

## Sensation Seeking, Self-Concealment as Predictors of Adolescents' Attitude Toward Violence in Early Adolescence

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### Abstract

*In this study, the variables of the research; relationships between excitement seeking, self-concealment and attitudes towards violence were also examined. In addition, this study investigates the prediction level of self-concealment and sensation seeking on the attitude toward violence in early adolescence. Relational survey method is applied in present study. Brief Sensation Seeking Scale, Self-concealment Scale, and Adolescents' Attitude toward Violence Scale were delivered to 393 adolescents. Participants consist of students attending 6th, 7th and 8th grade in three different public schools between the ages of 12-15. 50% of the participants were female students. Pearson correlation coefficient and stepwise regression analysis were applied. This study result shows that attitude toward violence positively relates to sensation seeking and self-concealment. The stepwise regression analysis revealed that self-concealment and sensation seeking predict the attitude toward violence. This study revealed that sensation seeking is an important predictor of adolescent's attitude toward violence. In the light of the findings obtained from the study, and the suggestions for teachers and psychological counselors about the orientation of the sensation seeking and the supporting environments were included.*

**Keywords:** Self-concealment, Attitude toward Violence, Sensation Seeking

## Erken Ergenlikte Şiddete Yönelik Tutumun Belirleyicisi Olarak Heyecan Arayışı ve Kendini Gizleme

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### Öz

Bu araştırmada, araştırmmanın değişkenleri olan; heyecan arayışı, kendini gizleme ve şiddete yönelik tutum arasındaki ilişkiler incelenmiştir. Bunun yanı sıra kendini gizleme ve heyecan arayışının, erken ergenlikte şiddete yönelik tutumu yordama düzeyi belirlenmeye çalışılmıştır. Araştırma, ilişkisel tarama yöntemi ile gerçekleştirilmiştir. Araştırma verileri; Kısa Heyecan Arayışı Ölçeği, Kendini Gizleme Ölçeği ve Ergenler İçin Şiddete Yönelik Tutum Ölçeği'nin 393 ergene uygulanmasıyla toplanmıştır. Katılımcılar 12-15 yaş arasındaki 3 farklı devlet okulunda 6. 7. ve 8. sınıfı devam eden öğrencilerden oluşmaktadır. Araştırmaya katılanların %50'si kız öğrencidir. Veriler Pearson koreasyon katsayısı ve aşamalı regresyon analizi ile incelenmiştir. Araştırma sonucunda şiddete yönelik tutumun, hem heyecan arayışı hem de kendini gizleme ile ilişkili olduğu görülmüştür. Aşamalı regresyon analizi sonucu, kendini gizleme ve heyecan arayışının şiddete yönelik tutumu yordadığını ortaya koymuştur. Heyecan arayışının ergenlerde şiddete yönelik tutumu yordayan önemli bir değişken olduğu sonucuna ulaşılmıştır. Araştırmadan elde edilen bulgular ışığında, heyecan arayışının yönelikine ve öğrencileri destekleyici ortamlara ilişkin öğretmenlere ve psikolojik danışmanlara yönelik önerilere yer verilmiştir.

**Anahtar Kelimeler:** Kendini Gizleme, Şiddete Yönelik Tutum, Heyecan Arayışı

## Introduction

The terms of violence and aggression are used interchangeably in the literature. But violence is accepted as a highly harmful part of aggression (Allen & Anderson, 2017). Hence, the types and terminological examination of these two terms may fall far beyond this article, we just focused on violence as a crucial problem in adolescence.

Examining the literature, there is a lot of study related to this issue. The frequency of engaging in violent behaviors is greater for adolescents than for all other age groups. Studies showed that tendency to violence increased during adolescence (Dahlberg & Potter, 2001; Haskan Avcı & Yıldırım, 2014). Furthermore, the results of longitudinal studies revealed that adolescents show high proportions of violent behavior, such as aggression, breaking rules, and antisocial behaviors (Brendgen, Vitaro, Tremblay, & Wanner, 2002). Silverman, Raj, Mucci, and Hathaway (2001) indicated that adolescent violence produces long and short-term problems with respect to physical, social, behavioral, and psychological aspects.

Positive attitudes toward violence have a significant importance in aggressive behaviors (Anderson, Benjamin, Wood, & Bonacci, 2006; Çetin, 2011). Individuals' attitude toward violence is affected by their evaluation of the situation and of possible other ways of behavior. Violent behaviors can be predicted by comprehending people's attitudes toward violence (Petty & Cacioppo, 1981 cited in Anderson et al., 2006).

Types of violence varies depending on sorts of violent behaviors, to whom violent behavior is committed, who commit violence, and the place that violence occurs. For instance, various injurious behaviors like emotional, verbal, physical, sexual, and economic aggression (Baker & Kavşut, 2007; Janosz, Archambault, Pagani, Pascal, Morin, & Bowen, 2008; Quinn, Bell-Ellison, Loomis, & Tucci, 2007; Türküm, 2011), pressure, and deprivation of freedom (Assembly, 1993), violence against women (Al-Matalka, 2009, 2012; Al-Matalka & Hussainat, 2013) are examples of to whom violent behavior is committed. Adolescence or peer violence (DuPont-Reyes, Fry, Rickert, Bell, Palmetto, & Davidson, 2014), and parental violence are examples of who commit violence. Domestic violence (Al-Matalka & Hussainat, 2013), violence in public are examples of the place where the violence occur. Although such categorizations of violence may vary, the

harm of violence can be more easily categorized, such as physical, psychological, economical, and sexual harm.

Adolescent violence, expressed as community or peer violence, is a comprehensive concept that includes gang violence, beating, bullying, physical or sexual assault, and pillage (DuPont-Reyes et al., 2014). Studies demonstrated that adolescent violence was related to playing video games (Deselms & Altman, 2003; Flowers, Hastings, & Kelley, 2000; Funk, Baldacci, Pasold, & Baumgardner, 2004; Krahe & Moller, 2004), and internet and online game addiction (Ko, Yen, Liu, Huang, & Yen, 2009; Mehroof & Griffiths, 2010). Furthermore, Sampson, Morenoff, and Raudenbush (2005) stated that adolescents grew up in suburbs more violent behavior than adolescents grew up in higher economic conditions. Studies also showed that a positive attitude toward violence was seen as a predictor of violent behavior (Gellman & Waack-Delucia, 2006; Vernberg & Jacobs, 1999). Meanwhile, adolescents who have higher attitude toward violence act violently towards their peers, siblings, and other persons (Çetin, 2011).

Empirical evidences also revealed that substance use (e.g. alcohol, cigarette, and marijuana) often preceded or accompanied acts of violence (Albus, Weist, & Perez-Smith, 2004; Foran & O'Leary 2008). Hurd, Zimmerman, and Reischl (2011) indicated that adult role models' antisocial behavior, which is displayed by significant others for adolescent (e.g. father, mother, peer, and teacher), was directly linked to increased violent behaviors. Some other studies ascertained that adolescent violence was related to childhood abuse (Fang, & Corso, 2007; Schafer, Caetano, & Cunradi, 2004). Moreover, seeking higher risky stimuli, including aggressive acts, is one other element related to violence (Jensen, Weaver, Ivic, & Imboden, 2011; Marcus, 2012; Saewyc, Brown, Plane, Mundt, Zakletskaia, Wiegel, & Fleming, 2009).

## Sensation seeking

Adolescents with higher sensation seeking may engage in violent and other criminal behaviors. These behaviors may negatively affect the adolescents' development and mental health. Sensation seeking goes up due to natural neurobiological changes in adolescents, but it goes down into adulthood (Chambers, Taylor, & Potenza 2003). Sensation seeking can be

explained as a search for new, complex, dense experiences, and alacrity of risk taking just for wishing to live such an experience (Zuckerman, 1994) and mental, physical, and social risks also included in it (Renfro, Antoine, & Lawson, 2013; Zuckerman, 1990). Furthermore, based on arousal theory, as a main aim, sensation seeking includes to heighten the arousal level (Zuckerman, 1994). For instance, higher levels of sensation seeking people are more possible to join dangerous, or sometimes only frightening activities (Stephenson & Southwell, 2006) as well video games including violence (Jensen et al., 2011).

Sensation seeking, accepted as a personality propensity, often linked to problematical behaviors. Studies revealed that various risky behaviors, such as hazardous sports (Diehm & Armatas, 2004), substance abuse (Manna, Casiglia, & Faraci, 2010), sexual risk-taking (Donohew, Zimmerman, Cupp, Novak, Colon, & Abell, 2000), and thoughtless driving (Curran, Fuertes, Alfonso, & Hennessy, 2010) all were related to sensation seeking. Studies also indicated that both risk-taking (Steinberg, 2008) and substance abuse (Cicognani & Zani, 2011; Stanis & Andersen, 2014) increased during adolescence.

As seen in previous studies, some factors related to sensation seeking like substance abuse (Albus et al., 2004; Foran & O'Leary 2008) and risk-taking (Thumherr, Michaud, Berchtold, Akrè, & Suris, 2009) may be the precursors of the violence during adolescence.

Furthermore, the neurotic part of perfectionism known as maladaptive perfectionism, meaning setting high standard goals but inability to reach them (Rice, Ashby, & Slaney, 2007), was linked to aggressive behavior (Öngen, 2010) including violence (Chester, Merwin, & DeWall, 2015). Meanwhile, maladaptive perfectionism is related to self-concealment (Williams & Cropley, 2014; Kawamura & Frost, 2004) and this relation brings a question in mind about the role of not only sensation seeking, but also the role of self-concealment in attitude toward violence.

### **Self-concealment**

Self-concealment is a behavioral disposition to consciously conceal worrying and possible shameful data about oneself from other people (Fridlander, Nazem, Fiske, Nadorff, & Smith, 2012). The self-concealment

process comprising the steps of: “(a) possessing a negatively evaluated secret, (b) keeping it from others, and (c) avoiding or feeling apprehensive about self-disclosure” (Larson & Chastain, 1990 cited in Masuda & Latzman, 2012 p. 49). Understanding self-concealment may lead to some useful ways to develop appropriate tools in order to aid adolescents who have feelings of anger, nervous, depressive, stressfull, and higher attitude toward violence.

Studies revealed that self-concealment negatively associated to relationship satisfaction and relationship well-being (Uysal, Lin, Knee, & Bush, 2012), however, it was positively related to depression and suicide (Fridlander et al., 2012). Thus, self-concealment has a positively associated to psychological distress (Masuda, Anderson, & Sheehan, 2009), negative emotions (Kahn & Hessling, 2001), maladaptive perfectionism (Kawamura & Frost, 2004), negative self-esteem, and psychological and physical symptoms, (Ward, Doherty, & Moran, 2007), but it is negatively associated with social support and alacrity to search for psychological help (Barry & Mizrahi, 2005). Researches also revealed that self-concealment inhibits psychological well-being (Uysal, Lin, & Knee 2010; Wang, Qi, & Cui, 2014; Wismeijer & van Assen, 2008), and psychological adjustment (Potocznak, Aldea, & DeBlaere, 2007).

### **Present study**

According to arousal theory, potentially risky behaviors, including violence, are chosen by the individuals in order to have higher arousal levels (Eysenck, 1997; Raine, Brennan, & Mednick, 1997; Raine, Venables, & Mednick, 1997). That is, high sensation seekers search for risky, dangerous, and or violent activities, to heighten their arousal levels (Roberti, 2004). Researches showed that violent films, games, and internet sites were attractive for high sensation seekers (Aluja-Fabregat, 2000; Krcmar & Greene, 1999; Slater, 2003). Moreover, sensation seeking relates to the consumption of violent material (Slater, 2003), which is a predictor of violent behavior (Jensen et al., 2011), and criminal behavior (Newcomb & McGee, 1991; Vermeiren, Schwab-Stone, Ruchkin, King, & Van Heeringen, 2003).

Adolescents with higher self-concealment may exhibit violence (Chester, Merwin, & DeWall, 2015). Because maladaptive perfectionism is linked to aggressive behavior including violence (Chester et al., 2015) and it is related to self-concealment (Kawamura & Frost, 2004; Williams & Cropley, 2014), the question about the roles of sensation seeking and the self-concealment in attitude toward violence should be answered in order to understand attitude toward adolescence violence.

Moreover, scholars indicated that diminishing violence necessitates collecting information related to personality traits and characteristics (Avcı & Güçray, 2010; Aypay & Durmuş, 2008; Spriggs, Halpern, & Martin, 2009; Vittes, Susan, & Sorensonv, 2006). Self-concealment and sensation seeking may be a crucial personal characteristic influencing attitude toward violence in adolescents.

Meanwhile, previous studies do not inform us whether self-concealment and sensation seeking predict attitude toward violence. Besides examining the relationships among self-concealment, sensation seeking, and attitude toward violence may supply helpful information for developing prevention research and programs of violence. In sum, the main objective of this research is to determine whether the relationship between self-concealment and attitude toward violence is mediated by sensation seeking.

To date, there is limited study investigating the associations among sensation seeking, self-concealment and attitude toward violence in early adolescence. In this context, drawing on previous studies about sensation seeking and violence (Cicognani & Zani 2011; Curran et al., 2010; Kopstein, Crum, Celentano, & Martin, 2001; Manna et al., 2010; Renfro et al., 2013), the hypothesis of present study is sensation seeking and self-concealment predict attitude toward violence.

## **Method**

Relational survey method is applied in present study. The relationships among variables are determined by implementing the relational survey method. In this regard, the relationships among research variables (sensation seeking, self-concealment, attitude toward violence) are examined.

## Participants

Convenience sampling method was used in the selection of the individuals to the study group. In this context, the study used a sample of three secondary state schools (Grades 6, 7, and 8). Of the participants, 50% were female. 393 adolescents (age range is between 12 to 15) filled the scales.

## Measures

A 5-point likert-type 10-item adolescents' attitude toward violence (Çetin, 2011) scale, a 5-point Likert-type 4-item Brief Sensation Seeking Scale (Stephenson, Hoyle, Palmgreen, and Slater, 2003) adapted into Turkish by Çelik (2015), and is a 10-item scale with a 5-point Likert-type Self-concealment Scale (Larson and Chastain, 1990) adapted into Turkish by Deniz and Çok (2010) were used for data gathering. Psychometric properties of all these self-report scales were sufficient for Turkish Culture.

**Adolescents' Attitude toward Violence:** In the study in which the scale was adapted to Turkish, it was determined that the factor loads of the scale were between .58 and .76 as a result of the exploratory factor analysis. It was found that fit indexes obtained from confirmatory factor analysis were acceptable ( $RMSEA=0.065$ ,  $GFI=.96$ ,  $AGFI=.94$ , and  $CFI=.95$ ). In addition, the reliability coefficient of the scale was found to be .85 (Çetin, 2011). Also in this study, the internal consistency coefficient of the scale was .80.

**Brief Sensation Seeking Scale:** In the adaptation study, as a result of the exploratory factor analysis, it was found that the Turkish form of the scale had a single factor structure as in the original and the factor loads of the items were ranked between .74 and .84. In addition, the reliability coefficient of the scale was found to be .82 at the adaptation process to Turkish. In this study, the internal consistency coefficient of the scale was .85 too.

**Self-concealment Scale:** In the study in which the scale was adapted to Turkish, it was found that the factor loadings of the scale were between

.51 and .74 as a result of the exploratory factor analysis. It was found that fit indexes obtained from confirmatory factor analysis were acceptable ( $GFI = .93$ ,  $AGFI = .89$ ,  $CFI = .97$ , and  $RMSEA = .07$ ). In addition, the reliability coefficient of the scale was found to be .86 at the adaptation study. But in this study, the reliability level of the scale was .85.

### Statistical Analyses

In a first step, the reliability of the Self-concealment Scale and the Brief Sensation Seeking Scale was assessed using Cronbach's alpha. In a second step, Pearson correlation coefficient was utilized to determine the relationships between variables. In order to the determining of the factors that contribute to the adolescents' attitude toward violence, the stepwise regression analysis was used.

In order to apply regression analysis, regression assumptions were controlled. 30 data were deleted as outliers, as a result of Mahalanobis distance. The variance inflation factors values indicated that no multi-collinearity problem didn't occur. After all, stepwise regression analysis was conducted to test whether the sensation seeking and self-concealment predict attitude toward violence.

*Table 1. Results about the Assumptions of Normal Distribution and Regression Analysis*

Variables	Skewness	Kurtosis	VIF	CI
Attitude toward Violence	.132	-.590		1.000
Self-concealment	.110	-.802	1.052	5.65
Sensation Seeking	-.078	-.987	1.052	7.74

## Results

### Associations among Study Variables

Descriptive statistics and correlations are shown in Table 1. As seen Table 1, attitude toward violence correlated positively and significantly with both sensation seeking ( $r = .72$ ) and self-concealment ( $r = .32$ ).

**Table 2. Descriptive Statistics and Correlations**

<b>Variables</b>	<b>1</b>	<b>2</b>	<b>3</b>
Attitude toward Violence	1		
Sensation Seeking	.72**	1	
Self-concealment	.32**	.24**	1
$\bar{x}$	27.35	10.40	26.76
SD	7.72	3.66	9.94

\*\* $p < 0.01$

### **Role of Sensation Seeking and Self-concealment on Attitude toward Violence**

The stepwise regression analysis assessed whether sensation seeking and self-concealment predicted adolescents' attitude toward violence. The findings are presented in Table 2.

**Table 3. Summary of Stepwise Multiple Regression Analysis for Variable Predicting Attitude Toward Violence**

<b>Variables</b>	<b>B</b>	<i>SE<sub>B</sub></i>	$\beta$	<i>t</i>	<i>p</i>	<i>R</i>	<i>R<sup>2</sup></i>	<i>F</i>	<i>p</i>
<b>Step 1</b>									
Self-concealment	.24	.04	.31	6.145	.00	.31	.09	37.76	.00
<b>Step 2</b>									
Self-concealment	.11	.03	.14	4.313	.00	.80	.64	321.144	.00
Sensation Seeking	1.63	.07	.76	23.396	.00				

\* $p < 0.01$

As seen Table 2, the first variable, self-concealment explained 31% of the variance in attitude toward violence. The second variable, sensation seeking, explained an additional 49% of the variance. The last regression model sensation seeking and self-concealment as predictors accounted for 80% of the variance in attitude toward violence. As shown in Table 2, the results of stepwise regression analysis demonstrated that the self-concealment was positively associated with attitude toward violence ( $\beta = .31$ ,  $t = 6.14$ ,  $p < .01$ ). When sensation seeking was entered in the model, the independent effect of self-concealment on attitude toward violence decreased ( $\beta = .14$ ,  $t = 4.31$ ,  $p < .01$ ), but  $R^2$  increased from .09 to .64. Thus, the relationship between self-concealment and attitude toward violence is partially mediated by sensation seeking.

## Discussion

This study aimed to investigate the relationships between attitude toward violence and sensation seeking, and between attitude toward violence and self-concealment in adolescents; and whether these variables predicted attitude toward violence levels. Furthermore, this study examined whether sensation seeking had mediating role in the relationship between self-concealment and attitude toward violence. The findings verified these hypotheses of the study. The present study shows that sensation seeking and self-concealment is positively related to attitude toward violence, and also sensation seeking and self-concealment significantly predict the attitude toward violence. Besides, the relationship between self-concealment and attitude toward violence is mediated by sensation seeking.

According to the predictive values, sensation seeking had a higher predictive score than self-concealment. As seen in the results of the regression analysis, sensation seeking significantly predicts attitude toward violence. This finding is coherent with the results of the previous researches (Aluja-Fabregat, 2000; Eysenck, 1997; Krcmar & Greene, 1999; Newcomb & McGee, 1991; Raine, Brennan, & Mednick, 1997; Raine, Venables, & Mednick, 1997; Slater, 2003; Vermeiren et al., 2003). Due to the fact that sensation seeking behaviors increase arousal level (Zuckerman, 1994), it may increase positive attitude toward violence level in adolescence.

Though the predictive score of self-concealment lesser than sensation seeking, it predicted attitude toward violence. Self-concealment has many negative effects such as depressive symptoms and anxiety (Barry & Mizrahi, 2005; Larson & Chastain, 1990), and related to low psychological well-being (Uysal et al., 2012). Due to negative feelings related to low psychological well-being and anxiety and depression, attitude toward violence can prevent the destructive effect of the low psychological well-being. In other words, self-concealer adolescents may get involve in violence in order to escape negative feelings of such negative feelings related to self-concealment. Furthermore, adolescents with higher self-concealment may feel lonely, ignored, and unappreciated, and also they may experience more relationship deficits than others. These negative effects of self-concealment may be suppressed by violent behavior or attitude toward violence may have a kind of protective role on self-concealment. Besides,

violent behaviors may be adolescents' self-disclosure method rather than disclosing negative feelings verbally in adolescence. They may prone to engage violent behaviors in order to obtain attention from significant others. All these possible relations may cause self-concealment's prediction of attitude toward violence.

Also the relationship between self-concealment and attitude toward violence is mediated by sensation seeking. To put it another way, without sensation seeking, the direct effect of self-concealment on attitude toward violence would be higher. This result also brings the idea to mind that individuals with higher sensation seeking may engage violent behavior, and may have positive attitude toward violence. As seen previous studies (Jensen et al., 2011; Stephenson & Southwell, 2006), because of the fact that sensation seekers may prone to engage illegal and/or risky behaviors, their attitude toward violence level is higher. Thus, in the light of such researches, the mediation effect of sensation seeking seems to be reasonable.

Finally, depending on the findings of present study, some suggestions can be made. In order to decrease the level of attitude toward violence, it is important to take further steps to decrease self-concealment level of adolescents. Also sensation seeking needs of adolescents can be directed to highly arousal or rewarding but not violent activities. On the other side, a good teacher and student interaction can be a reward for adolescents. For this reason, positive interaction between teachers and students and supportive relationships should be increased. Moreover, supportive student environments should be created. Serving such opportunities may lead to decrease adolescents' attitude toward violence. Furthermore, adolescents' attitude toward violence level may decrease, if their good characters (e.g. appropriate disclosing, self-regulation, and social intelligence) develop in school-based, family-based, and community-based education programs. Such kind of programs may include activities that will help to recognize the tips of anger (Wilde, 2006), increasing awareness about the proper ways of showing anger (Gültekin, 2011) clarify the rules and boundaries (Terzi, 2007), develop moral values, and sense of mercy (Hökelekli, 2007). Because these characters may increase positive thoughts, feelings, and behaviors and may reduce violent acts in adolescence. Furthermore, a multiple approach is needed that incorporates the adolescent, family, school, and community to experience a reduction of violence in adolescence.

Thus, future research should aim to improve psycho-education programs to decrease self-concealment, increase appropriate self-disclosure and sensation seeking activities, including adolescent, family, teacher and significant others for adolescents. And also the media should focus on reducing adolescent violence. The school programs, which aimed to reduce violent behaviors, can be focused on anger management, conflict resolution, and interpersonal problem solving skills.

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