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Relationship between styles of humor and divergent thinking

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Abstract

The aim of the present study was to investigate the relationship between styles of humor and divergent thinking of Turkish 6th, 7th, and 8th grade students. Styles of humor were measured by Humor Style Questionnaire and divergent thinking was measured by Guilford's Uses Test. Two measurements were administered to 84 6th, 7th and 8th grade students. Using bivariate correlations among 4 styles of humor, fluency, originality, and creativity, it was found that aggressive humor style was negatively correlated with fluency, originality, and creativity index and self-defeating humor style was negatively correlated with fluency scores. These results were discussed in terms of the association of humor and divergent thinking.

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Keywords: Humor; divergent thinking; creativity; fluency; originality.

1. Introduction

According to Guilford's (1950, 1968) prominent theory Structure of Intellect, there are many distinct faculties but two of them were especially important for creativity: convergent and divergent thinking. Divergent thinking (DT) is an important element in creativity because it was considered as one indicator of creative potential (Runco, 1999). DT was defined as the ability to produce various responses (Guilford, 1968). When people are faced with a problem, divergent thinking lead various responses. It is also a kind of problem solving (Runco, 2007). There are four main qualities of divergent thinking: fluency, originality, flexibility and elaboration (Ziv, 1989). Many studies used the fluency and originality components. Fluency is the total number of the ideas, and originality is the infrequency of the ideas (Runco, 1999). Divergent thinking tests are the most commonly used instruments to estimate the potential of creative thought (Runco, 2007).

There are common traits among creative people. Some of these traits are positive and some others are negative. Sense of humor is one of the positive traits of creative people. People who have sense of humor are also have ability to take a childlike and playful approaches to problems (Davis, 1999). Koestler (1964) is the first author who talked about the creativity and humor relationship. O'Quin and Derks (1997) found a strong relationship between creativity and humor. There are also studies showing that alerting test takers toward humorous answers (such as instructions to be funny and a game-like environment rather than a test-like environment) may positively affect their creative scores

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(O'Quin & Derks, 1999). Torrance (1970) defined humor and playfulness as characteristics of creative people. Murdock and Ganim (1992) offered to see the humor as a subset of creativity. McGhee (1980) found that creativity ratings were significantly related with humor after the age of 6.

Martin, Puhlik-Doris, Larsen, Gray, and Weir (2003) defined four dimensions of humor which refer to four different functions of it in everyday life. These four dimensions focused on the interpersonal and intrapsychic functions of the humor in people's daily lives. According to them people use humor for two main functions: to enhance the self or to enhance the relationships with others. If the humor is used to enhance the self in a way that is tolerant and non-detrimental, it is self-enhancing humor. On the other hand, if it is used to detriment one's relationships with others, it is aggressive humor. The latter refers the hostile uses of humor. Likewise, if humor is used to enhance one's relationships with others in a self-accepting way, it is affiliative humor and if humor is used to detriment self, it is called as self-defeating humor.

The purpose of this study is to examine the relationship between four dimensions of humor and divergent thinking among Turkish 6th, 7th, and 8th grade students. This study is different in one way because it attempted to examine four dimensions of humor instead of taking it as one dimensional concept. Secondly, there are very few studies on the relationship between creativity and humor in Turkish population. Thus, the present study can fill some gaps in this area.

2. Method

2.1. Participants

The participants of this study were composed of 84 6th, 7th, and 8th grade students in Turkey. Participants were selected through employing a convenient sampling method. Age of participants ranged from 11 to 14.

2.2. Instruments

In this study a humor styles questionnaire and a divergent thinking measure were used to collect data.

Humor Styles Questionnaire. Different uses of humor in students' daily life was assessed by Humor Style Questionnaire developed by Martin, Puhlik-Doris, Larsen, Gray, and Weir (2003). The adaptation study of the questionnaire was carried out by Yerlikaya (2003). It is a seven-point likert-type scale and consists of 32 items. The scale is composed of four factors: affiliative humor, self-enhancing humor, aggressive humor, self-defeating humor. There were 11 reverse items in the scale. In the Turkish form of the scale, Cronbach alpha coefficient was found to be .82 for overall scale, and it changed from .32 to .75 for subscales. In the present study, the Cronbach alpha coefficient was found as .63 for overall scale, and it changed from .36 to .77 for subscales.

Divergent Thinking. The participants received a Uses Test to measure divergent thinking. The test asked participants "list uses for a brick." Such kind of tasks was developed by Guilford (1968) and has been used many times in the creativity literature. Fluency scores were calculated for each participant. Number of ideas given by the participant showed the fluency score of the participant. To calculate originality score of the each participant, number of unique ideas were used. To obtain creativity index for each participant, participants' originality and fluency scores were converted z scores and these z scores were summed for each participant. At the end, each participant has three divergent thinking scores: fluency, originality, and creativity index.

2.3. Procedure

84 participants received two measures in their classrooms. The purpose of the study was not explained until all data were collected and a debriefing was provided. The Humor Styles Questionnaire was presented first and after all students finished the questionnaire the divergent thinking measure was presented. Each administration was completed in one session lasting approximately 40 minutes.

3. Results

Means, standard deviations and correlation matrix of the variables were given in Table 1. The correlation matrix indicated that there were negative significant correlations between fluency and aggressive humor and fluency, originality and creativity index. There was also negative significant correlation between self-defeating humor and fluency.

Table 1. Means, Standard Deviations, and Bivariate Correlations of the Variables

Variables	M	SD	Self-Enhancing Humor	Affiliative Humor	Aggressive Humor	Self-Defeating Humor	Fluency	Originality	Creativity Index
Self-Enhancing Humor	36.95	9.17							
Affiliative Humor	38.70	7.20	.297*						
Aggressive Humor	30.32	8.17	-.08	-.263*					
Self-Defeating Humor	19.39	8.01	.439**	.073	.252*				
Fluency	9.30	8.34	.003	.068	-.281*	-.237*			
Originality	2.02	2.81	.152	.150	-.249*	-.144	.791**		
Creativity Index		1.89	.082	.115	-.280*	-.202	.946**	.946**	

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

Contribution of creativity index in explaining the humor were presented in Table 2.

Table 2. Regression Analysis Predicting Humor

	B	SE	β	p	R	R ²	R ² _{adj.}	F
Model					.178	.032	.015	1.89
1. Creativity	-2.07	1.51	-.18	.174				

Results indicated that regression coefficient were not significant for the model ($R = .178$, $R^2 = .032$, $R^2_{Adj.} = .015$, $F(1, 58) = 1.89$).

Secondly, a multiple regression analysis was conducted to explain the contribution of fluency and originality in explaining the humor (Table 3).

Table 3. Multiple Linear Regression Analysis Predicting Humor

	B	SE	β	p	R	R ²	R ² _{adj.}	F
Model					.289	.084	.051	2.60
1. Fluency	-1.02	.46	-.40	.032				
2. Originality	1.65	1.43	.21	.252				

Results of the multiple regression indicated that the combination of fluency and originality explained % 08 of the variance and the model is not significant ($R = .289$, $R^2 = .084$, $R^2_{Adj.} = .051$, $F(2, 57) = 2.60$).

4. Discussion

Unlike most of the studies in the literature which revealed that there is a positive correlation between creativity and humor (Davis, 1999; Koestler, 1964; McGhee, 1980; Murdock & Ganim, 1992; O'Quin & Derks, 1997; Torrance, 1970), the present study did not find a significant correlation between creativity index and self-enhancing, affiliative, and self-defeating humor. The only significant relationship of creative index is between aggressive humor. The present study found that there is a negative correlation between aggressive humor and creativity.

In the literature humor seen as a positive trait of creative people. Davis (1999) listed sense of humor one of the 15 positive characteristics of creative people. He defined sense of humor as: "one's ability to take a childlike and playful approach to problems (pp. 172)." It is obvious that such a definition of humor is a positive characteristic and its positive correlation with creativity is not confusing. However in the present study four different functions of humor was examined. Aggressive humor is negative side of humor. Unlike the overall definition of the sense of humor, aggressive humor cannot be defined as a positive characteristic of creative personality. Hence, the negative correlation between aggressive humor and creativity might be interpreted as opposed to existing literature, however, this finding provides literature a new look to the humor. Ziv (1989) argued that creativity is best fostered in a relaxed, positive environment. Unlike the positive sense of humor, aggressive humor related with hostility, anger and aggression, so it does not provide an enriched environment to creativity.

The relationship between creativity and humor cannot be examined without examining the effects of environment. According to Coser (1959) when a high-status people joke, they choose someone of lower status as the focus of the joke. For instance, teasing and mocking is very common in military to make individuals behave like soldiers (Romero and Cruthirds, 2006). In such circumstances people in authority use humor to define their status and power (Smeltzer and Leap, 1988). According to Romero and Cruthirds (2006) aggressive humor is highly related with this organizational outcome because it helps leaders to strengthen their position in the hierarchy and highly hierarchic environments are not supportive for creative thinking. This studies also support the negative relationship between creativity and aggressive humor.

5. Conclusion and Recommendation

The relationship between humor and creativity is one of the controversial issues in the field of creativity. Results of the present study showed that although the regression analyses are not significant, there are negative correlations between aggressive humor and creativity index, specifically fluency and originality. Aggressive humor can be defined as the use of sarcasm, teasing, ridicule to manipulate others (Puhlik-Doris, Larsen, Gray, & Weir, 2003). Results of these study can be useful for teachers to understand students' characteristics in terms of humor and creativity. School counselors also use the results of the study to develop preventive models against bullying among middle school students. Principals also use the results of the study to create a supportive environment for creativity in the school, because aggressive humor can cause problems in the school and such problems may inhibit creativity.

In light of the results of the present study, following recommendations can be suggested for further studies: The study can be replicated by a larger sample and extended to other age groups. Also, some other constructs which are related with both humor and creativity (e.g. intelligence, verbal ability, and personality) can be controlled for future studies.

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