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Critical Thinking and Its Relationship with Social Tolerance among Students

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Abstract

The present study aimed to explain the relationship between critical thinking and social tolerance among the students of the faculty of psychology and educational sciences of Zahedan University. The study methodology was descriptive-correlational. 294 students were selected from the faculty of psychology and educational sciences of Zahedan University in BA and MA courses by the stratified sampling method by Morgan Table. For data collection, a researcher-built questionnaire of social tolerance and the critical thinking questionnaire by Ricketts were applied and the reliability of these two questionnaires by Cronbach's alpha was 0.84 and 0.85, respectively. The results of the correlation test showed that there was a positive and significant relationship between critical thinking and political, ethnic, nationality toleration, toleration against coverage and relationship and total toleration. The stepwise regression analysis showed that critical thinking dimensions explained the variance of social tolerance.

Keywords: *social tolerance, ethnic toleration, political toleration, religious toleration, critical thinking, innovativeness, engagement*

Introduction

Human communities define their identify by making themselves different from others. This is a natural tendency creating positive results including respect to the variety of people. This tendency can have negative outcomes as enmity or hate.

This occurs when a group considers itself better than another group. For example, when some communities imagine that they are selected by God, history or destiny. History has shown that each group, religion, ideology or culture can have reality, beauty and good but there is no superior religion or culture. The civil political conflicts and social turmoil in many countries in which racism, mass destruction and war exist show that peace, social toleration, formation of such culture are of great importance for the human being, family, organization, government and society. Human salvation is in the culture of peace and social tolerance (Agius, E., & Ambrosewicz-Jacobs, 2003, 6).

The term tolerance in European languages is derived from Latin "Tolero" as bearing, allowing and surviving (Fathali, 1999, 11).

Galeotti (2001) considers toleration as a social virtue among people and groups with different views and lifestyles as living in a unified community. According to Forst, the general concept of toleration is explained by six features: 1- there is a toleration ground, toleration has one group, as toleration in family, friends, religious society, citizens, 2- What is tolerated is considered as false behavior or belief and this is non-acceptance. 3- Beside non-acceptance, toleration requires a component of acceptance not eliminating negative evaluation and positive reasons are considered. 4- The concept of toleration includes the ideas of toleration range. These ranges are defined when the rejection reasons are stronger than acceptance reasons. 5-Toleration cannot be based on obligation and it is based on will of the one tolerating. 6-Tolerance as an action should be different from tolerance as an attitude. He considers toleration as the action of tolerance and tolerance as a tolerance attitude (Forst, 2003:72).

Tolerance is considered as a multi-dimensional concept among scholars, e.g., Vogt divided it into three groups: political, ethical and social tolerance. Political tolerance is toleration to the acts of people in public space or respecting the civil freedom of others. Ethical tolerance is toleration to the acts of others in the private space and Vogt refers to social tolerance as toleration to different states of the human being, the innate characteristics such as the color of skin, and gender, and what is achieved during life through the socialization process as speaking another language (Phelps, 2004:26).

To explain tolerance in different classes of society and to review the effective factors of social behavior, various studies have been conducted. Many researchers have studied the relationship between social, cultural factors, individual, family variables and psychology and tolerance. For example, in his MA thesis, Alizadeh (2008) evaluated the relationship between social tolerance and cultural capital among people aged 15–50 in Hamedan city. Sharepoor et al. (2009) studied the

relationship between social capital and tolerance among students. The study "Evaluation and assessment of social tolerance and effective social and cultural factors" investigated the effect of some components as persistence, self-expression value, social trust, security, individualism on social tolerance (Moghtadai, 2010). Golabi and Rezayi (2013), in their study, evaluated the relationship between social participation and social tolerance. Others evaluated the effect of religion on social tolerance (Serajzade et al., 2004; Vermeer, 2012) and another study evaluated the relationship between social tolerance dimensions and personality traits (Hossein-zade et al., 2015).

Among other factors affecting the social tolerance of individuals, one can consider their critical thinking. The association of critical thinking has defined this thinking as the process of thoughtful order, active and skillful conceptualization, application, analysis, composition and evaluation of collected data or generated by observation, experience, reasoning or communication as the guidance for theory and act (Snyder, 2008).

Popil (2011) stated that people with critical thinking had some features of acceptance of new ideas, flexibility, tendency to change, innovation, creativity, analytical nature, courage, tolerance, enthusiasm, energy, risk taking, being wise, experienced and a good thinker.

Like critical thinking, tolerance is based on flexibility, accepting new opinions and perception of the opinions of others, so we can expect the people with high critical thinking, encounter as logical the issues and have lower ethnical, religious, political and social biases and this type of thinking can effect social tolerance.

There is no local or international research on the relationship between critical thinking and social tolerance. Only in some studies the close components are evaluated. For example, we can consider social adaptation as associated with social tolerance. Social adaptation is a process enabling people to perceive and predict the behavior of others, control their behavior and regulate their social interactions (Slomowski & Dunn, 1996.) By training critical thinking to an experimental group of 40 people, Alikhani and Aghayi (2015) found that at the post-test stage between the experimental and control groups, there was no significant difference in social adaptation. At the follow-up stage, it was observed that social adaptation of the experimental group being trained in critical thinking was higher than that of the control group. Other variables close to social tolerance are agreement and openness to experience in the five-factor model of personality by McCrae, R.R., & Costa (1987). In this model, agreeableness is defined by self-sacrifice and people with this attribute are humble, friendly, empathic and are agreeable and flexible in encountering life events. Openness to experience is associated with wisdom,

openness to new thought, cultural interest, educational feedback and creativity (Howard, P., & Howard, 1998). Both of these attributes can be associated with the features of a person characterized by tolerance. In this relation, some research on personality traits and critical thinking show that openness to experience and agreeableness have positive and significant associations with critical thinking (Soltangharayi and Alayi, 2011; Ghafari et al., 2012, Barhaghtalab, 2013; Ghorbani Read and Isfahani asl, 2015). In the study of Soleimanifar et al. (2015), openness to experience effected prediction of critical thinking.

As already said, the effectiveness of critical thinking on social tolerance has not been considered yet. The presented study attempted to find whether or not there was a relationship between critical thinking and social tolerance of students, and whether critical thinking was a predictor of social tolerance in students.

Study methodology

The study methodology was descriptive-correlational. The study population comprised students of the faculty of psychology and educational science of Sistan and Baluchestan University in Zahedan (927 students) in the second semester of the 2016/2017 academic year. Based on Morgan Table, the sample size was 274. To achieve confidence and accuracy, 50 more questionnaires were distributed and the sample size amounted to 294.

To collect the required data, the following measures were used:

The questionnaire of critical thinking of Ricketts (2003): This scale consists of 33 items and 3 sub-scales. The first part (question 1–11) is used to evaluate innovativeness, the second part (question 12–20) measures maturity and the third part (question 21–33) includes an engagement scale, and the subjects respond based on a five-item Likert scale. The scoring is as follows: 1=Strongly disagree, 2=Disagree, 3=No idea, 4=Agree, 5=Strongly agree. The scores ranging 33–66 mean that critical thinking is weak. Scores 66–99: Critical thinking is average. Score above 99: Critical thinking is strong.

In the study of Pakmehr et al. (2013), the results of content validity, construct validity, factor analysis and internal consistency test and split half are good. The Cronbach alpha coefficient for the total sample was 0.68, for female subjects 0.65, and for male subjects 0.67. In this study, Cronbach's alpha coefficient was 0.85.

The researcher-built questionnaire of social tolerance: This questionnaire consists of 27 questions including tolerance to coverage and relationship (4 items), tolerance to women (4 items), ethnic tolerance (4 items), political tolerance (5

items), religious tolerance (4 items), tolerance to criminals (3 items) and nationality tolerance (3 items) as designed based on a five-item Likert scale.

To estimate the reliability of the questionnaire, content validity was used and it means the identification of reliability of indices through referring to experts in this field. In the presented study, the researchers dealt with the review of literature and opinions of experts and found that the indices in the questions of the questionnaire showed the semantic field of the studied concepts. To evaluate reliability, the questionnaire was given to 30 students. After completion, the questionnaires were coded, entered in SPSS software and their reliability was calculated with the use of Cronbach's alpha. The reliability coefficient of the questionnaire by Cronbach's alpha was 0.84, which is acceptable.

Results

To evaluate the relationship between critical thinking and social tolerance, the Pearson correlation test was used and the results are shown in Table 1.

Table 1. The results of the Pearson correlation coefficient of the dimensions of critical thinking and social tolerance

	Covering & relationship TOL	Women TOL	Ethnic TOL	Political TOL	Religious TOL	Criminals TOL	National TOL	Total TOL
Innovativeness	0.205**	0.057	0.237**	0.219**	0.084	0.018	0.275**	0.275**
Maturity	0.069	-0.031	0.110	0.072	-0.026	-0.053	0.022	0.048
Engagement	0.081	0.024	0.291**	0.292**	0.109	0.082	0.370**	0.300*
Critical Thinking	0.146*	0.025	0.265**	0.245**	0.076	0.027	0.288**	0.266**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

As shown in Table 1, there is a positive and significant relationship between innovativeness and tolerance to covering and relationship, ethical, political, national tolerance and total tolerance at the 99% level and correlation coefficients are 0.205, 0.237, 0.219, 0.275, 0.275, respectively. The maturity component has no

significant relationship with each of the social tolerance dimensions, but there is a positive and significant relationship between engagement and different types of ethnic, political, nationality and total tolerance with the correlation coefficients 0.291, 0.292, 0.370 and 0.300, respectively at the 99% level. Finally, there was a positive and significant relationship between critical thinking and tolerance to covering and relationship, ethnic, political, nationality and total tolerance, with the correlation coefficients 0.146, 0.265, 0.245, 0.288 and 0.266, respectively.

To find whether or not critical thinking and its components can predict students' social tolerance, stepwise regression was used.

Table 2. The results of the stepwise regression analysis of critical thinking and social tolerance

	Model	R	Adjust R2	SE	B	β	F	t	Sig.	
Total Tolerance	Engagement	0.300	0.087	0.120	0.647	0.300	28.984	5.384	0.000	
	Engagement	0.320	0.096	0.154	0.454	0.211	16.627	2.951	0.003	
	Innovativeness			0.155	0.310	0.142		1.994		
	Engagement	0.361	0.121	0.153	0.518	0.241	14.457	3.385	0.001	
	Innovativeness			0.170	0.534	0.246		3.139		0.002
	Maturity			0.207	-0.626	-0.207		-3.030		0.003

As shown in Table 2, the interpretation of the results is as follows:

First step: At this stage, the engagement variable is 0.65 and it means that one percent change in this variable can increase 0.65 of social tolerance. This variable is significant at the 99%, level. Also, the coefficient of determination (ADJ_R2) is 0.087, it which shows that the explanation power of social tolerance by this model is 8.7%.

Second step: In this step, the innovativeness variable is added. In this model, the engagement and innovativeness coefficients are 0.45 and 0.31, and it means that one percent change in each of the two components increased social tolerance as 0.45 and 0.31. The engagement variable is significant at the 99% level and innovativeness at the 95% level. Based on the adjustment coefficient of determination, the explanatory power is 9.6%.

Third step: In this model, based on the coefficients of engagement, innovativeness and maturity, one percent change in these components can increase 0.518, 0.534 and -0.626% of the social tolerance level. The significance level for all the variables is 99% in this model. In this step, the adjustment coefficient shows that the explanation power of the dependent variable is 12.1%.

Discussion and Conclusion

This study aimed to evaluate the relationship between critical thinking and social tolerance among the students of Sistan and Baluchestan University. The results show that there was a significant and direct relationship between total tolerance and critical thinking. This is because a person with critical thinking can bring order to data and information logically, associate them with other data and use them for decision making. The innovativeness dimension in critical thinking means intelligent curiosity to detect new realities and the maturity dimension means how aware a person is of the complexities of real issues and based on the recognition to the knowledge of self and others, how much he/she can accept the view of others. As stated before, a critical thinker has less bias against the different beliefs and cannot judge without thinking about the issues and can show more acceptance, flexibility and openness to different views.

Also, there was a positive and significant relationship between some dimensions of critical thinking and some dimensions of social tolerance. There was no relationship between tolerance to women, religious tolerance and tolerance to criminals with critical thinking and its components. This means that people do not use high levels of thinking, analysis or assessment in dealing with discrimination against women and other relevant issues and judge about some issues including: the significance of academic education for boys and girls, obedience of wife to her husband and the priority of employment of men in the case of low job offer based on the social-cultural grounds in which they live.

The lack of relationship between religious tolerance and critical thinking indicates that for the judgment of the issues relevant to religion, people do not use inference or critical assessment. Mostly, the majority of people are born into families already having their religion and they are familiar with religious issues earlier than with any type of education and as religious issues are trained with traditional methods and they do not respond well to religious criticism and curiosity, people do not learn to think in critical religious issues. For example, in Islam, thinking is of great importance, blind obedience is avoided and thinking and reasoning are invited in many verses and active methods and inquiry are not used to teach religion. They only learn to believe in their religion and if there are some problems in their minds, they attempt to find justification and reasons to keep their values and beliefs. The majority of people, without making any effort to select their religion, consider their primary religion as right and they think that the followers of other religions are deviated so they do not want to know about other religions as their goal is keeping their values and beliefs not their excellence.

Regarding the behavior towards criminals, many people delegate decision making and thinking about this item to law-making institutes and religious verdicts (in our country, the rules are extracted from it) and think less critically about the true or false nature of dealing with criminals. In recent years, in Iran, human rights groups attempt to forgive some criminals as those condemned with retaliation or those with high debt and this norm is gradually considered among people in society.

Other findings of the study revealed that critical thinking and its dimensions among students could explain social tolerance among them and this has great implications for our education system. According to Ernst, J. and Monroe (2006), the critical thinking skill is taught, and now that critical thinking can predict social tolerance, by teaching this skill in schools and universities, we can increase people's social tolerance and this is necessary in each society with a variety of cultures, tribes and religions.

Finally, with the development of the results of this study, we can say that by teaching critical thinking from early education years, social tolerance is increased and people can have less biased views to the issues and are open to different issues. Finally, we can say that the requirement of promotion of issues like tolerance is observing the rights of others and tolerating different views, planned formal and informal education at all levels of society and, above all, the social political system creating structures consistent with the public law, civil society and tolerance.

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