SOCIAL AND EMOTIONAL LONELINESS AND SELF-CONCEALMENT AS PREDICTORS OF ADOLESCENTS' SENSATION SEEKING

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Abstract

The present study has investigated the potential influence of Social and Emotional Loneliness and Self-Concealment on sensation seeking. Data were collected from a sample of 447 adolescents. In this research, Pearson correlation coefficient was utilized to determine the relationships between variables. Multiple regression analysis assessed the contributions of the social and emotional loneliness and self-concealment to sensation seeking in adolescents. Sensation seeking correlated with social and emotional loneliness, and self-concealment positively. Regression analysis showed that social and emotional loneliness and self-concealment were significant predictors of the sensation seeking. The significance and limitations of the results were discussed.

Keywords: Sensation seeking, self-concealment, social and emotional loneliness

1. Introduction

Sensation seeking is one of the most important factors to research on the prevention of risky behaviors in adolescents. Sensation seeking individuals may tend to engage in behaviors such as careless behavior, sex without contraception, attract in stimulating occupations, harmful drug use, minor criminal activity, driving recklessly. These type activities may be harmful effects on the healthy development of adolescents and cause various health problem. Therefore, sensation seeking must be examined for maintain psychological and physical health of adolescents who represents a critical developmental period.

Adolescence represents a critical developmental period during which there is a rapid increase in the beginning of substance use, such as smoking, alcohol, and drug. Furthermore, researchers (Arnett, 1999; Steinberg & Morris, 2001) have characterized adolescence as a period of increased risk taking (cited in Crone, Bullens, van der Plas, Kijkuit, & Zelazo, 2008). In addition, development of careless behavior and harmful habit among adolescents is presented in which sensation seeking and adolescent egocentrism is especially one of the most important factors. Findings from studies of automobile driving, delinquency, sex without contraception, illegal drug use, and minor criminal activity are presented with evidence of this (Arnett, 1992; Ayvasik and Sümer 2010; Pokhrel, Sussman, Sun, Kniazer, & Masagutov, 2010; Arnett 1990; Greene, Krcmar, Walters, Rubin, & Hale, 2000; Zakletskaia, Mundt, Balousek, Wilson, & Fleming, 2009). However, little is known of how individual change in, and particularly increases in, sensation seeking relates to increase in such experience in adolescence.

The personality characteristics of sensation seeking, defined as "the seeking of varied, novel, complex, and intense sensations and experiences, and the willingness to take physical, social, legal, and financial risks for the sake of such experiences" (Zuckerman 1994, p. 27), have been implicated in many risky behaviors. Sensation seeking shows the desire for new and sensational experiences in the physical, mental, and social domains (Renfro, Antoine & Lawson, 2013; Zuckerman, 1990; Zuckerman, Bone, Neary, Mangelsdorff, & Brustman, 1972). "Sensation approach reactions are characteristics of a high sensation seeking individual, and typically reflect the orientation and engagement to novel and intense stimuli. Low sensation seeking individuals,

however, are prone toward sensation withdrawal and exhibit avoidance behaviors such as fear or disengagement to novel and intense items" (Renfro, Antoine, & Lawson, 2013).

The construct of sensation seeking is based on the presumption that sensation seeking traits and impulsivity are positively correlated (Zuckerman, Kuhlman, Joireman, Teta, & Kraft, 1993). This association has a genetic basis (Hur & Bouchard, 1997). However, although both traits and impulsivity include a preference for risky activities, only impulsivity contains a lack of planning and an disdain of risks, whereas sensation seeking means award associated with risks (McDaniel & Zuckerman, 2003).

According to researchers, sensation seeking is often linked to risk taking. In the result of studies, found that sensation seeking is associated with a variety of illegal and/or risky behaviors such as risk-taking propensity (MacPherson, Magidson, Reynolds, Kahler, & Lejuez, 2010), sexual risk-taking (Donohew Zimmerman, Cupp, Novak, Colon, & Abell, 2000; Hoyle, Fejfar, & Miller, 2000), alcohol use (Cicognani & Zani, 2011; Legrand, Gomà-i-Freixanet, Kaltenbach, & Joly, 2007; Stacy, Newcomb, & Bentler, 1993; MacPherson et al., 2010), substance use (Kopstein, Crum, Celentano, & Martin, 2001; Manna, Casiglia, & Faraci, 2010), reckless driving (Curran, Fuertes, Alfonso, & Hennessy, 2010; Desrichard & Denarié, 2005; Heino, van der Molen, & Wilde, 1996), dangerous sports (Diehm & Armatas, 2004; Hansen & Breivik, 2001). A number of investigators have established that sensation seeking is connected to earlier onset of substance use among teens and young adults and to higher levels of use (Pederson, 1991). To date, however, there is no research examining the relationships between sensation seeking and social and emotional loneliness, and between sensation seeking and self-concealment in adolescents.

Social support is commonly defined characteristic of social environment, social networks and the benefits that they provide (Cohen & Matthews, 1987). Researchers have described social support's beneficial effects (Abbey, Abramis, & Caplan, 1985; Caplan, 1979; Cobb, 1976; Lieberman, 1982; Sarason, Levine, Basham, & Sarason, 1983; Williams, Ware, & Donald, 1981). Social support indicates a social network's structural characteristics and resources' perceived availability (Choenarom, Williams, & Hagerty, 2005). Social support is information that leads individuals to believe that they are cared for, esteemed, and loved (Schwarzer & Buchwald, 2004). Social support is a multidimensional concept which it states psychological and material resources providing from individual's interpersonal relationships with friends, family members, colleagues (Rodriguez & Cohen, 1998; Schwarzer & Buchwald, 2004). When individuals perceive particular interaction with another one as beneficial, social support occurs (Vietze, 2011). Loneliness has relationships with social and emotional support. The loss or paucity of these support can lead the individual to experience loneliness.

"Loneliness bases from a feeling of being isolated from significant relationships and reflects an interpersonal deficit that exists as a result of fewer or less satisfying relationships than an individual desires" (Hombrados-Mendieta, Garcia-Martin, Gomez-Jacinto, 2013). Loneliness has referred to relationship deficits (de Jong Gierveld, Groenou, Hoogendoorn, & Smit, 2009; Green, Richardson, Lago, & Schatten-Jones, 2001). Weiss (1974) defined two distinct types of loneliness that stem from different kinds of relationship deficits. Emotional loneliness is the absence of an emotionally close relationship with someone who understands and cares about the individual, such as a relationship with a partner or close confidant. Social loneliness is the absence of group ties that provide opportunities to share enjoyable activities and common interests (cited in Liu & Rook, 2013).

Research has linked loneliness to low self-esteem, depression, and physical illness (Hawkley & Cacioppo, 2007; Sorkin, Rook, & Lu, 2002). Such findings underscore the importance of efforts to understand the nature of loneliness and the kinds of relationship experiences that give rise to loneliness in adolescent. de Jong Gierveld et al. (2009) found that larger social network size and more frequent social activities, in contrast, have been found to be related to less social loneliness but to be unrelated to emotional loneliness.

Self-concealment is explained as a general and the constant behavioral tendency to keep distressing and potentially embarrassing private information from others. This behavioral pattern

includes the processes of: (a) possessing a negatively evaluated secret, (b) keeping it from others, and (c) avoiding or feeling apprehensive about self-disclosure (Larson & Chastain, 1990; Masuda & Latzman, 2012). "Self-concealment is also different from low self-disclosure, in that self-concealment implies that a person is hiding information that is distressing, whereas low self-disclosure implies only that a person is not volunteering information that is private" (Fisher, 1984 cited in Fridlander, Nazem, Fiske, Nadorff, & Smith, 2012).

Understanding self-concealment, the tendency to actively conceal distressing private information from others (Fridlander et al., 2012; Hu, Wang, & Wu, 2013; Larson & Chastain, 1990), may be important in developing effective ways to help individuals who has depression, stress, high sensation seeking. Research has demonstrated consistently that self-concealment is destructive to psychological well-being (Larson & Chastain, 1990; Major & Gramzow, 1999; Uysal, Lin, & Knee, 2010). In addition, studies have shown that self-concealing relate to marital well-being (Finkenauer, Kerkhof, Righetti, & Branje, 2009), relationship satisfaction negatively (Uysal, Lin, Knee, & Bush, 2012), relationship well-being (Uysal, Lin, & Bush, 2012), and depressive symptoms and suicidal behaviors (Fridlander et al., 2012). Furthermore, Self-concealment has relationships with anxiety, psychological distress, physical symptoms, and negative self-esteem, and negatively correlated with social support and willingness to use psychological services (Barry & Mizrahi, 2005; Cepeda-Benito & Short, 1998; Ichiyama et al., 1993; Kelly & Achter, 1995; Larson & Chastain, 1990).

The aim of the present study was to examine the relation between sensation seeking and social and emotional loneliness, and between sensation seeking and self-concealment in adolescents. Two hypotheses were tested. Given these emerging questions, the present study first investigated whether social and emotional loneliness and self-concealment were uniquely associated with sensation seeking. Drawing on Weiss's (1974) theoretical distinctions and on previous empirical work (de Jong Gierveld et al., 2009; de Jong Gierveld & Van Tilburg, 2006; Green et al., 2001; Hawkley & Cacioppo, 2007; Hombrados-Mendieta et al., 2013; Sorkin, Rook, & Lu, 2002), We hypothesize that emotional and social loneliness can be positively affected sensation seeking in adolescent. In addition to social and emotional loneliness, self-concealment may be related to the level of sensation seeking. Based on the studies on self-concealment (Barry & Mizrahi, 2005; Cepeda-Benito & Short, 1998; Fridlander et al., 2012; Hu, Wang, & Wu, 2013; Ichiyama et al., 1993; Kelly & Achter, 1995; Larson & Chastain, 1990; Major & Gramzow, 1999; Masuda & Latzman, 2012), we anticipate that sensation seeking is significantly associated with self-concealment positively.

2. Method

2.1. Participants

Data were collected from a sample of 447 adolescents who ranged in age from 12 to 15 years (M \(^1\)4 13.21, SD \(^1\)4 .48). Of the participants, 49% were female; 51% were male. All the participants participated in the study voluntarily. The data collection and its analysis were done anonymously.

2.2. Measures

2.2.1. Self-concealment Scale

The scale was developed by Larson and Chastain (1990), which was adapted into Turkish by Deniz and Çok (2010). It is a 10-item self-report measure of self-concealment. Items are rated from 1 (strongly disagree) to 5 (strongly agree). The scores can range from 10 (low level of self-concealment) to 50 (high level of self-concealment). The scale scores are the sum of items. In the present study, the Cronbach alpha coefficient was 0.81.

2.2.2. Social and Emotional Loneliness Scale

The scale was developed by DiTommasso, Brannen and Best (2004), which was adapted into Turkish by Çeçen (2007). It is a 15-item self-report measure of self-concealment. Items are rated

from 1(very strongly disagree) to 7 (very strongly agree). The scores can range from 15 (low level of social and emotional loneliness) to 105 (high level of social and emotional loneliness). The scale scores are the sum of items. In the present study, the Cronbach alpha coefficient was 0.81.

2.2.3. Brief Sensation Seeking Scale

The scale has been developed by Stephenson, Hoyle, Palmgreen, & Slater (2003), which was adapted into Turkish by Çelik Turan, & Güngör (2014) in order to measure sensation seeking. The Brief Sensation Seeking questionnaire contained four questions. The scale was anchored by strongly disagree (1) to strongly agree (4) with four items. The scale scores are the sum of items. In the present study, the Cronbach alpha coefficient was 0.79.

2.3. Data analysis

The reliability of the Social and Emotional Loneliness Scale, Self-concealment Scale and the Brief Sensation Seeking Scale was assessed using Cronbach's alpha. In this research, Pearson correlation coefficient was utilized to determine the relationships between variables. T-test was used to determine whether a adolescents' sensation seeking, self-concealment, and social and emotional loneliness differs according to gender. The possible effects of the social and emotional loneliness, and self-concealment on the sensation seeking were analyzed using multiple regression in the general linear model procedure of SPSS for Windows.

3. Results

3.1. Associations Between Variables

Descriptive statistics and correlations among study variables are presented in Table 1. Sensation seeking was significantly and positively associated with social and emotional loneliness (r= .26), and it was significantly and positively associated with self-concealment (r= .38).

Table 1 Descriptive Statistics and Correlations

Variables	1	2	3
Sensation Seeking	1		
Social and Emotional Loneliness	.26**	1	
Self-concealment	.32**	.25**	1
M	10.72	62.34	26.82
SD	3.45	11.82	9.85

^{**}p < 0.01

3.2. Differences in Terms of Gender

Adolescents' sensation seeking, self-concealment, and social and loneliness levels are compared by using t-test. The average of adolescents' sensation seeking, self-concealment, and social and loneliness points which are obtained with this purpose, the standard deviations of it and the findings regarding the *t* value are presented in Table 2.

Table 2 The Averages, Standard Deviations and T Values

Variables	Gender	N	<i>\bar{X}</i>	S	t	p
Sensation Seeking	Female	220	10.28	3.43	2.67	.008
	Male	227	11.15	3.42		

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Self-Concealment	Female	220	25.83	9.66	2.10	.037	
	Male	227	27.78	9.97			
	Female	220	62.07	9.84	0.48	.633	
Social and Emotional Loneliness							
	Male	227	62.60	13.49			

DF = 445

As seen in Table 2, it is found that sensation seeking (t= 2.67, p= .008) and self-concealment (t= 2.10, p= .037) points of adolescents show significant difference when compared according to the gender. It is seen that sensation seeking (\sqrt{s} =11.15) and self-concealment (\sqrt{s} =27.78) points average of male adolescents is higher than point average of male. However, it is found that social and emotional loneliness level (t= 0.48, p= .633) of adolescents don't show significant difference when compared according to the gender.

3.3. Social and Emotional Loneliness and Self-concealment as predictor of Sensation Seeking

The multiple regression analysis assessed the contributions of social and emotional loneliness, and self-concealment to adolescents' sensation seeking (see Table 3). In the regression model, sensation seeking was predicted by social and emotional loneliness ($\beta = .19$, p < .001), and predicted by self-concealment ($\beta = .27$, p < .001) positively. The variables accounted for 36,5% of the variance in sensation seeking. The regression model predicting sensation seeking was significant ($R^2 = .13$, p < .001). Finally, the regression model predicting sensation seeking was significant.

Table 2 Multiple Regression Analyses

Dependent	Predictor	b	Standard Error of <i>b</i>	β	t	p
Sensation Seeking	Social and Emotional Loneliness	.06	.01	.19	4.18	<.01
	Self-concealment	.09	.02	.27	5.85	<.01

4. Discussion

The aim of the present study was to examine the relationships between sensation seeking and social and emotional loneliness, and between sensation seeking and self-concealment in adolescents and whether these variables predicted sensation seeking levels. The findings clearly supported the hypotheses of the study. Preliminary correlation analyses showed that self-concealment, social and emotional loneliness were associated with sensation seeking positively. As a result of regression analysis self-concealment, social and emotional loneliness predicted sensation seeking significantly.

When comparing the predictive values, self-concealment is more predictive variable than social and emotional loneliness. This result showed that individuals with high self-concealment reported high sensation seeking. Similarly, individuals with high social and emotional loneliness demonstrated high sensation seeking. The present study findings are discussed in view of the previous studies. In the literature, there is no study examining the relationship between sensation seeking and social and emotional loneliness, and between sensation seeking and self-concealment. Researchers (de Jong Gierveld, Groenou, Hoogendoorn, & Smit, 2009; Green, Richardson, Lago, & Schatten-Jones, 2001; Liu & Rook, 2013) stated that loneliness have referred to relationship deficits. Research has linked loneliness to low self-esteem, depression (Hawkley & Cacioppo, 2007; Sorkin, Rook, & Lu, 2002). In this context, adolescents, having social and emotional loneliness, may try to gain attention by sensation seeking behaviors (e.g. Illegal and/or risky behaviors, smoking, substance use, reckless driving, and dangerous sports) in order to obtain social support

from other people such as friend, family, and teacher. In addition, these sensations seeking behaviors might help adolescents to increase the self-esteem level and decrease the depression level.

Reviewing the literature, it is seen that research has demonsrated consistently that self-concealment is destructive to psychological well-being (Larson & Chastain, 1990; Major & Gramzow, 1999; Uysal, Lin, & Bush, 2012; Uysal, Lin, & Knee, 2010) and relate to depressive symptoms and suicidal behaviors (Fridlander et al., 2012). Futhermore, self-concealment has relationship with anxiety, psychological distress, physical symptoms, and negative self-esteem, (Barry & Mizrahi, 2005; Cepeda-Benito & Short, 1998; Ichiyama et al., 1993; Kelly & Achter, 1995; Larson & Chastain, 1990). In this context, sensation seeking behaviours might help adolescents who have self-concealment characteristic, to overcome self-esteem problems, depressive symptoms, anxiety, and psychological distress. Thus, further research about sensation seeking should focus on self-esteem problems, depressive symptoms, anxiety, and psychological distress.

To date, our study is the first to assess sensation seeking, self-concealment and social and emotional loneliness in adolescents. However, there are several limitations. Social and emotional lonelines and self-concealment only accounts for a certain amount of the variance of sensation seeking scores. Despite these limitations, the present study offers interesting results and research perspectives. The relationship between sensation seeking and self-concealment seeking merits further study. Thus, other factors may be involved in adolescent's sensation seeking, such as cognitive distortions (Barrault & Varescon, 2013), anxiety and depression (Hopley, Dempsey, & Nicki, 2012), the characteristics of the particular culture and particular time (Arnett, 1992), physical, mental, and social domains (Renfro, Antoine & Lawson, 2013; Zuckerman, 1990; Zuckerman, Bone, Neary, Mangelsdorff, & Brustman, 1972), novel and intense stimuli (Renfro, Antoine, & Lawson, 2013), harmful habit and adolescent egocentrism. Further studies, assessing these factors conjointly, may beter help to understand sensation seeking in adolescents.

The present study findings are encouraging for continued investigation of how self-concealment, social and emotional loneliness relate to sensation seeking. Despite these promising results, there are important limitations in our study. We relied solely on the self-reports of our participants. Therefore, future research should collect the perspectives of others, including teachers, staff, peers, and families to further our understanding the relationship between social and emotional loneliness and sensation seeking, and the relationship between self-concealment and sensation seeking. Social support, which is lack of social and emotional loneliness, from peers, families, significant others, and teachers may serve to buffer impact of the decrease in well-being and happiness, and may decrease students sensation seeking. Future research should focus on various aspects of social support which may affect sensation seeking positively. Furthermore, future research about sensation seeking should focus on game addiction, depression and negative body image in adolescent.

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