β	t	β	t	β	t	β	t
Constant		3.60**		13.32**		7.14**		4.54**
1.) Honesty-Humility	-0.08	-1.44	-0.16	-3.07**	0.02	0.27	0.05	0.72
2.) Emotionality	0.09	1.65	0.21	4.38**	-0.19	-3.14**	-0.23	-3.76**
3.) Extraversion	0.35	5.65**	-0.37	-6.47**	0.24	3.47**	0.16	2.09*
4.) Agreeableness	0.16	2.71**	-0.09	-1.63	-0.02	-0.28	-0.06	-0.87
5.) Conscientiousness	0.25	4.36**	-0.17	-3.16**	0.14	2.23*	0.08	1.32
6.) Openness	0.01	0.22	-0.00	-0.04	0.27	4.43**	0.27	4.58**
7.) Approach Motivations							0.29	4.26**
8.) Avoidance Motivations							0.05	0.70
R ²		0.31		0.40		0.28		0.33

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

Table 3
Mediation results via approach motivations (PROCESS).

	Direct effect	S.E.	95% C.I.	Indirect effect	S.E.	95% C.I.
1.) Honesty-Humility	0.03	0.05	-0.07, 0.14	-0.02	0.02	-0.06, 0.010
2.) Emotionality	-0.19	0.05	-0.28, -0.09	0.02	0.02	-0.001, 0.07
3.) Extraversion	0.11	0.05	0.00, 0.21	0.08	0.03	0.03, 0.14
4.) Agreeableness	-0.06	0.06	-0.17, 0.06	0.04	0.02	0.01, 0.11
5.) Conscientiousness	0.08	0.07	-0.05, 0.21	0.06	0.03	0.02, 0.15
6.) Openness	0.22	0.05	0.13, 0.32	-0.00	0.02	-0.04, 0.03

social courage due to its inclusion of honesty-humility. Contrary to expectations, however, honesty-humility was the only dimension without a direct or indirect effect on social courage when the entire HEXACO was assessed together. It should therefore be questioned why this result arose.

Honesty-humility had a significant negative relationship with avoidance motivations but no significant relationship with approach motivations. This finding indicates that honesty-humility causes people to lessen their focus on avoiding negative outcomes, but it does not cause them to strive towards positive outcomes. Because social courage was only associated with approach motivations and striving towards positive outcomes in our regression analyses, honesty-humility did not have a relevant casual mechanism to influence social courage. Additional insights regarding this relation are discussed in the following section.

Alternatively, the effects of conscientiousness and agreeableness can be explained by the mechanism of approach motivations, as approach motivations fully mediated the effects of these two dimensions. Conscientiousness and agreeableness cause people to systematically approach positive outcomes, which causes them to perform more social courage behaviors. The effects of extraversion and emotionality can be partially explained by approach motivations, as approach motivations partially mediated the effects of these two dimensions; however, the effect of openness cannot be explained by approach motivations, as approach motivations did not mediate the effect of this dimension whatsoever. While extraversion and emotionality partially influence social courage because they cause people to strive towards positive outcomes, the cause of their remaining influence – and the influence of openness – should be investigated further, which is a consideration for future research discussed below.

5.1. Theoretical implications and future research directions

Few theoretical frameworks have been integrated with the study of courage, and the approach/avoidance framework is one of the only with prior theoretical support (Howard, 2019). While this framework was quite apt in understanding some relationships between the HEXACO dimensions and social courage, it did not fully explain all effects. For this

reason, researchers should turn to other theories and frameworks to detail these relationships, including those associated with HEXACO facets, emotions, creativity, and person-environment interactions.

We only investigated the primary dimensions of the HEXACO, but each dimension includes four facets. Recent researchers have increasingly recognized that facets of a common dimension can produce notably varying relations (Ashton & Lee, 2019; Howard, 2020; Lee et al., 2019), which can provide insights into the broader dimension. Future research should provide in-depth investigations by analyzing the relation of each dimension’s four facets with social courage, which could further the broad results observed in the current article. For instance, such an investigation could assess the non-significant results regarding honesty-humility, which includes the facets of sincerity, fairness, greed avoidance, and modesty. The facet of fairness may strongly relate to social courage, as those who perform social courage behaviors may be driven by a desire to ensure justice and address inequity; however, the other three facets may be less relevant to social courage, causing the overall dimension to produce a non-significant effect. In performing these studies, future researchers should also be mindful of current directions in studying facet relationships, including the assessment of measurement differences (Ashton & Lee, 2019; Lee & Ashton, 2019) and the application of novel theoretical frameworks (Espinoza et al., 2020; Knežević et al., 2019). One such framework that may be particularly useful is the situation, trait, and outcome activation (STOA) model (De Vries et al., 2016), which was recently supported via meta-analysis to adequately explain the HEXACO’s relations (Zettler et al., 2019).

Courageous behaviors are often believed to be emotionally driven, and some authors have even proposed that the decision to perform a courageous behavior is more driven by emotion than cognition (Geller, 2016, 2017; May, 1994); however, little research has examined the relationship between courage and emotions. Theories of emotions could provide novel insight into the occurrence of courage, but they could also explain the relationship between emotionality and extraversion with social courage behaviors. Notably, emotionality corresponds to greater negative affect and emotions, whereas extraversion corresponds to greater positive affect and emotions (Ashton & Lee, 2005, 2007, 2013; Lee & Ashton, 2014). These arising emotions – rather than

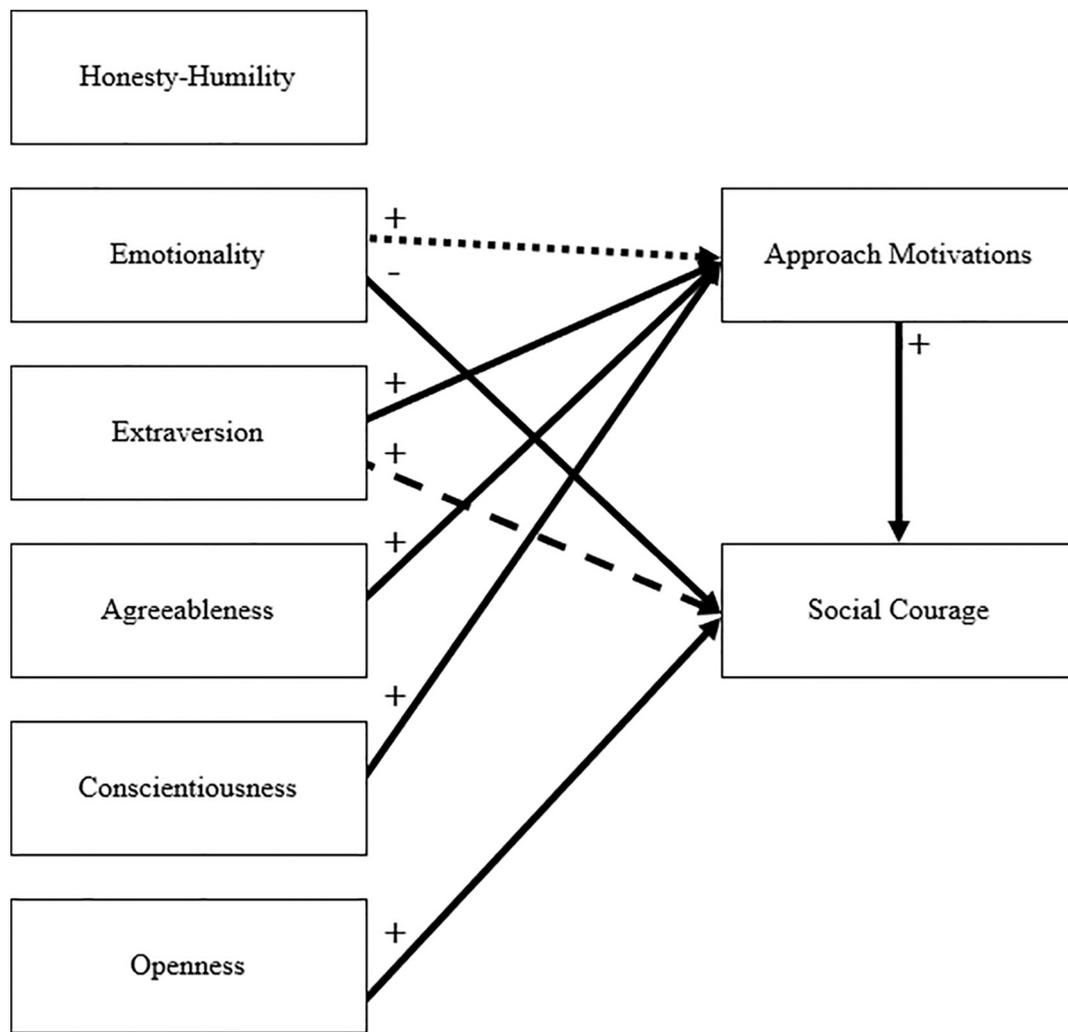


Fig. 1. Visual representation of study results.

Note: Solid lines are statistically significant at 0.01 level. Dashed lines are statistically significant at 0.05 level. Dotted lines are not statistically significant at 0.05 level, but the involved indirect effect approached statistical significance. Extraversion, agreeableness, and conscientiousness produced indirect effects with confidence intervals excluding zero. The confidence interval of emotionality's indirect effect was very close to excluding zero, with a range of -0.001 to 0.067 .

corresponding motivations – could be the explanatory mechanisms between these two HEXACO dimensions and social courage. Given these possibilities, theories of emotional processing and cognitive appraisal (Moors et al., 2013; Scherer et al., 2001) appear apt for the study of social courage, and we call for future applications of emotional theory.

Further, openness includes the dimensions of creativity and unconventionality in the HEXACO framework. Creative and unconventional behaviors are often risky, as the actor risks failure, social disapproval, and/or many other negative outcomes. This causes risk-taking to significantly relate with creativity and unconventionality in prior research (Dewett, 2006; Tyagi et al., 2017). While not often linked with courage, creativity and unconventionality may influence the performance of courageous behaviors due to their association with risk-taking, which could explain the observed relationship between openness and social courage in the current study. Future research is needed to further probe this link, and theory surrounding courage and unconventionality should be applied in this future research.

Lastly, the current study was a relatively narrow investigation into the antecedents of social courage, as it largely focused on personality, whereas Howard and Cogswell (2019) was a broad investigation into the antecedents of social courage, as it studied antecedents from multiple domains. The former can provide more detailed inferences regarding a narrow domain of study, while the latter can provide more general

inferences regarding a broad domain of study. We urge future researchers to perform studies that find a middle ground between these two extremes. Specifically, future research should study the interaction of personality and environment in predicting social courage, which could be guided by prior research on situational strength and trait-activation theory (Meyer et al., 2010; Tett et al., 2013). By doing so, these studies could identify who performs social courage behaviors as well as the contexts that they do so.

5.2. Limitations and future replication opportunities

Some readers may disagree with the use of MTurk samples. The current study applied current best-practices for ensuring sufficient data quality when using MTurk, such as applying attention checks and utilizing a time-separated research design, and prior authors have supported that results obtained via MTurk samples are valid when applying these practices (McDuffie, 2019; Robinson et al., 2019). Nevertheless, the current results should be replicated using alternative samples.

While we applied a time-separated research design, it was not robust enough to derive firm conclusions regarding causality in our effects. It is often assumed in research that traits produce motivational states and motivational states produce behaviors (Amodio et al., 2008; Elliot et al., 2013; Elliot & Thrash, 2002; Ferris et al., 2013), but the current research

design cannot definitively support this notion. The current results should be replicated using research designs that can firmly support such effects, such as panel studies.

Beyond methodological limitations, the current article also includes some conceptual limitations. We did not investigate boundary conditions of our tested relationships, and we urge future researchers to assess moderating influences. Notably, employees may only perform social courage behaviors if they have positive beliefs in their work-related capabilities, causing task-specific self-efficacy (e.g., job self-efficacy, creative self-efficacy) to moderate any influence on social courage behaviors (McKay et al., 2018; Orth & Volmer, 2017). Such investigations would also satisfy the call made by Howard and Holmes (2019) for further research on boundary conditions, after they discovered that none of their three moderators significantly influenced the relations of social courage. As they argued, future research is needed to determine whether the relations surrounding social courage are indeed resilient to outside influences.

6. Conclusion

The goal of the current study was to assess the relationships between the HEXACO dimensions and social courage. The results supported that honesty-humility did not significantly relate to social courage, but all other dimensions did produce significant effects. Approach motivations mediated most of these effects, but the results also highlighted some effects that could benefit from the integration of novel theory. Therefore, the current article addressed certain uncertainties in the study of courage and social courage, but it also identified many directions for future research and theoretical integration.

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