

The Role of Interpersonal Problem Solving in Using the Immature Defense Mechanisms in Adolescents*

El papel desarrollado por la resolución de problemas interpersonales en el uso de mecanismos de defensa inmaduros en adolescentes

Received: 15 August 2018 | Accepted: 04 November 2019

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ABSTRACT

The purpose of this study was to examine associations between interpersonal problem solving and immature defense mechanisms in addition to whether interpersonal problem solving are predictors of immature defense mechanisms. The participants of the study consists of 428 high schools students (184 of the students were females). Interpersonal Problem Solving Inventory and Defense Style Questionnaire were applied. Results of multiple regression analyses indicated that all variables of interpersonal problem solving skills together accounted for 32% of the variance in defense mechanisms. Specifically, significant predictors of immature defense mechanisms levels were lack of self-confidence, negative approach to the problems, constructive problem solving respectively. Generally, the levels of adolescents resort to immature defense mechanisms, lack of self-confidence and negative approach to the problem of the increase, a decrease in constructive problem-solving skills are seen to be effective. The results of the study was discussed within the results of the previous studies.

Keywords

Adolescent; interpersonal problem; problem-solving approaches; lack of self-confidence; defense mechanisms.

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RESUMEN

El objetivo de este estudio fue examinar las asociaciones entre la resolución de problemas interpersonales y los mecanismos de defensa inmaduros, y averiguar si los primeros son predictores de los segundos. Los participantes fueron 428 estudiantes de enseñanza secundaria (184 mujeres). Se aplicó el Cuestionario Interpersonal de Resolución de Problemas y Tipo de Defensa. Los resultados de los análisis de regresión múltiple mostraron que la totalidad de las variables de habilidades interpersonales para resolver problemas representaban el 32 % de la varianza de los mecanismos de defensa. Específicamente, los indicadores significativos de los niveles de mecanismos de defensa inmaduros fueron la falta de confianza en sí mismo, el enfoque negativo de los problemas y la resolución constructiva de problemas, respectivamente. En general, se comprobó que el nivel de mecanismos de defensa inmaduros de los adolescentes tiene un impacto negativo en el planteamiento de problemas en el aumento o en disminución de sus habilidades constructivas de

How to cite: Bedel, A. (2019). The role of interpersonal problem solving in using the immature defense mechanisms in adolescents. *Universitas Psychologica*, 18(5), 1-12. <https://doi.org/10.11144/Javeriana.upsy18-5.rips>

resolución de problemas. Los resultados del estudio se discuten en el contexto de los resultados de estudios previos.

Palabras clave

adolescente; problema interpersonal; enfoques de resolución de problemas; falta de autoconfianza; mecanismos de defensa.

Adolescence period, in which development is fast, witnesses distinctive stressful and worrisome life events. Seek for independence, romantic relationships, academic achievement, professional orientation, peer relations and parental problems are important stressful life events observed in this period (Kulaksızoğlu, 2017; Santrock, 2014). Social problem solving skill, which is an approach of conscious coping with stress and worrisome life events vary across individuals (Öğülmüş, 2006; Türnüklü, 2017). The concept of social problem solving was defined by D'Zurilla and Nezu (1971) as the application of cognitive behavioral method by individual in effectively coping with the problematic situation in daily life. There are two sub-dimensions of problem solving approach, in the social problem solving model developed by D'Zurilla and Goldfried (1971) for interpersonal problem solving. These are approach to the problem and problem solving skills. The sub-dimension of approach to the problem is explained with two components as positive and negative approach. Positive approach is based on positive thinking. Those people who approach to the problem positively regard the problem as a natural part of life, and have a positive opinion and feel confident on that the problem can be solved. They believe that time and effort are necessary to solve a problem successfully (D'Zurilla, Chang, & Sanna, 2003; Eskin, 2018). That they feel competent in solving the problem makes positive contribution to their problem-solving skills (Korkut, 2017; Yenice, 2012). Some studies revealed that having problem solving skill has an effect on decrease in aggression, anger, hostility (Seçer & Ogelman, 2011) and in negative behaviors (Bushman & Peacock, 2010), and on increase in social self-efficacy (Erözkan, 2013), positive emotion

(D'Zurilla, Maydeu-Olivares, & Pujol, 2011) and interpersonal relationships (Joseph & Strain, 2010; Sumi, 2012). Negative thinking is referred to as negative approach to the problem. Negative approach to the problem is the nonfunctional point of view for the problems experienced. It was concluded that individuals who have a negative point of view for the problems they face, perceive problems as a threat, and believe that these problems can't be solved, and that they will fail in solving them (D'Zurilla, Nezu, & Maydeu-Olivares, 2004), which affects their daily life adjustments negatively (Bell & D'Zurilla, 2009) and which become effective on their spiritual signs (Ergin & Dağ, 2013). Problem-solving skills are classified as logical, impulsive-careless, and avoiding styles, in the dimension of problem-solving skill. Logical - rational problem solving skill is referred to as constructive problem solving skill (Eskin, 2018). Impulsive-careless, and avoiding problem solving styles are nonfunctional approaches. These approaches include nonfunctional coping behaviors in solving problem, such as thoughtless, careless, avoiding the problem rather than coping it (D'Zurilla et al., 2004) and social anxiety (Baltacı & Hamarta, 2013). The purpose of the social problem solving model is to gain functional coping skill to individuals by increasing their positive approaches to the problems they face, and decreasing their negative approaches and, avoidant and careless problem solving skills (Nezu, D'Zurilla, & Nezu, 2012). The findings of the subject suggested that individuals with negative thoughts and nonfunctional ways of coping with problems suffered from psychological distress such as more stress (Basut, 2006; Hirsch, Chang, & Jeglic, 2012), depression (Anderson, Goddard, & Powell, 2011; Eskin, 2018; Özdemir, Kuzucu, & Koruklu, 2013), anxiety (Karataş, 2011; Siu & Shek, 2010) and suicidal ideation (Fidan, Ceyhun, & Kirpınar, 2009; Holen, Lervag, Waaktaar, & Ystgaard, 2012; Spirito, Francis, Overholser, & Frank, 1996). While social problem solving skill is one of the ways of conscious coping with stress and anxious in life, defense mechanisms are defined as unconscious way of coping with those (Cüceloğlu, 2018,

p. 301). Defense is the basic mechanism of personality, and mental health workers attempt to influence this situation through consultation (Perry & Metzger, 2014). When used within certain limits, defense mechanisms help people in difficult situations until they manage to cope with stressful situations more directly (Cramer, 1998). With the help of defense mechanisms, the adjustment between id, superego and environmental forces is balanced, contributing to ego to gain strength (Freud, 2015, p. 105). While defense mechanisms provide temporary relief, they often distort reality, and prevent problems from being solved effectively. A person who is bound up with defense mechanisms may never learn more effective ways to cope with problems (Cüceloğlu, 2018). The ego defense mechanisms in adolescence period aims at to protect the psychological integrity and balance of the organism. Everybody uses various defense mechanisms to sustain his/her psychological integrity and to preserve the value of his/her own ego. If these reactions become a main tool to cope with constrained situations, and are exaggerated so that they will prevent individual's adjustment, then they will become unhealthy (Cüceloğlu, 2018; Geçtan, 2017). The energy spent to plead reduces the energy available for a productive and satisfying life (Gerring & Zimbardo, 2016). In the study conducted by Andrews, Singh, and Bond (1993); (Yılmaz, Gençöz, & Ak, 2007), defense mechanisms were collected under three headings, including mature defenses (sublimation, humor, expectation, suppression), immature defenses (reflection, passive aggression, externalise, derogation, denial, displacement, splitting, rationalization, somatization), and neurotic defenses (make - disrupt, idealization, reaction formation, altruism). Mature defense mechanism is considered as a functional defense form. The findings of the relevant studies suggested that healthy individuals use mature defense mechanisms more frequently, and exhibit compatible behaviors (Yılmaz et al., 2007). Mature defense mechanisms allow undesirable emotions to be expressed in socially acceptable forms (Pellitteri, 2002) and to reduce the

difficulties experienced (Hentschel, Smith, & Draguns, 2004). While those people who have confident personality trait use mature defense mechanisms such as humor and sublimation, those people who have antisocial personality trait use immature defense mechanisms such as denial (Weinberger, 1998). These mature defense mechanisms contribute to attain new meanings and perspectives in conflict resolution (Metzger, 2014). In the study conducted by Evren et al. (2012), it was determined that alcohol users using mature defense mechanism exhibit less self-harm behaviors. The use of mature defense mechanism was found to have an important relationship with negative attitude against empathy, competence and hostility (Davidson, MacGregor, Johnson, Woody, & Chaplin, 2004), with low depressive symptoms (Waqas et al., 2015), social skills and mature behaviors (Cramer, 2002; Kwon, 2002), with positive perfectionism (Dickinson & Ashby, 2005; Flett, Besser, & Hewitt, 2005), with life satisfaction (Lyke, 2016). On the other hand, individuals using immature and neurotic defense mechanisms are seen to show negative symptoms of mental health. The use of immature and neurotic defense mechanism was found to have a significant relationship with stress (Hyphantis, Palieraki, Voulgari, Tsifetaki, & Drosos, 2011), negative emotions (Steiner et al., 2007), somatic complaints (Hyphantis, Gouliia, & Carvalho, 2013), avoidant personal trait (Seaton & Beaumont, 2011), antisocial personality trait (Presniak, Olson, & Macgregor, 2010), mood disorder, panic disorder (Chávez-León, Lara-Muñoz, & Ontiveros-Uribe, 2006), personality disorder (Cramer, 1999), alcohol (Brody & Costa, 2013) and anger (Offer, Lavie, Gothelf, & Apter, 2000). In the studies of which physical health related outcomes, as well as mental health related outcomes, were discussed, it was found that those people with mature defense mechanisms have better physical health in advanced life (Malone, Cohen, Liu, Vaillant, & Waldinger, 2013).

The above explanations show that there are relationships between defense mechanisms and various social, psychological and emotional

variables. In the literature review, any study investigating the relationship between problem solving skills and defense mechanisms in domestic and abroad people hasn't been found. It is believed that the outcomes of this study will provide important contributions to the problem solving and defense mechanisms literature. This research was conducted on high school students. The biological, cognitive and social changes that are experienced in this period can also lead to emotional tension. There may also be an increase in students' interpersonal problems with family and surroundings. Students' problem solving approaches towards the problems they faced, conscious coping skills, and unconscious coping approaches are within psychological counselors' field of interest. Accordingly, it is expected that the findings of this research will guide to the formation of the contents of preventive guidance and psychological counseling programs to be prepared by psychological counselors working in schools. In this context, the purpose of the study is to investigate the relationships between interpersonal problem-solving approaches and immature defense mechanisms, and to determine whether immature defense mechanisms can be significantly predicted through interpersonal problem-solving approaches.

Method

Participants

The study was conducted in accordance with overall screening model. The universe of the study consisted of high school students in Konya province center. The sample of the study consisted of 15 classes, randomly selected from the classes with an average of 30 students in each, determined by the simple random sampling method from the classes in vocational high school and the anatolian high school in the central district, of which students were thought to represent the high school students in general. The scales used in the study were applied to a total of 450 students in these classes, and the test batteries of 22 students who didn't fully fill

out the items in the scales were excluded from the assessment. The average age of the students participating in the study was 17.24 (SD:1.04). The other demographic characteristics of the sample are shown in Table 1.

Table 1
Gender, class and school type information of participants

	Variables	Frequency	Percent
Gender	Female	184	44
	Male	244	56
	Total	428	100
Class	11. Class	242	56
	12. Class	186	44
	Total	428	100
School Type	Vocational High School	338	78
	Anatolian High School	90	22
	Total	428	100

Instruments

Interpersonal Problem Solving Inventory ([IPSI]; Çam & Tümkaya, 2008)

IPSI is a 5 point Likert scale (1 = *Not suitable at all*, 5 = *Completely suitable*) consisting of 50 items, developed to measure the problem-solving approaches and skills of high school students. The scale consists of a total of five subscales, including negative approach to the problem (NAP), constructive problem solving (CPS), lack of self-confidence (LS), unwilling to take responsibility (UR), insistent-persevering approaches (I-PA). The high score obtained from each subscale indicates that the relevant feature of interpersonal problem-solving is high. The internal consistency Cronbach's alpha coefficients of subscale scores of IPSI were found as follows: NAP = 0.89, CPS = 0.87, LS = 0.67, UR = 0.68 and I-PA = 0.7. The test-retest correlation values of the inventory was found to range between .67 and .84 (Çam & Tümkaya, 2008). In the scope of this study, the internal consistency Cronbach's alpha coefficients of subscale scores of IPSI were found as follows: NAP = 0.86, CPS = 0.83, LS = 0.67, UR = 0.73 and I-PA = 0.76.

Defense Style Questionnaire (DSQ, 1999).

The questionnaire which measures ego defenses was developed by Bond, Gardner, Christian and Sigal in 1983 (cited in Bodur, 1999). The short form of the questionnaire was obtained as a result of its adaptation to Turkish, performed by Bodur (1999). DSQ is a 9 point likert scale (1 = *Not suitable for me at all*, 5 = *Completely suitable for me*) consisting of 26 items, developed to measure the defense ways of individuals aged 19 years and over. The high total score obtained indicates that the level of immature defense is high. In the reliability study, DSQ short form was found to have high internal consistency ($\alpha = 0.71$). In the validity study, it was seen that DSQ short form had significant relationships with continuous anxiety scale (Öner, 1977) $r = 0.38, p < 0.05$, with social comparison scale (Savaşır & Şahin, 1997) $r = -0.41, p < 0.05$, with neuroticism $r = 0.72, p < 0.001$, and psychotism dimensions of Eysenk Personality Test (Öner, 1977). Based on these results, it is thought that the DSQ short form can evaluate immature ego defense mechanisms more accurately (Bodur, 1999). Besides, due to the fact that reliability and validity studies during the Turkish adaptation of the scale was conducted on individuals aged 19 years and over, and that the mean age was 17.24 in the study, the validity of the reliability studies were conducted to determine the appropriateness of the scale to the relevant age group. Within the scope of this study, the Cronbach's alpha coefficient of the scale was found as .88. The scale was found very compatible ($\chi^2 /df = 1.89, GFI = 0.9, CFI = 0.91, RMSEA = 0.051, SRMR = 0.054$) with the sampling data, as a result of confirmatory factor analysis made.

Procedure

The scales used in the study were applied by the school counselor to the students within the class hours. Before the application, the purpose of the study was briefly explained to the students, and only volunteers were provided to participate

in the study, by receiving the approval of the students. The data were also evaluated for the compatibility with multiple analyzes; skewness and kurtosis coefficients were found to range between -0.39 and 0.34 and -0.74 and -0.2, respectively, for each variable used in the study, and, it was observed that they satisfied the assumption of normal distribution since the data range between +1 and -1 (Tabachnik & Fidel, 2015).

Data analysis

In order to examine potential relations among research variables which are interpersonal problem solving, and immature defense style scores, Pearson Moments Multiplication Correlation coefficients have been calculated. To the end of determining explanatory ratio of interpersonal problem solving on immature defense mechanisms Multiple Regression Analysis has been employed. Their relative explanatory levels have been compared via standardized Beta (b) values (Büyüköztürk, 2017).

Results

Correlations regarding interpersonal problem inventory, defense style questionnaire employed in present research are presented in Table 2.

Table 2
Correlations among interpersonal problem-solving inventory and defense style questionnaire

Variables	1	2	3	4	5	6
Negative orientation to the problem	-					
Constructive problem solving	-0.069	-				
Lack of self-confidence	0.375**	-0.22**	-			
Unwilling to take responsibility	0.206**	-0.064	0.242**	-		
Insistent-persevering orientation	0.111*	0.454**	-0.11*	-0.001	-	
Immature defense style	0.404**	-0.297**	0.45**	0.091	-0.056	-

* $p < 0.05$ ** $p < 0.01$

Table 2 displays that there is a medium level and positive relation between negative problem orientation and immature defense mechanisms ($r = 0.404, p < 0.01$), medium level and negative relation with constructive problem solving and immature defense mechanisms ($r = -0.297, p < 0.01$), medium level and positive relation

between lack of self-confidence and immature defense mechanisms ($r = 0.45, p > 0.05$). There is no significant relationship unwilling to take responsibility ($r = 0.091, p > 0.05$) and insistent-persevering orientation ($r = -0.56, p > 0.05$) with immature defense mechanisms.

In order to determine the predictive level of interpersonal problem-solving variables on immature defense mechanisms, multilinear regression analysis was carried out and the obtained results are in Table 3.

Table 3
Multiple regression analysis for the prediction of immature defense mechanisms

Variables	B	SH _B	β	T	p
Negative orientation to the problem	0.753	0.122	0.275	6,182	0***
Constructive problem solving	-0.753	0.146	-0.238	-5.148	0***
Lack of self-confidence	2.015	0.291	0.314	6,936	0***
Unwilling to take responsibility	-0.406	0.301	-0.057	-1.352	0.177
Immature defense style	0.375	0.307	0.056	1.224	0.222

$R = 0.561$ $R^2 = 0.315$ $F_{(5,422)} = 380.767$ $p = 0.001$

***p < 0.001

Table 3 shows that all variables detected as predictive variables collectively predict immature defense style on significant level ($p < 0.001$) and explain about 32% of the variance in immature defense style. As relevant Beta values are examined it surfaces that the strongest predictor of immature defense style is lack of self-confidence ($b = 0.314$) ensued by negative orientation to the problem ($b = 0.275$) and a constructive problem solving ($b = -0.238$) variables.

Discussion

When research findings are examined, it was seen that there is a moderate positive relationship between the dimensions of negative approach to the problem and of lack of self-confidence of interpersonal problem-solving and immature defense form, and moderate negative relationship between the dimension of constructive problem solving of interpersonal problem-solving and immature defense form. It was concluded that there is no significant relationship between the dimensions of unwilling to take responsibility and of insistent-persevering approaches of interpersonal problem-solving and

immature defense form. Besides, when the results of the analysis were examined to see which variables explain the use of immature defense mechanisms, it was seen that the strongest predictor variable was lack of self-confidence, which was followed by the variables of negative approach to the problem and constructive problem solving, respectively. In social problem solving model, it is important to be confident in functional solving the problems experienced. Individuals feeling inadequate themselves in terms of self-confidence show passiveness and insecurity adopting avoidant style when faced with problems. An individual in that case prefer to avoid problem rather than overcome it. He/she delays it as far as possible, and waits for it to be solved by itself. This increases the use of immature defense mechanisms. However, having a self-confident personality trait will increase the frequency of using mature defense mechanisms such as humor and sublimation (Weinberger, 1998). Having frequent recourse to immature defense mechanisms, depending on mutual interaction, may prevent an individual from learning effective problem solving skill (Cüceloğlu, 2018).

Another finding is that the predictor variable of using immature defense mechanisms is negative approach to the problem. In the social problem solving model, negative approach to the problem includes negative thoughts and emotions towards the problem experienced (D'Zurilla et al., 2004; Eskin, 2018). Having negative thoughts and feelings on experienced problems causes individual to approach problems negatively, which adversely affects his/her daily life adjustments (Bell & D'Zurilla, 2009). The negative approach prevents to give meanings to experienced problems, with different point of view, produce alternative solution options, and decision making skill (Metzger, 2014). This approach limits individual to look problems from a broad perspective (Özcan & Ögülmüş, 2010). This can lead individual to avoid from problems, and use immature defense mechanisms more than ever. As consistent with previous finding, individuals who adversely approach the problems that they face don't believe that they can solve

these problems, and their self-sufficiency can be lower. They can exhibit the behavior of avoiding from problems, and an increase in the frequency of using immature defense mechanisms can be observed. In the study by Seaton and Beaumont (2011), it was concluded that individuals with unsociable personality trait use immature defense mechanisms more frequently. On the other hand, to regard faced problem as an opportunity, attempt to solve it, and the positive viewpoint of individual in case of being unable to solve problem are factors that help him/her to meet adverse events in a mature way (Ellis & Harper, 2017). In spite of experienced problems, these positive thoughts and feelings help individual to use his/her psychological and social resources (Folkman, 2008).

Another finding is that the predictor variable of recourse level to immature defense mechanisms is constructive problem solving skill. As constructive problem solving skill increase, the level of use of immature defense mechanisms decreases. Using his/her problem solving ability will help someone to cope with difficulties that he/she experienced. Constructive problem solving skill is a functional problem solving approach. It includes process phases such as identifying problem, creating alternative options, decision making and application. Besides, some studies suggested that the increase in the level of social skills has an important effect on individual to feel competent himself (Erözkan, 2013), and on constructive solution of the problems encountered in interpersonal relations (Joseph & Strain, 2010; Sumi, 2012; Türnüklü, 2017). Constructive problem solving skill is a preventative factor in coping with stress and anxiety (Korkut, 2017; Linda, Marroquín, & Miranda, 2012). In meta analysis by Johnson and Johnson (2004), while the students participating in the problem solving skill training used win, lose, power assertion, and withdrawal strategies before training, they tended to use problem-solving-oriented process after the training.

When these three findings were evaluated together, lack of self-confidence, increase in negative approach to the problem, and decrease in constructive problem solving skill were found

to be effective on adolescents' levels of use of immature defense mechanisms. The result of the study reveals the importance of problem solving skill in terms of decrease in adolescents' levels of use of immature defense mechanisms. Adolescents' intensive recourse to immature defense mechanisms can negatively affect their life adjustments, causing their psychological integrity to be damaged. This situation is within school psychological counselors' field of interest. Therefore, psychoeducation programs (interpersonal problem solving, conflict resolution, social skills training, etc.) and individual psychological counseling practice studies that will help them gain social problem solving skill are recommended in preventive guidance and psychological counseling services to be carried out with children and adolescents. The study group of the research consisted of students continuing high school in Konya, Turkey. Conducting this study with adolescents receiving formal education is one of the limitations of the study. In terms of generalizability of its findings, the study should be repeated with different groups such as adolescents outside formal education or those with different qualifications. The study findings should be supported with experimental studies.

Acknowledgements

A portion of this study has been presented in Yıldız International Conference on Educational Research and Social Sciences in 2014.

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Notes

- * Research article.