EMPIRICAL ASSESSMENT

Two Facets of Moral Maturity

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Battistich (1999) noted that most research on character development has focused narrowly on a single component such as moral reasoning or an undesirable outcome such as cheating. Furthermore, Lemming (1993) indicated that thought and research on character development is atheoretical, which hampers progress in developing effective character development programs. However, there are a number of theoretical approaches and models (e.g., Berkowitz, 2002; Likona, 1991) that have been proposed for conceptualizing the construct of character and guiding character development programs. Common to many of these theoretical approaches and models are two facets: moral reasoning and moral excellence (e.g., virtues such as integrity, selflessness, honesty, etc.).

As pointed out by Walker and Pitts (1998), contemporary moral psychology models (e.g., Kohlberg, 1981, 1984; Eisenberg, 1995; Gilligan, 1982; Shweder, Mahapatra, & Miller, 1987) have focused more on moral reasoning and paid little attention to the construct of moral excellence. The construct of character or moral excellence is to a large extent based on virtue ethics as originally described by Socrates and Aristotle (Born & Megone, 2019). This is reflected in an individuals' character-related traits and values. Hendrix, Barlow, and Luedtke, (2004) presented research with two instruments to measure the character values of individuals. One instrument, *Character Assessment Rating Scale* consisted of a 12-point scale for rating character traits of self and others. The other instrument *Behavioral Desirability Scale* (BDS) consisted of 65 items to measure character-related values (Hendrix, Born, &

ABSTRACT

There is emerging interest and scholarship around the world in character development. Many programs in schools and applied settings are evolving to intentionally develop character. Considerable research work has focused on a single component, moral reasoning" and undesirable behavioral measures such as "cheating." Much of the other research completed in this area has focused on "moral excellence" yielding desirable outcomes such as integrity, selflessness and conscientiousness. This study investigated whether or not moral reasoning is significantly related to moral excellence. Using two separate populations of participants, research results establish that "moral reasoning" and "moral excellence" are two distinctive facets of the construct of "moral maturity.

Hopkins, 2015; Born, Hendrix, & Pate, 2017). The BDS items formed four factors: selflessness, integrity, spiritual appreciation, and conscientiousness. Due to spiritual appreciation not being as strong a factor as the other three it was removed in later research to form BDS version two (BDS2) made up of 50 items.

Ones, Viswesvaran, and Schmidt (1993) in a large-scale meta-analysis found that integrity tests predicted both job performance and counterproductive behaviors on the job such as disciplinary issues, theft, and absenteeism. Looking over these tests they concluded that a common factor seems to be conscientiousness. Conscientiousness is one of the factors of the BDS, therefore it appears that the BDS is measuring a construct similar to those in integrity tests.

Moral reasoning has been frequently measured with the *Defining Issues Test* (DIT); Rest, Narvaez, Bebeau, & Thoma, 1999). The DIT is based on Lawrence Kohlberg's cognitive-developmental theory of ethical judgment (Narvaez, 2019). Kohlberg used a time-consuming *Moral Judgment Interview* to assess moral development. Later, James Rest and colleagues developed a survey called the DIT to assess Kohlberg's

moral development stages or schema. The DIT provides three stages or schema (Narvaez, 2019). The lowest level of moral reasoning is the *Personal Interest Schema* where a person is primarily interested in his or her personal welfare. The next level is the *Maintaining Norms Schema* where a person considers law and authority important in upholding social order. The highest level of moral reasoning is Postconventional reasoning. Postconventional reasoning involves not accepting laws blindly, as would be the case in the Maintaining Norms Schema, but evaluating them in order to ensure they provide society-wide benefit (Narvaez, 2019). Since the DIT is based on Kohlberg's developmental model, it is understandable that research has focused to a large extent on student moral reasoning in educational classroom settings. The DIT is basically a measure of the development of concepts of social justice and has been found to be predictive of political attitudes and political choices (Bebeau & Thoma, 2003).

Moral reasoning or cognitive understanding of what is moral does not mean it results in moral excellence, i.e., one's value system (virtues) and moral behavior (Vance, 2016). Narvaez (2018) indicated that moral values develop by early experiences which influence

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later moral orientations and behavior. Moral maturity is presumed to be a broader construct than moral reasoning. It includes moral reasoning and moral excellence (i.e., ethical or moral values, and ethical or moral behavior). The primary difference between moral reasoning and moral excellence is that moral reasoning deals with an individual's thought processes while moral excellence deals with one's values and behaviors. These moral values or virtues included in this research include integrity, selflessness, and conscientiousness.

The purpose then, of this research is to establish whether or not moral reasoning and moral excellence in terms of moral values (i.e., virtues) are two different components of the construct of moral maturity. This therefore leads to the following hypotheses.

Null Hypothesis:
H_o: Moral reasoning (as measured by the DIT) is significantly related to moral excellence (as measured by the BDS).

Alternate Hypothesis:
H_a: Moral reasoning (as measured by the DIT) is *not* significantly related to moral excellence (as measured by the BDS).

Study 1

Method

Participants. Participants consisted of 482 United States Air Force Academy (USAFA) first classmen (i.e., seniors) of which 81 percent were male and 19 percent female. This gender split approximated the cadet population at that time. The research protocol approved by USAFA provided for cadets in the incoming class and first classmen to be selected as participants in this research. Only the first classmen were used in this particular research effort due to the DIT only being administered to first classmen while the BDS was administered to both groups. The institution provided the group setting for the DIT and BDS to be administered.

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Measures

Moral Excellence. Moral excellence was measured by the Behavioral Desirability Survey version 2 (BDS2) which consisted of three factors: selflessness, integrity, and conscientiousness. BDS items ranged from 1 (extremely undesirable) to 9 (extremely desirable). Hendrix, Barlow, and Luedtke (2004) provide validation data for the BDS and Barlow, Jordan, and Hendrix (2003) replicated the validation with a different sample and location. Throughout its existence, USAFA has focused on developing leaders of character. Central to this mission are the Academy's core values of Integrity First, Service before self, and Excellence in all we do. In 1997, the U. S. Air Force adopted these and provided them in its 1997 Air Force Core Values Handbook. It is interesting that the three BDS factors are basically the same as United States Air Force Academy's and U. S. Air Force's three core values.

Moral Reasoning. Moral reasoning was measured with the *Defining Issues Test Version 1* (DIT1).

Postconventional reasoning is established by two scores, the *P* Score and the *N2* Score. Factors included in the analyses were those for the *Personal Interest Schema* (interest), *Maintaining Norms Schema* (norms), and *Postconventional Schema* (*P* score, and *N2* score)[1]. The DIT *P* score has been the most used measure to assess moral reasoning stages. The *N* score was added later and was also designed to measure moral reasoning stages but where the *P* score only used rankings of moral dilemmas the *N* score included both rankings and ratings.

Procedure

Participants were administered two surveys that were linked by numerical code so responses would be anonymous. The two surveys were the Behavioral Desirability Survey (BDS2) and the Defining Issues Test (DIT1). One of the co-authors of this research (Hendrix) administered both instruments to cadets during class periods. The institution established a

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1 More information on this instrument is available from the authors.

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time for cadets to be in an auditorium where both instruments were administered by the same co-author.

Results

The means, standard deviations, correlations, and coefficient alpha scale reliability indices for Study 1 are provided in Table 1. Hypotheses Ho and Ha, were tested with correlational analysis and factor analysis. A review of the correlations between the BDS factors of Selflessness, Integrity, and Conscientiousness with those of the DIT's Interest, Norms, *P* Score, *N2* Score indicate small (i.e. .10-.20) but significant relationships primarily between the BDS factors and the *P* Score and *N2* Score.

Table 2 provides the factor analysis results which show that the BDS scales load as one factor while the four DIT measures load as two different factors. That is, the BDS scales were found to be highly correlated indicating they were measuring one construct or factor that can be considered a measure of moral excellence. The DIT however had two sets of items where the items within each set were highly correlated but not correlated with the other set.

Study 2

Method

Participants. Study 2 was similar in approach to Study 1 with several modifications: occurred in a civilian

Table 1

Means, Standard Deviations, Correlations of USAFA Cadet Scores

Variable	M	SD	1	2	3	4	5	6	7
1. Selflessness[a]	7.59	.73	1.00						
2. Integrity[b]	7.09	.85	.53**	1.00					
3. Conscientious[c]	7.56	.72	.75**	.66*	1.00				
4. Interest[d]	28.97	18.64	-.05	.10	-.08	1.00			
5. Norms[e]	36.62	17.95	.00	.20**	.06	.26**	1.00		
6. P Score[f]	34.67	19.66	.16**	.12*	.09	.17**	.20**	1.00	
7. N2 Score[g]	38.09	21.85	.16**	.16**	.10*	.12**	-28**	.73**	1.00

[a]*N* = 482. [b]*N* = 482. [c]*N* = 482. [d]*N* = 806. [e]*N* = 806. [f]*N* = 806. [g]*N* = 806.
*p < .05, **p< .01

Table 2

Factor Analysis of USAFA Cadet Scores

	Component		
	1	2	3
Selflessness	.854	.115	-.073
Integrity	.834	.064	.088
Conscientious	.924	.019	-.022
Interest	-.126	.049	.788
Norms	.129	.167	.779
P score	.060	.922	.104
N2 score	.096	.917	.133

educational environment, with graduate students, and used the more recently developed DIT2 rather than DIT1. The DIT2 is structured and administered the same as the DIT1, however we determined the prompt statements were much more current and more appropriate for our research approach. This study's participants consisted of 41 Harvard University first year master's students enrolled in the Harvard Kennedy School ethics subject, *Responsibilities of Public Action*. Approximately 50% were males and 50% females, while approximately 70% were US students and 30% international students. This is sample is representative of the total master's student population in this program.

Measures

Moral Reasoning. Moral Reasoning was measured using the DIT2. As noted in Study 1, the DIT is based on Kohlberg's theory of moral development and is a device for activating moral schemas (to the extent that a person has developed them) and for assessing them in terms of "importance" judgments. Specifically,

this research used the streamlined version of the DIT – the DIT2 and was paper based. Participants were tasked to read five moral dilemmas, then rate and rank corresponding statements in terms of their moral importance. Participants rated and ranked items higher the more they made sense and resonated with their preferred schema. Conversely, when participants encountered items that did not make sense or seemed too simplistic or unconvincing, a lower rating was given. The DIT2 was administered to students in collaboration with the Center for the Study of Ethical Development at the University of Alabama.

Moral Excellence. Moral Excellence was measured using the BDS2. This scale measures individual character-related values. As noted in Study 1, the BDS scale ranges from 1 *extremely undesirable* to 9 *extremely desirable* and contains three subscales: selflessness, integrity, and conscientiousness.

Procedure

The DIT2 moral reasoning instrument was given to students in class under guidance from a trained independent tutor and not in the presence of the research team or class professor. Students were free to either participate in the DIT2 paper-based survey or not to participate, without prejudice. If students chose to participate, they were provided with a unique identification number that was used on the survey rather than their student name, ensuring anonymity throughout the study.

The BDS moral excellence survey was provided to students online. Students were free to participate in the BDS on their own time on a specified day. Students entered the BDS via a link online and securely entered the test via their unique identification number, ensuring anonymity once again. This was similar to the paper BDS administered in our first study, yet we administered in this study on-line for student convenience and to make data collection more efficient.

Results

The means, standard deviations, correlations, and coefficient alpha scale reliability indices for Study 2 are provided in Table 3. As in Study 1, Hypotheses H^0 and H_a, were tested with correlational analysis and factor analysis. A review of the correlations between the BDS factors of Selflessness, Integrity, and Conscientiousness with those of the DIT's Interest, Norms, P Score, N2 Score indicate no significant relationships between the BDS and DIT measures.

Table 3

Means, Standard Deviations, Correlations of Harvard Student Scores

Variable	M	SD	1	2	3	4	5	6	7
1. Selflessness[a]	7.50	.64	1.00						
2. Integrity[b]	7.01	.56	.66**	1.00					
3. Conscientious[c]	7.32	.66	.74**	.48**	1.00				
4. Interest[d]	18.84	20.12	.15	.04	.06	1.00			
5. Norms[e]	29.47	21.05	.17	.05	-.32	.49*	1.00		
6. P Score[f]	57.28	19.19	-.06	-.10	-.15	.13	-.19	1.00	
7. N2 Score[g]	57.17	16.75	-.09	-.12	-.23	.12	-.02	.96**	1.00

[a]N = 41. [b]N = 41. [c]N = 41. [d]N = 26. [e]N = 26. [f]N = 26. [g]N = 26.
*$p < .05$, **$p < .01$

Table 4

Factor Analysis of Harvard Student Scores

	Component		
	1	2	3
Selflessness	.921	-.004	.159
Integrity	.813	-.043	.010
Conscientious	.853	-.133	-.042
Interest	.076	.158	.844
Norms	.009	-.144	.877
P score	-.049	.993	-.043
N2 score	-.110	.976	.058

Table 4 shows that the factor analysis results are effectively the same as those for Study 1. That is, the BDS scales load as one factor while the four DIT measures load as two different factors.

Despite a different educational environment and level of education and the DIT2 opposed to the DIT1, this result is consistent with the findings in Study 1 and confirm our hypothesis that the DIT and BDS are distinctive measures and add uniquely to moral maturity.

Results of both Study 1 and 2 support the hypothesis (H_a): Moral reasoning (as measured by the DIT) is not significantly related to moral excellence (as measured by the BDS). These results support that the DIT and BDS measure different constructs.

Discussion

The DIT was designed to measure moral reasoning and as noted by Bebeau and Thoma (2003) it is a measure of the development of concepts of social justice. One of the major threats to the DIT's validity is its political content. Rest and colleagues (1999) indicate that political preferences are highly correlated with the DIT and they suggest that morally mature people tend to favor liberal political ideology. However, since the DIT is based on Kohlberg's (1984) approach to morality, this suggests that there should be a positive relationship between the DIT score and morality.

Scoring high on either moral reasoning or moral excellence suggests a propensity to exhibit moral behaviors. This is significant since as the two are basically unrelated, it would seem reasonable to conclude that the combination of the two would be more predictive of moral behavior than either one of them alone, and better represent the larger construct of moral maturity.

Future research investigating the effects of both the DIT and BDS within business and other organizational settings would prove beneficial in adding to the understanding of the relative contribution of each in predicting moral behavior.

Another future research consideration is the addition of organizational outcome measures that could be related to measures of moral reasoning (DIT) and moral excellence (BDS). Including them in future research would help in better understanding the utility of the BDS and DIT in predicting desirable and undesirable organizational outcomes. Inclusion of integrity tests would also add to our knowledge of the relationship of integrity tests to the BDS and DIT. That is, if they share similar dimensions and the extent each predicts organizational outcomes both positive and negative.

The importance of research such as this is it provides clarity between some of the many constructs that get talked about with respect to character. Understanding the relationships between these constructs or lack of relationship helps us to better clarify what is meant by morality, character and their relationship to other constructs like leadership.

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