

Surveying the Relationship of Moral Foundations and Cultural Intelligence with Grit of the Teachers of Special Children Schools in Birjand City

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ABSTRACT— Moral foundation is one of the efficient tools to carry out the tasks in an efficient way. The present study, therefore, is aimed at surveying the relationship of moral foundations and cultural intelligence with grit of the teachers of special children schools in Birjand City. Study group was comprised of 92 teachers of special children schools in Birjand City in 2014, who were selected through cluster random sampling. For data gathering, Ang et al.'s (2004) intelligence inventory, Duckworth et al.'s grit scale (2007), and Haidt and Graham's moral foundations inventory (2007) were used. The data was analyzed using Pearson's Correlation, and regression analyses. The findings showed a relationship between the elements of moral foundations and grit and between the elements of cultural intelligence and grit. In addition, the results showed that there was a relationship between the elements of cultural intelligence and moral foundations.

KEYWORDS: Perspective Translation, Safin Event, Safin event in history, Nasr bin Mozahem, Karim Zamani.

Introduction

One of the phenomenon that people deal with it in their life is stress or mental pressure. Despite technological advances that have facilitated our lives, people still have to deal with stressors. Knowing that destructive stresses decrease one's performance with regard to personal, social, and organizational aspects, a great deal of research works have been carried out to shed light on techniques and skills to improve grit. (Iezadi, 2010) Different psychological approaches have tried to introduce frameworks for adaptive resistance. In this regard, viewpoints of therapists such of Kobasa are notable, who introduced the concept of hardiness to show that one of the effective variables on mental pressures is their characteristics including grit (Iezadi, 2010). According to the experts, patience (grit) is a tool to attenuate vulnerability of individuals and preserve mental peace. There are several variables that may influence grit and among many, cultural intelligence is one to notice. Cultural intelligence reflects individual's ability to extent effective management in a group with different cultures (Ang and Dyne, 2008). Individuals with high cultural intelligence are able to progress and adapt in a new and different cultural ground while preserving their cultural identity. (Early and Ang, 2003) Because intellectual intelligence refers to one's ability to demonstrate proper behaviors in situations with cultural variety, it is considered as one of the main elements in assessing cultural merits. One of the variables that influence grit are moral foundations. Ethics is a set of natural and spiritual traits that emerge as behaviors and deeds that are rooted in one's inner moods (Deilami and Tabibi, 2011). Moral tensions are complicated decisions that are deep rooted in the life. (Akbari et al., 2011) Given the above introduction, one may ask "do the cultural intelligence and moral foundations predict grit?"

Methodology

The present study is a correlative work with study population comprised of all teachers in special schools located in Birjand City in 2014 (n = 120). Based on the size of study population and Kerjegy and Morgan's table (1970), sample group size was obtained 92 and to select the participants, simple random sampling was used. To analyze the data descriptive statistics (frequency, percentage, and mean SD) and inferential statistics (Pearson correlation and regression) were used. (Sig. 0.05)

Research tools

Cultural intelligence inventory

Cultural intelligence inventory consists of 20 questions based on four factors (i.e. strategy or meta-cognition, knowledge or cognition, motivational, and behavioral). Cronbach's alpha of the four factors was obtained 0.76, 0.84, 0.76, and 0.83 respectively. The statements are scored based on Likert's seven-point scale (completely agree = 7, completely disagree = 1). The inventory measures one's ability to establish good communication in different cultures.

Grit scale

The scale is designed to measure persistence or grit of the respondent. It consists of two subscales of persistency of interests (6 statements) and persistence as with endeavor (6 statements) and it is designed as a self-report scale. The participants need to choose from 5 alternatives designed based on Likert's 5-point scale (not like me = 1, 5 = very like me). It is notable that half of the grit scale is score inversely. To obtain the final score, sum of score is divided by 12; the higher the score the higher the grit and vice versa.

Moral foundation questionnaire (MFQ30)

With 30 questionnaire, MFQ30 measures the five dimensions of morals including main and foundational aspects of morals in different cultures and different ethnical, racial, and language identities. The subscales are care and harm, fairness, in group loyalty, authority respect, and purity and sanctity.

Question

Are cultural intelligence and moral foundations significantly related with grit?

Hypotheses

1. Moral foundations (care and harm, fairness, in group loyalty, authority respect, and purity and sanctity) and cultural intelligence (meta-cognition, cognition, behavioral, motivational) are related with grit in teachers of special children schools.
2. There is a relationship between cultural intelligence (metal-cognition, cognition, behavioral, motivational) and grit (persistence as with endeavor, stability of interests, and persistency) in teachers of special children schools.
3. There is a relationship between moral foundations (care and harm, fairness, in group loyalty, authority respect, and purity and sanctity) and grit (persistence as with endeavor, stability of interests, and persistency) in teachers of special children schools.

Table 1- Mean and SD of the participants with regard to cultural intelligence

SD	Mean	Max	Min	N	Cultural intelligence
4	19	28	5	92	Meta-cognitive knowledge
9	19	49	6	92	Cognitive knowledge
5	17	28	7	92	Motivational knowledge
8	22	35	6	92	Behavioral knowledge
21	79.02	124	34	92	Total cultural knowledge

As listed in the Table above, among the elements of cultural intelligence, behavioral knowledge and motivational knowledge obtained maximum and minimum mean scores respectively.

Table 2- Mean and SD of participants with regard to grit

SD	Mean	Max	Min	N	Grit
4	17	27	7	92	Stability of interests
3	24	30	15	92	persistence
6	42	56	31	92	Total grit

As listed in the table above, mean score of stability of interests, persistence, and girt are 17±4, 24±3, and 42±6.

Table 3- Mean and standard deviation with regard to moral foundations

SD	Mean	Max	Min	N	Moral foundations
3	21	30	11	92	Care and harm
3	24	30	14	92	Fairness
2	23	30	18	92	In group loyalty
3	24	30	14	92	Authority respect
2	24	30	15	92	Purity and sanctity
11	118	142	73	92	Total moral foundation score

Table 4- Regression analysis to predict grit based on the aspects of cultural intelligence and moral foundations

r^2 modified	Estimate SD	r^2	R	Model
0.17	5.83	0.19	0.47	1

As listed in the table above, with modified $r^2 = 0.17$, the aspects of cultural intelligence predicts 17% of variance of grit.

Table 5- ANOVA for predicting grit based on the aspect of cultural intelligence and moral foundations

Sig.	F	Mean squares	DF	Sum squares	Variable
0.001	10.84	357.42	2	714.84	Regression
		34.09	89	3034.14	Remainder
			91	3748.97	Total

As listed in the table above, value of F (10.84) is significant ($p < 0.05$). That is, there is a relationship between the elements of cultural intelligence and moral foundations and grit can be predicted based on cultural intelligence and moral foundations.

Table 6- Standard and non-standard beta-coefficient to predict grit based on the aspects of cultural intelligence

Sig	T	Standard error coefficient	Non-standard coefficient		Model
		B	Sd	B	
0.001	6.85		6.15	42.15	Fix value
0.001	4.56	0.48	0.03	0.14	Cultural intelligence
0.10	-1.63	0.17	0.075	-0.09	Moral foundations

As listed in the table above, with $t > 2$ and ($p < 0.05$) for cultural intelligence, there is a relationship between predictor variable (cultural intelligence) and dependent variable (grit). No relationship was found between moral foundation and grit.

Table 7- Regression analysis to predict grit based on the aspects of cultural intelligence

r^2 modified	Estimate SD	r^2	R	Model
0.18	5.79	0.22	0.46	1

As listed in the table above, with modified $r^2 = 0.17$, the aspects of cultural intelligence predict 18% of variance of grit.

Table 8- ANOVA for predicting grit based on the aspects of cultural intelligence

Sig.	F	Mean squares	DF	Sum squares	Variable
0.001	6.12	206	4	824	Regression
		33.32	87	2924.98	Remainder
			91	2748.97	Total

As listed in the table above, value of F (6.12) is significant ($p < 0.05$). That is, there is a relationship between the elements of cultural intelligence and grit, and the latter can be predicted based on cultural intelligence elements.

Table 9- Standard and non-standard beta-coefficient to predict grit based on the aspects of cultural intelligence

Sig	T	Standard error coefficients	Non-standard coefficients		Model
		β	Sd	B	
0.001	12.02		2.78	33.51	Fixed value
0.77	0.27	0.03	0.15	0.04	Metal-cognitive knowledge
0.98	0.01	0.002	0.07	0.001	Cognitive knowledge
0.82	0.21	0.02	0.14	0.03	Motivational knowledge
0.003	3.11	0.43	0.10	0.33	Behavioral knowledge

As listed in the table above, with $t > 2$ and ($p < 0.05$) only for behavioral knowledge variable, there is a relationship between predictor variable (cultural intelligence elements) and dependent variable (grit). No relationship was found between meta-cognitive knowledge, cognitive knowledge, and motivational knowledge, and grit.

Table 10- Regression analysis to predict grit based on the aspects of moral foundations

r^2 modified	Estimate SD	r^2	R	Model
0.15	5.90	0.20	0.44	1

As listed in the table above, with modified $r^2 = 0.15$, the aspects of moral foundations predict 15% of variance of grit.

Table 11- ANOVA for predicting grit based on the aspect of moral foundations

Sig.	F	Mean squares	DF	Sum squares	Variable
0.002	4.28	149.64	5	748.21	Regression
		34.89	86	30000.77	Remainder
			91	3478.97	Total

As listed in the table above, value of F (4.28) is significant ($p < 0.05$). That is, there is a relationship between the elements of moral foundations and grit, and the latter can be predicted based on elements of moral foundations.

Table 12- Standard and non-standard beta-coefficient to predict grit based on the aspects of moral foundations

Sig	T	Standard coefficients	Non-standard coefficients		Model
		β	Sd	B	
0.000	6.74		6.36	42.89	Fixed value
0.18	1.34	0.16	0.20	0.27	Care and harm
0.23	1.19	0.15	0.26	0.31	Fairness
0.04	-2	-0.26	0.28	-0.56	In group loyalty
0.003	3.05	0.42	0.27	0.84	Authority respect
0.006	-2.86	-0.37	-0.30	-0.86	Purity and sanctity

As listed in the table above, with $t > 2$ and ($p < 0.05$) for the variables in group loyalty, authority respect, purity, and sanctity, there is a relationship between predictor variable (moral foundations intelligence elements) and dependent variable (grit). No relationship was found between fairness, care and harm, and grit.

Discussion and conclusion

The relationship between the effect of moral foundation and cultural intelligence on grit was examined. As shown, there was a relationship between one element of cultural intelligence (behavioral knowledge) and grit; and there was no relationship between the elements meta-cognitive knowledge, cognitive knowledge, and motivational knowledge and grit. Dayn and Ang (2007) measured cultural intelligence and its effect on adaptability, stability, and decision making. They reported that cultural intelligence was directly and significantly related with the variables and affected cultural judgment and decision making abilities. Moreover, the results showed that the elements of moral foundations (in group loyalty, authority respect, and purity and sanctity) were related to grit; and the elements care and harm and fairness were not related to grit. To the best of our knowledge there was no similar work on the relationship between moral foundations and grit.

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