

# Analyzing Interpersonal Problem Solving in Terms of Solution Focused Approach and Humor Styles of University Student

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## Abstract

In this study university students interpersonal problem solving approaches were investigated in terms of solution focused approach and humor styles. The participants were 773 (542 female and 231 male, between 17-33 years old) university students. To determine the university students' problem solving approaches "Interpersonal Problem Solving Inventory", to determine solution focused approaches "Solution Focused Inventory", and to determine humor styles "Humor Styles Questionnaire" were used. In data analysis, Pearson Product-Moment Correlation Coefficient technique was used to reveal the relation between solution focused approach and interpersonal problem solving approaches and also between humor styles and interpersonal problem solving approaches. Multiple Linear Regression Analysis technique was used to determine predictive power of the solution focused approach and humor styles on interpersonal problem solving approaches. According to the results of correlation analysis, significant relations were revealed between solution focused approach and problem solving approaches and also between humor styles and problem solving approaches. According to the regression analysis, solution focused approach and humor styles significantly predict all the problem solving approaches (problems in a negative way, constructive problem solving, lack of self-confidence, unwillingness to take responsibility, insistent-persevering approach). Discussion and suggestions were included within the results obtained.

**Keywords:** Interpersonal problem solving approaches, Solution focused approach, Humor styles

## 1. Introduction

People encounter various problems throughout their lives and it is possible that these problems arise in different forms and types. These problems in the lives of individuals can arise in personal, family and social settings. Interpersonal relationships are one of the most important types of these problems (Arslan, 2009). Human life also becomes meaningful with these problems and their solution (Ivey, Ivey and Simek-Morgan, 1993, Büyükkaragöz and Çivi, 1994). Heppner and Krauskopf (1987) describe interpersonal problem solving as the cognitive, emotional, and behavioral responses required to overcome the necessities stemming from his own and his environment. In addition, Heppner and Krauskopf (1987) considered problem solving as a competing process and regarded it as (1) the characteristics of the problem, (2) whether the person used the problem solving steps or not, and (3) the interaction of the person's personal characteristics. D'Zurilla, Nezu, and Maydeu-Olivares (2004) have similarly defined a problem-solving process as a cognitive-behavioral process in which a group, couple, or individual attempts to find effective solutions to the problems they face in their daily lives.

The problems that individuals experience show up in the social environment and can be solved so interpersonal problem solving and social problem solving can be considered as the same. The reason for the social qualification of problem solving is related to the reasons for solving the problems encountered in real life (Maydeu-Olivares and D'zurilla, 1996). D'Zurilla and Goldfried (1971) first introduced a social problem-solving model that extensively explains the orientation of individuals and the type of problem solving that they encounter when encountering problems in interpersonal relationships. This model was later expanded and revised by D'Zurilla and Nezu (D'zurilla and Nezu, 1982; D'Zurilla, 1990).

Social problem solving model consists of two dimensions: problem orientation and problem solving style. The problem orientation that started with the individual noticing the problem; it includes the expectations of the individual about the problem, the causal attributions and the part of the motivation where the problem is encountered (Arslan, Hamarta, Arslan and Saygın, 2010). Problem orientation may be positive, as individuals who can see themselves have sufficient resources to overcome the problems faced by the individual, or they may be negative as demonstrated by individuals who do not rely on their own abilities and skills (Nezu and Nezu, 2001). Problem solving styles consist of three dimensions; Rational problem solving, impulsive careless style, avoidant style. Those who adopt a rational problem-solving style have the ability to identify, apply and evaluate strategies that will solve the problem-solving steps correctly and reach the solution as they face a problem. Rational problem solving is a functional and consequent problem solving style (Eskin, 2014). Individuals in rational problem solving solve the problem; by identifying the problem, gathering information, determining solution options and deciding appropriate options (D'Zurilla and Goldfried, 1971). Individuals with rational

problem-solving skills have high self-confidence and self-esteem (Hamarta, 2009). According to Nezu and Nezu (2001), those who use impulsive-careless problem solving; focus on one or a few solutions when looking for solutions to their problems and they act on the thought that comes first to their minds. They evaluate solution options and possible results superficially. Those who try to solve potential problems using such solution strategies can not develop their own metacognitive skills. In addition, individuals using this style have a low tolerance to uncertainty. There is a tendency to move without thinking (Eskin, 2014). When those who embrace the avoidable problem-solving style encounter problems they do not attempt to solve the problem by exhibiting behavior in the form of postponement, addiction to others, inactivity (D'Zurilla, Nezu and Maydeu-Olivares, 2002).

Çam and Tümkaya (2007) have dealt with interpersonal problem solving as a structure in social problem solving. Based on the social problem solving model, they developed an Interpersonal Problem Solving Inventory to measure interpersonal problem solving approaches. They found that the factor analysis of these developed inventories resulted in five sub-dimensions of the Interpersonal Problem Solving Inventory. These are: Problems in a Negative Way, Insistent-Persevering Approach, Constructive Problem Solving, Lack of Self-Confidence, Unwillingness to Take Responsibility (Çam ve Tümkaya, 2007). The problems in a negative way is related to the individual's desperation in the face of the problem experienced in the interpersonal relationship, the focus on the negative side of the problem, the pessimism of the problem, and the feelings and thoughts felt when the problem is encountered. The insistent-persevering approach is a type of problem solving that is shown as an effort to insist that the individual can solve the problem by going to the problem he or she is facing. Constructive problem solving is associated with the feelings, thoughts and behaviors contributing to the effective and constructive solution of problems when individuals experience problems. Lack of Self-Confidence is the individual's inability to rely on his own skills and resources to solve problems. Unwillingness to Take Responsibility of the individual not to do what he or she needs to do in interpersonal relationships. The individual does not want to get involved in anything (Çam and Tümkaya, 2007).

Individuals should be able to see enough resources of their own to be able to solve their problems in a healthy way. A successful and healthy life is possible when the problems are solved in a functional way (Basmacı, 1998). While some of the reactions the individual has shown to solve the problem are influential, some are ineffective (Dora, 2003). When faced with a problem if the individual tries to examine the problem in detail to determine the method to reach the solution, he may miss out on the solution or may not see himself enough. Creating functional goals and achieving functional results without examining the problem faced by the individual may be possible to through a solution-focused approach.

The solution-focused approach avoids detailed analysis while seeking solutions to individual problems. It is a goal-oriented and future-oriented approach that deals with creating solutions from the problem (Grant, Cavanagh, Kleitman, Spence, Lakota and Yu, 2012). In order for individuals to be able to approach the events in a solution-focused way, their thoughts must be in this direction. Solution-focused thinking style focuses on the individual's resources, goals and ways of achieving them without focusing on the causes of the problems (Karahana and Hamanta, 2015). Problem-focused thinkers tend to look for what's on wrong way, and generally do not realize their sources. A solution-focused individual searches for what works in the face of problems and activates their own resources and potential (Jackson and McKergow, 2007). In a solution-focused approach, the individual is thought to be constantly changing and it is not expected that the problems experienced by the individual are permanent and always occur (Sklare, 2014). Problem-focused people are very concerned about the mistakes in their past and how they affect the time they are in. Solution-focused people on the other hand are future-oriented, and at the same time they allow individuals to be more optimistic about the future (Jackson and McKergow, 2007).

Solving the problems functionally will facilitate individual's adaptation of the social environment. Humor and its usage is also effective when the individual adapts to life. The individual uses humor to skillfully arrive at the top of difficult situations or problems (Thorson and Powel, 1991). According to the circle of goodness model by the characteristics of healthy people, problem-solving and humor are included in self-management. Each area of the circle of goodness is interrelated and affects the other one (Myers, Sweeney and Witmer, 2000).

Humor is an integral part of daily life in interpersonal relationships. Since ancient times, people have perceived some events that they see, hear and live as funny and have tried to find their reasons (Aşılıoğlu, 2016). Therefore humor has no qualifying meaning as a universally accepted one. According to Freud (2003), humor is a defense mechanism that helps to remove an individual from negative emotions. May (2009) stated that as a function of humor, it gives a different perspective to the individual's problems. According to Maslow (1970), using humor is an important feature of individuals who perform themselves. Alport (1961) sees humor as one of the main features of personality.

In general, the sense of humor is a person's ability to see, perceive and tell something ridiculous. In other words, this feeling is related to humor creation, humor entertainment, interpretation and understanding (İlhan, 2005). Having an improved style of humor is a general term that suggests it is an effective way for the

individuals to deal with the problems and tensions experienced by him/her (Yerlikaya, 2009). Humor has both cognitive and emotional elements in its structure. Some of the elements that make up humor are happiness and health, and others are related to different feelings such as aggression, disdain, ridicule (Martin, 2010). The way people use humor is classified as compatible and incompatible. Compatible humor-style includes participatory humor and self-improving humor. These humor styles help individuals to be good in their relationships and in themselves. Under the title of incompatible humor, there are aggressive and self-destructive humor styles. These incompatible humor styles do not create an entertainment for the individual as well as hurting the others (Martin, Puhlik-Doris, Larsen, Gray and Weir, 2003). The individual's self-view and self-evaluation are related to both the humor style and problem-solving skills (Traş, Arslan and Taş, 2011).

As can be seen from research on problem solving is related with self-esteem (Heppner, Reeder and Larson, 1983), locus of control (Saraçoğlu, Serin and Bozkurt, 2005), beliefs of social competence (Çelikkaleli ve Gündüz, 2010; Güneş, 2011), communication skill (Koç, Kılıç and Gül, 2015), self-efficacy levels (Yenice, 2011), stress coping skills (Totan and Kabasakal, 2012). From the explanations given above and researches, it is understood that the problems arising in the relations between the persons are affected by many areas in the life of the individual. It is possible for the individual to reach a functional result in the solution of the emergent interpersonal problems, by preparing himself for the solution. A solution-focused approach may be possible for individuals to prepare themselves for solving, to set goals for themselves, to see the problem as an element of self-development, and to trust in the forces that exist in them. There are studies showing that individuals' emotions, thoughts, and their reflection on daily life are influential in solving interpersonal problems (D'Zurilla, Chang, Nottingham and Faccini, 1998; Heppner, Reeder and Larson, 1983; Oğuztürk, Akça and Şahin 2011). While expressing individual feelings, thoughts, and trying to solve the problems they face, it can be expected to benefit from individual characteristics such as humor (Thorson, Powel, Sarmany-Schuller and Hampes, 1997; Traş, Arslan and Taş, 2011).

From this point of view, the purpose of this research is examining the interpersonal problem solving approaches of university students in terms of solution focused approach and humor styles.

## 2. Method

### 2.1 Participants

This research was conducted in accordance with the relational screening model. The study's universe is constituted by the students who are studying at the Faculty of Education, Theology and Science of Necmettin Erbakan University. The study group of the study is composed of 773 students who are studying at university. 542 female and 231 male students were participated in the survey. The students are between the ages of 17-33 ( $x = 21.20$  and  $Ss = 2.94$ ).

### 2.2 Instruments

*Interpersonal Problem Solving Inventory (IPSI)*: It was developed by Çam and Tümkaya (2007) in order to measure the interpersonal problem solving orientation and interpersonal problem solving skills of university students. The Interpersonal Problem Solving Inventory consists of 50 items. The high score obtained from each subscale of the scale indicates that the individual has a high level of interpersonal problem solving. The items have a rating of five likert types and have options between "Not at all appropriate" (1) and "Completely appropriate" (5). As a result of exploratory factor analysis conducted by the researchers ( $n = 526$ ), five factors explaining 38.38% of the variance related to interpersonal problem solving were reached. The correlation level calculated from the total scores of the subscales in which the items are included varies from .22 to .74. The internal consistency of subscale scores was examined by Crombach alpha coefficients. It was seen that problems in a negative way = .91, Constructive problem solving = .88, lack of self-confidence = .67, unwillingness to take responsibility = .74, insistent-persevering approach = .70. The test retest correlation values calculated by applying the inventory to the students twice with 4 weeks interval of 60 students were found as Problems in a Negative Way = .89, Constructive Problem Solving = .82, Lack of Self-Confidence = .69, Unwillingness to Take Responsibility = .76 and Insistent-Persevering Approach = .70 (Çam ve Tümkaya, 2007).

*Solution Focused Inventory (SFI)*: It was developed by Grant, Cavanagh, Kleitman, Spence, Lakota and Yu (2012), which measure the solution-focused approach of the individuals. The adaptation of the solution-focused inventory was done by Karahan and Hamarta (2015). University students and professionals were benefited while the scale was being developed. Solution Focused Inventory consists of 12 items. The items have a six-point Likert type rating and have options between "I definitely do not agree" (1) and "I definitely agree" (6). Solution-focused inventory has three sub-dimensions: Problem Deployment, Goal Orientation and Resource Goal Action. From the subscales obtained as exploratory factor analysis, the Goal Orientation accounts for 23% of the total variance and the factor loadings range from .66 to .85. The correlation between the original form and the Turkish form to find the linguistic equivalence of the Solution Focused Inventory was found to be .92 for the separation from the problem, .94 for the goal orientation, and .91 for the source movement. The construct validity of the

inventory was calculated with internal consistency coefficients and found to be .77 for the separation from the problem, .84 for the goal orientation and .70 for the mobilization of resources (Karahan and Hamanta, 2015).

*Humor Styles Scale (HIS)*: It was developed by Martin, Puhlik-Doris, Larsen, Gray and Weir (2003) which measure the humor styles used by the people in four different sub-dimensions. The adaptation of the inventory to the Turkish was done by Yerlikaya (2003). The inventory consists of four sub-dimensions, two of which measure compatible humor and the other two measure incompatible humor. Compatible sub-dimensions are participatory humor and self-enhancing humor. The incompatible sub-dimensions are aggressive humor and self-destructive humor. The validity and reliability studies of the scale were conducted on university students. As a result of the factor analysis made, the percentage of explanation of variance of these four factors is found as 36.88. The items have a seven-point Likert-type rating and have options between "I do not Participate" (1) and "I Totally Participate" (7). Internal consistency coefficients in the adaptation study of the scale; .74 for Participatory Humor, .78 for Self-Improvement Humor, .69 for Aggressive Humor, and .67 for Self-Destructive Humor. Subscales were found to be .88 for Participatory Humor, .82 for Self-Improvement Humor, .85 for Aggressive Humor, and .85 for Self-Destructive Humor (Yerlikaya, 2003).

### 2.3. Data Analysis

The time to apply the scales to the classes in the sample group randomly determined to collect the data was determined. "Personal Information Form", "Interpersonal Problem Solving Inventory", "Solution Focused Inventory" and "Humor Styles Scale" were applied by the researcher at the appointed time. Before applying, the guidelines on scales were read and information about the application was given. SPSS 18 program was used for the analysis of data in the study. In the statistical analysis of the study, Pearson moments product correlation and multiple linear regression analysis techniques were used.

### 3. Results

Table 1 shows the minimum, maximum, arithmetic mean and standard deviation values for the study dependent (interpersonal interpolation approaches) and independent variables (solution-focused approach).

**Table 1** Minimum-Maximum, Arithmetic Mean, Standard Deviation Values for Dependent and Independent Variables

Variables	Min	Max	ss		
Interpersonal Problem Solving	Problems in a Negative Way	16.00	80.00	40.18	13.28
	Constructive Problem Solving	27.00	79.00	54.08	9.70
	Lack of Self-Confidence	7.00	31.00	13.42	4.72
	Unwillingness to Take Responsibility	5.00	25.00	11.75	4.19
	Insistent-Persevering Approach	10.00	30.00	20.39	4.02
Solution Focused Approach	Problem Deployment	6.00	24.00	14.83	3.65
	Goal Orientation	6.00	24.00	17.59	3.22
	Resource Goal Action	4.00	24.00	18.92	3.11
Humor Styles	Participatory Humor	13.00	56.00	42.83	8.57
	Self-Enhancing Humor	14.00	56.00	37.63	8.20
	Aggressive Humor	8.00	47.00	22.08	7.68
	Self-Destructive Humor	8.00	56.00	28.46	8.85

In the study, Pearson Moment Product Correlation technique was used in the analysis of the relationship between solution-focused approach and interpersonal problem-solving approaches of college students and the relationship between humor styles and interpersonal problem-solving approaches, and the results are given in Table 2 and Table 3.

**Table 2** The Relationship Between Solution-Focused Approaches and Interpersonal Problem-Solving Approaches

	Problems in a Negative Way	Constructive Problem Solving	Lack of Self-Confidence	Unwillingness to Take Responsibility	Insistent-Persevering Approach
Solution Focused Approach	r	r	r	r	r
Problem Deployment	-.53**	.05	-.39**	-.26**	-.02
Goal Orientation	-.25**	.41**	-.21**	-.18**	.36**
Resource Goal Action	-.19**	.32**	-.24**	-.17**	.26**

\*p< .05    \*\*p< .01



It is clear from the table 2 that there was a significant negative correlation between problem deployment and problems in a negative way ( $r = -.53, p < .01$ ), lack of self-confidence ( $r = -.39, p < .01$ ), unwillingness to take responsibility ( $r = -.26, p < .01$ ). While there was a significant positive correlation between goal orientation and constructive problem solving ( $r = .41, p < .01$ ), insistent-persevering approach ( $r = .36, p < .01$ ); there was a significant negative correlation between goal orientation and lack of self-confidence ( $r = -.21, p < .01$ ), unwillingness to take responsibility ( $r = .18, p < .01$ ). There was a significant positive correlation between resource goal action and constructive problem solving ( $r = .32, p < .01$ ), insistent-persevering approach ( $r = .26, p < .01$ ). While there was a significant negative correlation between resource goal action and lack of self-confidence ( $r = -.24, p < .01$ ), unwillingness to take responsibility ( $r = -.17, p < .01$ ).

**Table 3**  
*The Relationship Between Humor Styles and Interpersonal Problem-Solving Approaches*

		Problems in a Negative Way	Constructive Problem Solving	Lack of Self-Confidence	Unwillingness to Take Responsibility	Insistent-Persevering Approach
Humor Styles	Participatory Humor	$r = -.23^{**}$	$.23^{**}$	$-.30^{**}$	$-.19^{**}$	$.19^{**}$
	Self-Enhancing Humor	$r = -.20^{**}$	$.31^{**}$	$-.12^{**}$	$-.05$	$.20^{**}$
	Aggressive Humor	$r = .10^{**}$	$-.20^{**}$	$.34^{**}$	$.33^{**}$	$-.08^*$
	Self-Destructive Humor	$r = .24^{**}$	$-.10^{**}$	$.25^{**}$	$.18^{**}$	$-.07^*$

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

When Table 3 was examined, there was a significant positive correlation between participant humor and constructive problem solving ( $r = .23, p < .01$ ), insistent-persevering approach ( $r = .19, p < .01$ ). While there was a significant negative correlation between participant humor and problems in a negative way ( $r = -.23, p < .01$ ), lack of self-confidence ( $r = -.30, p < .01$ ), unwillingness to take responsibility ( $r = -.19, p < .01$ ). There was a significant positive correlation between self-enhancing humor and constructive problem solving ( $r = .31, p < .01$ ), insistent-persevering approach ( $r = .20, p < .01$ ) while there was a significant negative correlation between self-enhancing humor and problems in a negative way ( $r = -.20, p < .01$ ), lack of self-confidence ( $r = -.12, p < .01$ ). There was a significant positive correlation between aggressive humor and problems in a negative way ( $r = .10, p < .01$ ), lack of self-confidence ( $r = .34, p < .01$ ) and unwillingness to take responsibility ( $r = .33, p < .01$ ). While there was a significant negative correlation between aggressive humor and constructive problem solving ( $r = -.20, p < .01$ ), insistent-persevering approach ( $r = -.08, p < .05$ ). There was a significant positive correlation between self-destructive humor and problems in a negative way ( $r = .24, p < .01$ ), lack of self-confidence ( $r = .25, p < .01$ ), unwillingness to take responsibility ( $r = .18, p < .01$ ). While significant negative correlation was found between self-destructive humor and constructive problem solving ( $r = -.10, p < .01$ ) and insistent-persevering approach ( $r = -.07, p < .05$ ).

A multiple linear regression analysis of solution-focused approach and humor styles explanation of interpersonal problem solving is given in Tables 4, 5, 6, 7, 8.

**Table 4**  
*Multiple linear regression analysis on problems in a negative way*

Variables	R	R <sup>2</sup>	R <sup>2</sup> ch	F	df	B	$\beta$	p
Constant	.61	.37	.36	63.22	7/765	75.49		.00**
Problem Deployment						-1.61	-.45	.00**
Goal Orientation						-.24	-.06	.07
Resource Goal Action						-.20	-.05	.14
Participatory Humor						-.17	-.12	.00**
Self-Enhancing Humor						-.18	-.11	.00**
Aggressive Humor						.03	.02	.58
Self-Destructive Humor						.38	.24	.00**

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

In Table 4, as a result of the regression analysis problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor together with problems

in a negative way showed a significant relationship ( $R = .61$ ,  $R^2 = .37$ ), ( $F_{(7/765)} = 63.22$ ,  $p < .01$ ). This result suggests that 37% of the total variance in the problems in a negative way is explained by problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor. According to the standardized regression coefficient ( $\beta$ ), the order of significance of the predictive variables on problems in a negative way is problem deployment ( $\beta = -.45$ ), self-destructive humor ( $\beta = .24$ ), participatory humor ( $\beta = -.12$ ), self-enhancing humor ( $\beta = -.11$ ), goal orientation ( $\beta = -.06$ ), resource goal action ( $\beta = -.05$ ), aggressive humor ( $\beta = .02$ ). When the significance tests of the regression coefficients are taken into consideration, problem deployment ( $p < .01$ ), self-destructive humor ( $p < .01$ ), participatory humor ( $p < .05$ ) and self-enhancing humor ( $p < .05$ ) were significant predictive variables on problems in a negative way.

**Table 5**  
*Multiple linear regression analysis on Constructive Problem Solving*

Variables	R	R <sup>2</sup>	R <sup>2</sup> ch	F	df	B	$\beta$	p
Constant	.54	.29	.28	44.13	7/765	21.86		.00**
Problem Deployment							-.07	.04*
Goal Orientation							.33	.00**
Resource Goal Action							.15	.00**
Participatory Humor							.05	.19
Self-Enhancing Humor							.16	.00**
Aggressive Humor							-.17	.00**
Self-Destructive Humor							.13	.00**

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

In Table 5, as a result of the regression analysis problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor together with constructive problem solving showed a significant relationship ( $R = .54$ ,  $R^2 = .29$ ), ( $F_{(7/765)} = 44.13$ ,  $p < .01$ ). This result suggests that 29% of the total variance in the constructive problem solving is explained by problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor. According to the standardized regression coefficient ( $\beta$ ), the order of significance of the predictive variables on constructive problem solving; goal orientation ( $\beta = .33$ ), aggressive humor ( $\beta = -.17$ ), self-enhancing humor ( $\beta = .16$ ), resource goal action ( $\beta = .15$ ), self-destructive humor ( $\beta = .13$ ), problem deployment ( $\beta = -.07$ ), participatory humor ( $\beta = .05$ ). When the significance tests of the regression coefficients are taken into consideration, goal orientation ( $p < .01$ ), resource goal action ( $p < .01$ ), self-enhancing humor ( $p < .01$ ), aggressive humor ( $p < .01$ ), self-destructive humor ( $p < .01$ ), problem deployment ( $p < .05$ ) were significant predictive variables on constructive problem solving.

**Table 6**  
*Multiple linear regression analysis on lack of self-confidence*

Variables	R	R <sup>2</sup>	R <sup>2</sup> ch	F	df	B	$\beta$	p
Constant	.59	.35	.35	59.96	7/765	21.32		.00**
Problem Deployment							-.31	.00**
Goal Orientation							-.01	.81
Resource Goal Action							-.01	.00**
Participatory Humor							-.25	.00**
Self-Enhancing Humor							.01	.67
Aggressive Humor							.26	.00**
Self-Destructive Humor							.19	.00**

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

In Table 6, as a result of the regression analysis problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor together with lack of self-confidence showed a significant relationship ( $R = .59$ ,  $R^2 = .35$ ), ( $F_{(7/765)} = 59.96$ ,  $p < .01$ ). This result suggests that 35% of the total variance in the lack of self-confidence is explained by problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor. According to the standardized regression coefficient ( $\beta$ ), the order of significance of the predictive variables on lack of self-confidence is problem deployment ( $\beta = -.31$ ), aggressive humor ( $\beta = .26$ ), participatory humor ( $\beta = -.25$ ), self-destructive humor ( $\beta = .19$ ), resource goal action ( $\beta = -.09$ ), self-enhancing humor ( $\beta = .01$ ), goal orientation ( $\beta = -.01$ ). When the significance tests of the regression coefficients are taken into consideration, problem deployment ( $p < .01$ ), resource goal action ( $p < .01$ ), participatory humor ( $p < .01$ ), aggressive humor ( $p < .01$ ), self-destructive humor ( $p < .01$ ) were observed as the significant predictive variables on lack of self-confidence.

**Table 7**

*Multiple linear regression analysis on unwillingness to take responsibility*

Variables	R	R <sup>2</sup>	R <sup>2</sup> ch	F	df	B	β	p
Constant	.46	.21	.20	29.07	7/765	15.75		.00**
Problem Deployment							-.22	.00**
Goal Orientation							-.05	.17
Resource Goal Action							-.05	.14
Participatory Humor							-.15	.00**
Self-Enhancing Humor							.04	.28
Aggressive Humor							.28	.00**
Self-Destructive Humor							.08	.02*

\*p< .05    \*\*p< .01

In Table 7, as a result of the regression analysis problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor together with unwillingness to take responsibility showed a significant relationship (R= .46, R<sup>2</sup>= .21), (F<sub>(7/765)</sub>=29.07, p<.01). This result suggests that 21% of the total variance in the unwillingness to take responsibility is explained by problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor. According to the standardized regression coefficient (β), the order of significance of the predictive variables on unwillingness to take responsibility is aggressive humor (β= .28), problem deployment (β= -.22), participatory humor (β= -.15), self-destructive humor (β= .08), resource goal action (β= -.05), goal orientation (β= -.05), self-enhancing humor (β=.04). When the significance tests of the regression coefficients are taken into consideration, problem deployment ( p<.01), participatory humor ( p<.01), aggressive humor (p<.01), self-destructive humor ( p<.05) are observed as the significant predictive variables on unwillingness to take responsibility.

**Table 8**

*Multiple linear regression analysis on insistent-persevering approach*

Variables	R	R <sup>2</sup>	R <sup>2</sup> ch	F	df	B	β	p
Constant	.44	.19	.18	25.81	7/765	8.53		.00**
Problem Deployment							-.14	.00**
Goal Orientation							.41	.00**
Resource Goal Action							.18	.00**
Participatory Humor							.04	.09*
Self-Enhancing Humor							.03	.18
Aggressive Humor							-.02	.36
Self-Destructive Humor							.04	.08*

\*p< .05    \*\*p< .01

In Table 8, as a result of the regression analysis problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor together with insistent-persevering approach showed a significant relationship (R= .44, R<sup>2</sup>= .19), (F<sub>(7/765)</sub>=25.81, p<.01). This result suggests that 19% of the total variance in the insistent-persevering approach is explained by problem deployment, goal orientation, resource goal action, participatory humor, self-enhancing humor, aggressive humor and self-destructive humor. According to the standardized regression coefficient (β), the order of significance of the predictive variables on insistent-persevering approach is goal orientation (β=.33), resource goal action (β=.14), problem deployment (β= -.13), participatory humor (β= .09), self-destructive humor (β= .08), self-enhancing humor (β=.05), aggressive humor (β= -.03). When the significance tests of the regression coefficients are taken into consideration, problem deployment ( p<.01), goal orientation ( p<.01), resource goal action ( p<.01), participatory humor ( p<.05), self-destructive humor ( p<.05) were observed as the significant predictive variables on insistent-persevering approach.

#### 4. Conclusion and Discussion

As a result of the study, it was found that solution-focused approach and humor style significantly explains problems in a negative way. According to the research result, there was a negative relationship between problem deployment, goal orientation, resource goal action and problems in a negative way. In addition, there is a negative relationship between participant humor, self-enhancing humor and problems in a negative way while a positive relationship was found between aggressive humor, self-destructive humor and negative problems in a negative way. This result shows that as problem deployment, goal orientation and resource goal action of the individuals decrease, approaching the problems in a negative way increases. Based on this result it can be

suggested that as the participatory humor, self-enhancing humor increases, problems in a negative way decreases in addition to aggressive humor and self-destructive humor increases, approaching the problems in a negative way increases. Against the difficulties faced by the individual, failure to set goals for the solution and focusing on the negative side of the encounter can cause the individual to approach the problems in a negative way. For this reason, people with higher goal orientation, resource mobilization and problem deployment can be expected to be less approaching the problems in a negative way. The use of humor to reduce the tensions experienced by individuals in their lives and the ability to entertain themselves even in the face of adverse situations may be possible if individuals have a less probable approaching the problems in a negative way. For this reason, individuals with participatory humor and self-enhancing humor style may be expected to be less probabilistic problems in a negative way, more aggressive humor and self-destructive humor styles.

The other finding in the research is that solution-focused approach and humor styles have meaningful explanations for constructive problem-solving in interpersonal problem-solving approaches. There was a positive relationship between problem deployment, goal orientation, resource goal action and constructive problem solving. Furthermore there is a positive relationship between participatory humor, self-improving humor and constructive problem solving; there was a significant negative relationship between aggressive humor, self-destructive humor, and constructive problem solving. This result shows that problem deployment, goal orientation and resource goal action increase, constructive problem solving increase. Based on this result it can be suggested that as the participatory humor, self-enhancing humor increases, constructive problem solving increases in addition to aggressive humor and self-destructive humor decrease, constructive problem solving increases. Constructive problem solving uses the emotions, thoughts and behaviors of the individuals to enable them to solve their problems in an effective and constructive manner (Çam ve Tümkaya, 2007). The rational problem solving model in the social problem solving model and constructive problem solving are similar. (Arslan, 2010). Rational problem solving is a constructive problem-solving style using effective problem-solving skills in a planned, reasonable, and systematic way (D'Zurilla, Nezu and Maydeu-Olivares, 2004; D'Zurilla and Nezu, 2007). Constructive problem solving is an effort by the individual to reach an effective solution (Arslan, Hamarta, Arslan and Saygin, 2010). For this reason, it is expected that individuals tend to solve their problems constructively as the number of solution-focused approaches such as problem deployment, goal orientation and resource goal action increase. In the research examined the relationship between humor styles and problem solving by Traş, Arslan and Taş (2011), participatory humor, self-enhancing humor usage increased the positive problem solving approach; the use of aggressive humor and destructive humor has been found to reduce the positive problem-solving approach. This result supports the findings.

The research also shows that solution-focused approach and humor styles significantly explain lack of self-confidence in interpersonal problem-solving approaches. In the research, there is a significant negative relationship between problem deployment, goal orientation, resource goal action and lack of self-confidence. In addition, there is a significant negative relationship between participatory humor, self-enhancing humor and lack of self-confidence; there is a significant positive correlation between aggressive humor, self-destructive humor and lack of self-confidence. This result shows that problem deployment, goal orientation and resource goal action will decrease as the levels of lack of self-confidence increase. Based on this result it can be suggested that as the participatory humor, self-enhancing humor decreases, lack of self-confidence increases in addition to aggressive humor and self-destructive humor increases, lack of self-confidence increases. Lack of self-confidence the self is the situation in which the individual feels inadequate to solve problems (Çam and Tümkaya, 2007). Solution-focused individuals create reasonable targets for themselves, seeking to use existing resources for solution, and look at the problem positively rather than negatively (Grant, et al., 2012). For this reason, it may be expected that individuals with a high degree of solution-focused approach, such as problem deployment, goal orientation, resource goal action, may adopt a less lack of self-confidence. In the survey conducted by Yerlikaya (2009), there was a significant negative relationship between perceived stress, anxiety, depression scores and participant humor, self-promoting humor scores; It was found that there was a significant positive correlation between aggressive humor, self-destructive humor and perceived stress, anxiety, depression. Depression is a depressive condition characterized by pessimism, hopelessness, lack of self-confidence, self-guilt due to insignificant reasons (Bakırcıoğlu, 2012). Starting from this point of view adopting the incompatible humor style of the individuals will also lead to problems in a negative way. When the related literature is examined, it is observed that it supports research findings.

Solution-focused approach and humor styles in our research seem to explain meaningfully to unwillingness to take responsibility for interpersonal problem-solving approaches. In the research, there was a significant negative relationship between problem deployment, goal orientation, resource goal action and unwillingness to take responsibility. In addition, there is a significant negative relationship between participatory humor, and unwillingness to take responsibility; there is a significant positive correlation between aggressive humor, self-destructive humor and unwillingness to take responsibility. This result shows that problem deployment, goal orientation and resource goal action will decrease as the levels of unwillingness to take responsibility increase.



Based on this result it can be suggested that as the participatory humor, self-enhancing humor increases, unwillingness to take responsibility decreases in addition to aggressive humor and self-destructive humor increases, unwillingness to take responsibility increases. Unwillingness to take responsibility implies that the individual does not do what is necessary to solve the problem (Çam ve Tümkaya, 2007). It is believed that in a solution-focused approach, individuals can create their own goals and create solutions (MacDonald, 2007); So that they are more eager to undertake the responsibility of displaying, acting and changing new behaviors (Selekman, 2005). It is therefore possible that individuals with a high degree of solution-focused approach, such as problem deployment, goal orientation and resource goal action, may be expected to adopt a less unwillingness to take responsibility. Individuals can sometimes come close to solving their problems, ignoring the problem, waiting for the problem to come off spontaneously, or loading the responsibilities of problems into others (Korkut, 2002). According to Martin, Puhlik-Doris, Larsen, Gray and Weir (2003), aggressive humor is positively associated with neuroticism, hostility, resentment and aggression as well as negativity, mildness and responsibility. Therefore, it can be expected that the individual has a positive relationship between incompatible humor styles and unwillingness to take responsibility.

According to the findings, solution-focused approach and humor styles significantly explain insistent-persevering approach in interpersonal problem-solving approaches. In the research, there was a significant positive relationship between problem deployment, goal orientation, resource goal action and insistent-persevering approach. In addition, there is a significant positive relationship between participatory humor, self-enhancing humor and insistent-persevering approach; There is a significant negative correlation between aggressive humor, self-destructive humor and insistent-persevering approach. This result shows that problem deployment, goal orientation and resource goal action will increase as the levels of insistent-persevering approach increase. Based on this result it can be suggested that as the participatory humor, self-enhancing humor increases, insistent-persevering approach increases in addition to aggressive humor and self-destructive humor increases, insistent-persevering approach decreases. Insistent-persevering approach is that the individual makes an effective effort to solve the problems experienced in interpersonal relationships (Çam ve Tümkaya, 2007). The basic philosophy of the solution-focused approach is "don't repair if not corrupted", "do insist on working solutions" and "try different solutions" (Sklare, 2014). According to this philosophy, the individual determines what is wrong with his life and, if rarely in his life he finds solutions, he repeats what he has done, and if it does not work, he will be eager and willing to try new solutions (Meydan, 2013). Therefore, individuals with a high degree of solution-focused approach, such as problem deployment, goal orientation and resource goal action may be expected to adopt a more insistent-persevering approach. Humor helps the individual to communicate with others (Olson, Backe, Sørensen and Kock, 2002). It is necessary for the individual to use communication skills at a good level in order to be able to cope effectively with the problem of the interpersonal living (Küçük, 2010). Similarly, research conducted by Koç, Kılıç and Gül (2015) found a positive relationship between communication skills and an insistent-persevering approach. For this reason, a positive relationship between compatible humor use and insistent-persevering approach to problem solving can be explained in the light of these research results.

In this research, it was aimed to reveal the relationship university students' problem solving approaches, solution focused approach and humor styles. Pearson Product-Moment Correlation Coefficient and Multiple Linear Regression Analysis were used for this purpose. The research is carried out only in the university sample and the results of the research can be generalized in similar samples. Conduct of the research in different groups will also be helpful in the generalization of the results. However, the results of the research show that the results of the research are important for university students in solution-focused approach and humor styles for interpersonal problem solving. The solution-oriented approach to these findings and the experimental investigation of the effects of humor styles on interpersonal problem solving skills will also be more explanatory. In addition, when the results are evaluated in general, it is appropriate for individuals to apply solution focused approach and compatible use of humor to improve their interpersonal problem solving skills.

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#### Notes

This study is a summary of the master's thesis written by Hayri KOÇ under the supervision of Dr. Coşkun ARSLAN, and it appeared as an oral presentation with the same title at the 1st International Academic Research Congress on 3th-5th November, 2016. This study was supported by Research Fund of the Necmettin Erbakan University. Project Number: 161310005.