

*Full Length Research Paper*

# **The investigation of social problem solving abilities of university students in terms of perceived social support**

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Accepted 25 July, 2013

The purpose of this study is to analyze of university students' perceived social support and social problem solving. The participants were 827 (474 female and 353 male) university students. Data were collected Perceived Social Support Scale-Revised (Yildirim, 2004) and Social Problem Solving (Maydeu-Olivares and D'Zurilla, 1996) translated and adapted by (Dora, 2003). In order to analyze data, Pearson Correlation Coefficient and simple regression analysis. The results of the study showed that a significant negative relationship among social support perceived from family, peer and teacher and negative orientation problem solving, impulsive-careless problem solving and avoidance problem solving. We also identified a significant positive relationship between social support from perceived family and teacher support and positive orientation problem solving and also a significant positive relationship between social support perceived from family, peer and teacher support and rational problem solving. The results also showed that perceived social support from family, peer and teacher significantly predicted social problem solving. Findings, their implications, limitations of the study and recommendations for future research are discussed.

**Key words:** Social support, social problem solving, university students.

## **INTRODUCTION**

People generally live in places where they communicate in all life. Places this communication has occurred are family, group of friends, school, office and other social surroundings. In the kind of this social surroundings, people can disagree on the same point and a problem can occur because sources are inadequate and people's psychological needs, morals are different (Öğülmüş, 2001). Çam and Tümkaya (2008) express solving these cases of dispute among people as social problem solving. Problem solving is a way increasing self-confidence and providing diminishment of anxiety and positive feelings (Korkut, 2007; Deniz, 2004). Social problem solving is cognitive, behavioural and affective process a person creates to cope with problems he undergoes in real life (D'Zurilla and Maydeu Olivares,

1995; D'Zurilla et al., 2004).

Bingham (1998) stated to be able to classify problems according to their subjects, complexity or solving processes. According to Maydeu-Olivares and D'Zurilla (1996), problem solving processes are a) tendency to problem and orientation; b) application of problem solving abilities by deciding proper solution. Problem orientation consists of positive and negative orientation (D'Zurilla et al., 2004). Positive orientation problem solving consists of cognitive problem solving based on self-sufficiency on problem solving (Belzer et al., 2002). Negative orientation problem solving is associated with self-respect, low communication skill, threat perception, anger management and low problem solving ability (Belzer et al., 2002; Hamarta, 2009; Arslan, 2010). Problem solving abilities

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are avoidant approach, impulsive-careless approach and rational problem solving (D'Zurilla et al., 2004). Positive orientation problem solving and rational problem solving approach are functional, negative problem solving, impulsive-careless approach, avoidant approach and non-functional problem solving approach (D'Zurilla et al., 2002). Rational problem solving approach is application of rational, clear and effective problem solving abilities (D'Zurilla et al., 2004). According to impulsive-careless problem solving style, person behaves insufficiently individually, carelessly and hastily, and generally he does what he thinks, and he can be wrong because of his hastiness (Belzer et al., 2002; Arslan, 2005). In avoidant style, person can show postponement, passivity and laziness and he prefers to avoid a problem and he postpones problem solving or pass the buck (D'Zurilla and Goldfried, 1971; Belzer et al., 2002; Arslan, 2005). Çam and Tümkaya (2007) stated that if person had positive problem orientation, she/he would prefer rational problem solving but if person had negative orientation problem solving, she or he would prefer avoidance of problem solving. It has been observed increasement of interest in teaching of problem solving methods among people nowadays (Öğülmüş, 2001).

In development of problem solving ability, support by family, peer and surrounding can be effective. According to Çeçen (2008), person learns to be able to cope with loneliness and difficulties she/he undergoes in society based on family support she/he is treated affectionately, approvingly and democratically. It is observed that the higher social support by family, peer and surrounding is great to people in literature, the lower people's depression level which they can approach with safety to problem situations, is and academic success is high (Bandura, 1997; Yıldırım, 1998; Ceyhan et al., 2005). Duru (2008) stated that social support can be used as a coping strategy against difficulties being undergone in the daily life. Concept of social support is based on Kurt Lewin Field Theory and his behaviour definition (Pearson, 1990). Social support can be defined as social and psychological support by circle of person (Lepore, 1991). It is stated existence of people who person always receives help in his life or realization of help as "received support"; person's perception of being loved by people who the person regards or the belief to be provided help needed as "perceived social support" (Cohen et al., 1984; Sorias, 1988; Lepora, 1991). Social support resources; a) financial support, provided to discharge daily responsibilities by others, b) emotional support, fulfilling basic social needs such as belonging, empathy, respect and sympathy, c) mental support includes in supports such as knowledge, advice and guidance (Sorias, 1988; Cohen and Wills, 1985; Cohen, 2004). Social support resources consists of family, friends, teachers and society (Yıldırım, 2007; Cüceloğlu, 1999; Yıldırım, 1999). There are investigations revealing relationship among social problem solving abilities, academic success and

self-respect along with social support perceived in literature (Arslan, 2005; Arslan, 2009; Yıldırım, 1998; Yıldırım, 1999). It is pointed out family, friend and teacher factors in psychological counseling services in educational institutions and predictor of social problem solving ability, perceived social support. The purpose of investigation is to determine whether or not relationship perceived social support with social problem solving and to determine whether or not perceived social support (family, friend and teacher) predicts meaningfully social problem solving ability (problem orientation and problem solving styles).

## METHODS

### Participants

The survey model was adopted in this study. The participants were 827 (57.3%) 474 female, (42.7%) 353 male students of Selçuk University (Konya, Turkey). Participants participated in the research voluntarily. The mean age of the participants was 20.8 years with a standard deviation of 1.37.

### Instruments

#### *Social Problem Solving Inventory-Revised (SPSI-R)*

The SPSSS-R was developed by D'Zurilla and Nezu (1990) and revised by both Maydeu-Olivares and D'Zurilla (1996) and D'Zurilla et al. (2002). It was adapted into Turkish by Dora (2003). It is a 5-point Likert type scale with 52 items and five subscales of; Positive Problem Orientation (PPO), Negative Problem Orientation (NPO), Rational Problem Solving (RPS), Impulsivity-Carelessness Style (ICS) and Avoidance (AS) Style. The SPSI-R has been found to have good reliability and validity (D'Zurilla et al., 2002). For college students, coefficients alphas for the five scales have been found to range from 0.95 (RPS) to 0.76 (PPO), with test-retest reliabilities ranging from 0.88 (NPO) to 0.72 (PPO). Criterion-referenced validity is evidenced by significant correlations with relevant scales on the Problem Solving Inventory and with such theoretically related constructs as stress, somatic symptoms, anxiety, depression, hopelessness and suicidality (Chang and D'Zurilla, 1996; D'Zurilla et al., 2002). Higher scores on PPO and RPS indicate more constructive problem solving processes, while higher scores on NPO, ICS and AS indicate more dysfunctional processes.

#### *Perceived Social Support Scale-Revised (PSSS-R)*

The PSSS-R was used to measure students perceived social support from family, friends and teachers. The scale was developed and revised by Yıldırım (2004). It is a 3-point Likert type scale with 50 items and subscales of; family support (FS), support from friends (SFF) and support from teachers (SFT). Cronbach alpha reliability coefficients for the scale and subscales were as follows: .93, .94 for FS, .91 for SFT. Test re-test reliability coefficients were .91, .89, .86 and .86 for the scale FS, SFF and SFT respectively. Construct validity was tested using principal component analysis. The FS subscale had three factors (attentiveness and emotional support; advice giving approval); SFF had one and the SFT had two factors (emotional support; advice giving and approval). Scores on the scale and those on each subscale were significantly correlated with scores on Beck Depression Inventory and Daily Hassles Scale (Yıldırım, 2004).

**Table 1.** Correlations among social problem solving and perceived social support.

	Family	Peer	Teacher
PPO	.08*	.007	.096**
NPO	-.21**	-.18**	-.10**
RPS	.12**	.11**	.15**
ICS	-.13**	-.18**	-.02
AS	-.17**	-.21**	-.12**

Notes: \*\*Correlation is significant at the .01 level (2-tailed).

\*Correlation is significant at the .05 level (2-tailed) PPO=Positive Problem Orientation; NPO=Negative Problem Orientation; RPS=Rational Problem Solving; ICS=Impulsivity-Carelessness Style; AS=Avoidance Style

**Table 2.** Predictive power and explanation positive orientation problem solving scores of perceived social support levels.

Positive problem orientation									
	R	R <sup>2</sup>	R <sup>2</sup> <sub>ch</sub>	F	Df	B	β	T	P
(Constant)						6.10		7.80	.000 <sup>a</sup>
Family						-.03	-.08	2.15	.03*
Peer	.12 <sup>a</sup>	.01	.01	4.16	3/826	-.03	-.05	-1.33	.18
Teacher						.02	.09	2.55	.01*

<sup>a</sup>Predictors: (Constant) Family, peer, teacher support ; <sup>b</sup>Dependent Variable: Positive problem orientation  
Note: \* p<.05; \*\* p<.001

### Data analysis

The Pearson Correlation Coefficient technique was used to determine the relationship among the subscales of social problem solving and perceived social support. Simple regression analysis was used to determine whether or not perceived social support (family, peer and teacher support) predicts social problem solving (problem orientation and problem-solving styles). SPSS 16.0 was used for data analysis.

### RESULTS

The relationships among the five subscales of social problem solving and perceived social support were analyzed by using the Pearson Correlation analysis technique and the results are presented in Table 1.

Table 1 shows that positive problem orientation is positively related to family and teacher. Also showed that rational problem solving is positively related to received family, peer and teacher support and that negative problem orientation and avoidance style are negatively related to received family, peer and teacher support. It is found out negative correlation among impulsivity/carelessness style, perceived family support and perceived friend support. Regression analysis was performed to predict social problem solving by perceived social support and the results are given in Table 2.

When Table 2 is examined, it is seen that perceived social support levels of university students predicts

positive orientation problem solving scores ( $R=0.12$ ,  $R^2=0.01$ ,  $F(3,826)=4.16$ ,  $p<0.05$ ). Perceived social support levels explain 1.5% of total variance in positive orientation problem solving. It was seen that perceived peer support did not predict positive problem orientation and the most important predictor were perceived teacher support ( $\beta=.09$ ) and perceived family support ( $\beta=-.083$ ) when the results of 't' test was examined with regard to significance of regression coefficients.

When Table 3 is examined, it is seen that perceived social support levels of university students predicts negative problem orientation scores ( $R=0.24$ ,  $R^2=0.06$ ,  $F(3,826)=16.28$ ,  $p<0.05$ ). Perceived social support levels explains 5.3% of total variance in negative problem orientation. It was seen that perceived teachers support did not predict negative problem orientation and the most important predictor were perceived family support ( $\beta=.09$ ) and perceived peer support ( $\beta=-.083$ ) when the results of 't' test was examined with regard to significance of regression coefficients.

When Table 4 is examined, it is seen that perceived social support levels of university students predicts rational problem orientation scores ( $R=0.18$ ,  $R^2=0.03$ ,  $F(3,826)=9.02$ ,  $p<0.001$ ). Perceived social support levels explains 3.2% of total variance in rational problem orientation. It was seen that perceived family support and friend support did not predict rational problem orientation and the most important predictor were teacher support

**Table 3.** Predictive power and explanation negative orientation problem solving scores of perceived social support levels.

<b>Negative problem orientation</b>									
	<i>R</i>	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> <sub>ch</sub>	<i>F</i>	<i>Df</i>	<i>B</i>	<i>β</i>	<i>T</i>	<i>P</i>
(Constant)						32.05		13.05	.000 <sup>a</sup>
Family	.24 <sup>a</sup>	.06	.053	16.28	3/826	-.17	-.15	-4.07	.000**
Peer						-.18	-.11	-2.80	.005*
Teacher						-.04	-.05	-1.31	.190

<sup>a</sup>Predictors: (Constant) Family, peer, teacher support ; <sup>b</sup>Dependent Variable: Negative problem orientation Note: \* p<.05; \*\* p<.001

**Table 4.** Predictive power and explanation rational problem solving scores of perceived social support levels.

<b>Rational problem solving</b>									
	<i>R</i>	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> <sub>ch</sub>	<i>F</i>	<i>Df</i>	<i>B</i>	<i>β</i>	<i>T</i>	<i>P</i>
(Constant)						34.2		8.4	.000 <sup>a</sup>
Family	.18 <sup>a</sup>	.03	.03	9.02	3/826	.13	.07	1.84	0.67
Peer						.14	.05	1.29	.20
Teacher						.16	.12	3.43	.001**

a. Predictors: (Constant) Family, peer, teacher support; b. Dependent Variable: Rational problem solving Note: \* p<.05; \*\* p<.001.

perceived ( $\beta=.122$ ) when the results of 't' test was examined with related to significance of regression coefficients.

When Table 5 is examined, it is seen that perceived social support levels of university students predicts Impulsivity/carelessness style scores ( $R=0.19$ ,  $R^2=0.04$ ,  $F(3,826)=10.32$ ,  $p<0.05$ ). Perceived social support levels explains 3.6% of total variance in Impulsivity/carelessness style. It was seen that perceived teacher support and friend support did not predict Impulsivity/carelessness style and the most important predictor were peer support perceived ( $\beta=.15$ ) and family support perceived ( $\beta=-.08$ ) when the results of 't' test was examined with related to significance of regression coefficients.

When Table 6 is examined, it is seen that perceived social support levels of university students predicts Avoidance style scores ( $R=0.24$ ,  $R^2=0.06$ ,  $F(3,826)=4.16$ ,  $p<0.05$ ). Perceived social support levels explains 6% of total variance in Avoidance style. It was seen that perceived teacher support did not predict Avoidance style and the most important predictor were peer support perceived ( $\beta=-.17$ ) and family support perceived ( $\beta=-.10$ ) when the results of 't' test was examined with related to significance of regression coefficients.

**DISCUSSION**

It was found positive, meaningful correlations between

positive problem orientation and perceived family, teacher supports; between rational problem solving approach and perceived family, peer, teacher supports when the results of investigation was assessed. On the other hand, it was found negative, meaningful correlations between negative problem orientation, avoidance style and perceived family, peer, teacher supports; between impulsivity/ carelessness style and perceived family, peer supports. These results show that family, peer and teacher supports increase positive problem orientation and rational problem solving approaches which are functional problem solving approaches. On the other hand, it was revealed that negative problem orientation, impulsivity/carelessness and avoidance approaches, which are non-functional problem solving approaches, increase when family, peer and teacher supports were perceived insufficiently. In literature, it is seen that persons who perceive family, peer and teacher supports have higher self-esteem level (life satisfaction, academic success, perceiving their parents democratically) (D'Zurilla et al., 2004; Arslan, 2009; Hamarta, 2009; Yıldırım, 1999; Çeçen, 2008). In the event that person perceives insufficiently family support, social problem solving (Bilgenoğlu, 2009) can be recommended as a coping mechanism against crisis situations he/she undergoes (Özgüven et al., 2003). In investigations dealing with teacher support, it was stated that academic self-efficacy, academic growth, academic entrepreneurship, learning, academic success, psychological

**Table 5.** Predictive power and explanation impulsivity/carelessness style scores of perceived social support level.

<b>Impulsivity/carelessness style</b>									
	<i>R</i>	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> <sub>ch</sub>	<i>F</i>	<i>Df</i>	<i>B</i>	$\beta$	<i>T</i>	<i>P</i>
(Constant)						13.30		10.99	.000 <sup>a</sup>
Family	.19 <sup>a</sup>	.04	.03	10.32	3/826	-.04	-.08	-2.01	.044**
Peer						-.13	-.15	-3.94	.000*
Teacher						.01	.03	.96	.34

a. Predictors: (Constant) Family, peer, teacher support

b. Dependent Variable: Impulsivity/carelessness style

Note: \* p<.05; \*\* p<.001

**Table 6.** Predictive power and explanation avoidance style scores of perceived social support levels.

<b>Avoidance style</b>									
	<i>R</i>	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> <sub>ch</sub>	<i>F</i>	<i>Df</i>	<i>B</i>	$\beta$	<i>T</i>	<i>P</i>
(Constant)						16.88		10.89	.000 <sup>a</sup>
Family	.24 <sup>a</sup>	.06	.05	4.16	3/826	-.07	-.10	-2.56	.011**
Peer						-.17	-.15	-4.04	.000*
Teacher						-.03	-.06	-1.73	.09

a. Predictors: (Constant) Family, peer, teacher support

b. Dependent Variable: Avoidance style

Note: \* p<.05; \*\* p<.001

adaptable and resiliency traits of students are so higher (Cohen and Wills, 1985; Mercer et al., 2011; Hattie, 2009; Yıldırım, 1999; Danielsen et al., 2010). The findings of these studies support the results of our study. In literature, positive, meaningful correlations between rational problem solving style and family, peer, teacher supports shows consistency with the research findings that it was found positive correlation between family, peer, teacher supports and life satisfaction, self-esteem (Hamarta, 2009; Deniz, 2004; Arslan, 2009); negative correlation between family, peer, teacher supports and exhaustion, depression, loneliness, test anxiety

(Bilgenoğlu, 2009; Duru, 2008; Yıldırım, 2007). According to results of this investigation, it was studied out that functional problem solving approaches are positively correlated with positive situations; on the other hand, non-functional problem solving approaches are correlated with negative situations. It was studied out negative, meaningful correlation between negative problem orientation and perceived family, peer, teacher supports. These investigations pointed out negative correlation among negative problem orientation and low life satisfaction, self-respect, academic success, blowing off, explanandum of anger, social anxiety, family, peer and teacher supports (Arslan, 2009; Isık, 2000; Arslan, 2009; Budak, 1999; Hamarta, 2009; Hamarta, 2009; Arslan, 2010; Yıldırım, 1999). On the other hand, some investigations pointed out correlation among impulsivity-carelessness problem solving approach and low support

of peer and family, crisis situations, suicide attempt risk, low loading complexity, low life satisfaction and low self-respect (Arslan, 2009; Özgüven et al., 2003; Arslan, 2005; Hamarta, 2009). These findings supports our investigation findings. When person perceives social supports by his/her surrounding, impulsivity/ carelessness problem solving approach against difficulties s/he undergoes can be regarded as an approach that the person can make wrong decisions in his life because of his carelessness and hastiness. When person does not perceive social support by family, peer and teachers who are important for him/her, s/he has difficulty in coping with problems and perceives the problems as a threat. Negative and meaningful correlation between avoidance style and perceived family, peer, teacher supports can be interpreted as regression behaviour because students, who perceive insufficiently family, peer and teacher supports, have low self-esteem (Arslan, 2005). If person knows that his family, peer and other social circle will support him when he needs to be helped, anxiety and stress which problems cause reduce (Cohen, 2004). Person can struggle to cope with problems instead of delaying or passive behaviour (Arslan, 2005; Arslan, 2010). People who have avoidance style can show functional problem solving approach along with family, peer and teacher supports.

When results of our study were evaluated, social problem solving abilities of university students will also develop positively as long as social support perception of

them increases. Moreover, in curriculums and psychological counseling programmes, students' social surroundings consisting of family, peer and teacher should be considered. In educational institutions, a problem encountered about students should be approached by considering to be solved easily along with family, peer and teacher supports. Limitations of the current study are an indication of possible directions for future research. This study was carried out with university students. Hence, these results are not generalizable to other populations.

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