

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/320082102>

Anger and Tolerance Levels of the Inmates in Prison

Article in Archives of Psychiatric Nursing · September 2018

DOI: 10.1016/j.apnu.2017.09.014

CITATIONS

0

READS

489

5 authors, including:



Songül Duran

Trakya University

31 PUBLICATIONS 25 CITATIONS

[SEE PROFILE](#)



Sibel Ergün

Balikesir University

19 PUBLICATIONS 40 CITATIONS

[SEE PROFILE](#)



Ozlem Tekir

Balikesir University

9 PUBLICATIONS 16 CITATIONS

[SEE PROFILE](#)

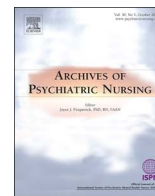
Some of the authors of this publication are also working on these related projects:



substance use and nursing students [View project](#)



Stroke Patients Quality of Life and adherence to treatment [View project](#)



Anger and Tolerance Levels of the Inmates in Prison

Songül Duran^{a,*}, Sibel Ergün^a, Özlem Tekir^a, Türkan Çalışkan^b, Ayşe Karadaş^a

^a Department of Nursing, Balıkesir University, School of Health, Balıkesir, Turkey

^b Department of Midwifery, Balıkesir University, School of Health, Balıkesir, Turkey



Anger is defined by Soykan (2003) as “a highly natural, universal and humane emotional response displayed to unsatisfied requests, undesired results, and unmet expectations (Soykan, 2003).” In terms of evolutionary psychology, when evolutionary past of organisms combines with the human nature, anger helps people to survive and makes adaptive responses easier; especially in the face of danger, it causes fight-or-flight response (Bahrami, Mazaheri, & Hasanzadeh, 2016). Anger is a functional, normal emotion for a person; however, it may cause behaviors such as aggression, creating distress for the person and others, (Robertson, Daffern, & Bucks, 2012), avoidance and withdrawal (Ayup, Nasir, Abdul Kadir, & Mohamed, 2016; Kroner & Reddon, 1992). According to one definition, anger is an emotional situation that forms a basis for hate and aggression (Bahrami et al., 2016). It is possible that anger can contribute to annoying behaviors and behavioral difficulties in prison environments. It was reported that anger has a primary role in the severity of hostility and retaliation (Ünver, Yuce, Bayram, & Bilgel, 2013) and can lead to interpersonal violence resulting sometimes with violence (Ramirez, Jeglic, & Calkins, 2015).

Anger arises under varied internal and external conditions. Frustration, being hard done-by, physical injury or sprain, being subjected to harassment or violence, disappointment and threats are among factors causing anger (Kıran, 2012). When people perceive events and other people around them as a threat to themselves, the level of tension felt increases and tolerance levels decrease. As a natural consequence of this, the reaction displayed is anger and aggression (Yazgan, 2007).

Tolerance, generally, means the ability to tolerate or endure stress, burden, pain, pressure without suffering any damage (Kaleli, 2013). Tolerance is defined as bearing internal tension with the help of inner powers (Ersanlı, 2014). Frustration is a period during which the feelings of anger and aggression dominate. In this respect, people's tolerance levels are associated with the extent to which they can endure the tension experienced resulting from this frustration (Akkoç-Şener, 2011).

Studies examining the relationship between violence, aggression and committal behaviors, and anger have revealed that anger is mostly an initiator of aggressive behavior, even if it is not automatically exhibited by aggression and violence (Ersen et al., 2011).

It was reported that anger is associated with being imprisoned, with

problems about discipline, aggression, and violence (Howells et al., 2008). However, some studies have reported that compared to society in general, convicts, and compared to people committing other types of crime, those committing a violent crime had higher levels of anger in scores (Görgülü & Cankurtaran Öntaş, 2013; Howells et al., 2005). One study stated that organized convicts were angry and depressive before crime (Cantürk & Cantürk, 2004). It was reported that convicts have serious difficulties in managing anger and that they mostly express this feeling as physical aggression in the shape of an outburst without considering its possible results (Petkova, Nikolov, & Panov, 2005)

All this information leads to the conclusion that there is an intense relationship between anger, tolerance, violence, and crime. In Turkey, although some studies have examined types of anger expression (Ersen et al., 2011) and the mental characteristics of convicts who have committed a crime (Ünver et al., 2013), there are no studies discussing the relationship between anger and the tolerance levels of imprisoned convicts. It is believed that this study is important to determine convicts' anger and tolerance levels and that it will be a guide for education programs to be implemented to confront this problem (anger management education/education for increasing tolerance of indulgence).

In the light of this purpose, answers were sought for the following questions:

1. What are the anger and tolerance levels of imprisoned convicts?
2. What are factors that affect anger and tolerance levels of imprisoned convicts?

Materials and Methods

Study Design and Purpose

This was a descriptive cross-sectional study conducted to determine anger and tolerance levels of imprisoned convicts.

The Place Where This Study Was Conducted

This study was conducted with convicts in Balıkesir Burhaniye T-Type Closed Prison. Prisons in Turkey are classified as A, B, C, D, E, F, H, K, L, M, R, and T types according to their capacity, size, and safety

* Corresponding author.

E-mail address: songulduran@trakya.edu.tr (S. Duran).

levels. D- and F-Type prisons are high security. (<http://www.cte.adalet.gov.tr/index.html>, Accessed: 20 January 2017). This penal institution, where the present study was conducted, has 91 rooms of 8 persons (18 single rooms, 2 observation rooms, 1 disabled room, 8 rooms of 3 and 2 transient rooms). Although the Burhaniye T-Type Closed Prison has a capacity of 532, because the current number has increased, its capacity has increased to 922 with the capacity to further increase. (<http://www.burhaniyettkacik.adalet.gov.tr>, Accessed: 11 April 2017). During the period when this study was conducted, 1050 convicts were in the prison. People committing ordinary crimes or crimes of terror are in the T-Type prison. Those who did not wish participate in the study, who did not complete the forms, and who had a history of a psychiatric disorder (444 individuals) were excluded from the study.

Participants

The population of this study comprised convicts in Balıkesir Burhaniye T-Type Closed Prison between 15.01.2015 and 15.04.2015. This study did not select a study sample, it aimed to reach the entire population. The study sample therefore included all convicts (506 people) who agreed to participate in the present study, did not have a history of psychiatric disease. After providing the necessary explanation, the researcher delivered data collection tools to all wards and collected them 15 to 20 min later. The researcher helped illiterate convicts to complete the questionnaires.

Data Collection Tools

Study data were collected using the Personal Information Form, Tolerance Scale, and State-Trait Anger Expression Inventory (STAXI).

- Personal Information Form:** This form queries sociodemographic data such as age, gender, educational level, the place where participants lived longest, and questions about being in prison (type of crime, duration) (Ozdemir, 2009; Ayan, 2013; Kızılkaya, 2014).
- Tolerance Scale:** This 11-item scale was developed by Ersanli and is calculated using scores obtained from 1 to 5 items, except for the 3rd item which is reverse scored. Higher scores indicate that the participant has higher levels of tolerance. The internal consistency coefficient of the Tolerance Scale was 0.84 (Ersanli, 2014). The Cronbach's alpha coefficient of the scale to be 0.87 for the present study.
- State-Trait Anger Expression Inventory (STAXI):** The validity and reliability analysis of this 34-item Likert-type scale was performed by Ozer in 1994. This scale has 2 sub-dimensions: anger and anger style. There are 10 questions about anger (the maximum possible score of this sub-dimension is 40, and the minimum is 10), and 24 questions about anger style. Anger style was examined under three sub-dimensions: "anger-in" (8 questions), "anger-out" (8 questions) and "anger gotten under control" (8 questions). The highest possible score on each three sub-dimensions is 32, the lowest is 8. Ozer determined that the Cronbach's alpha values of the State-Trait Anger Expression Inventory of the anger-out scale, of the anger-in scale were between 0.67 and 0.92, 0.80 and 0.90, 0.69 and 0.91, 0.58 and 0.76, respectively. While high scores obtained from the Trait Anger Subscale indicate high level of anger, high scores obtained from the anger control subscale indicate that anger is controlled, high scores obtained from the anger-out subscale indicate that anger is easily expressed and high scores obtained from the anger-in subscale indicate that anger is suppressed (Özer, 1994).

The present study determined the Cronbach's alpha values in the sample group to be 0.86, 0.82, 0.77, and 0.71 for the state anger state sub-dimension, the anger management sub-dimension, the anger-out sub-dimension, and the anger-in sub-dimension, respectively.

Procedures

Ethical Considerations

The researcher obtained the necessary permission (dated 30.12.2015 and numbered 5115) from the Ministry of Justice to conduct the study in the relevant institution and obtained ethical committee consent (dated 01.07.2016, numbered 94025189-050.04-191) from the Balıkesir University Medical School, Department of Ethical Committee. The researcher also informed participants about the study and received their written consents.

Data Analysis

The data obtained were analyzed using SPSS 18 software. This study used percentages, means, *t*-test, and one-way ANOVA analyses. $p < 0.05$ was accepted as a statistically significance limit.

Limitations of the Study

This study was conducted in one institution, which is among the study limitations. Thus, it is not possible to generalize these study results. In the institution, approximately 48% of prisoners were reached. For that reason, sampling cannot be generalized. Moreover, this study was not assessed by being conducted in different institutions according to the characteristic of open/closed prison. Some participants did not report which crime they committed; therefore, this study could not make a comparison based on this characteristic. Therefore, it is suggested that further studies be conducted by taking these deficiencies into consideration, and in different institutions. Another limitation of this study is that it was conducted only in a closed prison.

Results

Table 1 shows sociodemographic features of participants. A large majority (94.1%) of participants were male, and 58.1% had children. Based on participants' educational level, 55.9% were primary school graduates. Of participants; 70.6% were self-employed before being imprisoned, 44.3% lived longest in a province center before being

Table 1
Sociodemographic features of participants.

Sociodemographic features	n	%
Gender		
Male	476	94.1
Female	30	5.9
Having children		
Yes	294	58.1
No	212	41.9
Educational level		
Literate	76	15.0
Primary school graduate	283	55.9
High school graduate	112	52.1
Bachelor's degree or above	35	6.9
Participants' profession before imprisonment		
Not working	97	19.2
Retired	11	2.2
Officer	7	1.4
Farmer	34	6.7
Self-employed	357	70.6
The place where participants had lived longest before imprisonment		
Village	61	12.1
Town/district	221	43.7
Province center	224	44.3
Having been imprisoned previously		
Yes	342	67.6
No	164	32.4
Total	506	100

Table 2
Participants' mean scores on the tolerance scale and state-trait anger expression inventory.

Tolerance and anger levels (the minimum and maximum possible scores of the scale)	Mean	Standard deviation	Minimum	Maximum
Tolerance (11–55)	25.42	9.59	11	55
State anger (10–40)	20.89	7.48	10	40
Anger-in (8–32)	16.34	4.69	8	32
Anger-out (8–32)	15.83	4.88	8	32
Anger management (8–32)	22.73	5.99	8	32

imprisoned. More than half of the participants (67.6%) reported that they were not in prison for the first time. More than half of the participants (67.6%) reported to have been sentenced to imprisonment more than once.

Table 2 shows participants' tolerance and anger mean scores. This study determined that the mean tolerance levels of participants were low. According to participants' anger sub-dimension mean scores, their levels of state anger, anger-in, and anger-out were below the mean, whereas their anger management levels were above the mean.

Table 3 shows participants' mean anger and anger level scores according to their sociodemographic features. This study determined that participants' mean scores on the Tolerance Scale did not cause a statistically significant difference according to gender, educational level, or profession ($p > 0.05$). Participants who had children had higher mean scores on the Tolerance Scale compared to those with no children ($p = 0.034$). Based on the study results, convicts who had previously been imprisoned had lower Tolerance Scale mean scores compared to

Table 3
Participants' tolerance and anger levels according to their sociodemographic features.

	Tolerance scale	State anger	Anger-in	Anger-out	Anger got under control
Sociodemographic features	X ± SD	X ± SD	X ± SD	X ± SD	X ± SD
Gender					
Female	28.33 ± 10.86	19.93 ± 7.68	15.46 ± 4.09	13.76 ± 5.44	25.0 ± 6.28
Male	25.24 ± 9.49	20.96 ± 7.47	16.40 ± 4.73	15.96 ± 4.82	22.58 ± 5.95
Test/p	$t = -1.712$ $p = 0.087$	$t = 0.728$ $p = 0.467$	$t = 1.061$ $p = 0.289$	$t = 2.404$ $p = 0.017^*$	$t = -2.145$ $p = 0.032^*$
Educational level					
Literate	27.65 ± 10.95	20.80 ± 7.99	15.96 ± 5.09	15.32 ± 5.39	23.22 ± 6.61
Primary school graduate	25.42 ± 9.97	20.96 ± 7.39	16.29 ± 4.38	15.73 ± 4.53	22.53 ± 5.89
High school graduate	24.80 ± 7.94	21.69 ± 7.34	17.18 ± 5.06	16.82 ± 5.37	22.61 ± 6.15
Bachelor's degree or above	22.62 ± 7.21	18.02 ± 7.16	14.94 ± 4.80	17.15 ± 4.67	23.65 ± 4.82
Test/p	$F = 2.541$ $p = 0.056$	$F = 2.165$ $p = 0.091$	$F = 2.438$ $p = 0.064$	$F = 2.605$ $p = 0.051$	$F = 0.565$ $p = 0.636$
Profession					
Not working	26.87 ± 9.47	22.63 ± 8.21	16.79 ± 4.70	16.18 ± 5.49	22.29 ± 6.55
Retired	30.27 ± 11.79	19.00 ± 7.09	14.63 ± 3.32	16.36 ± 4.84	21.36 ± 6.75
Officer	21.85 ± 6.01	17.14 ± 7.03	17.00 ± 6.92	14.00 ± 3.46	25.28 ± 3.45
Farmer	26.88 ± 10.51	20.17 ± 6.96	17.05 ± 5.11	17.14 ± 5.65	23.73 ± 5.46
Self-employed	24.81 ± 9.46	20.62 ± 7.29	16.20 ± 4.64	15.63 ± 4.64	22.74 ± 5.89
Test/p	$F = 2.068$ $p = 0.084$	$F = 2.144$ $p = 0.074$	$F = 0.897$ $p = 0.466$	$F = 1.168$ $p = 0.324$	$F = 0.825$ $p = 0.510$
Having children					
Yes	26.19 ± 10.22	20.77 ± 7.78	16.36 ± 4.75	15.69 ± 5.03	23.18 ± 6.09
No	24.36 ± 8.55	21.07 ± 7.06	16.33 ± 4.63	16.02 ± 4.67	22.09 ± 5.80
Test/p	$t = 2.128$ $p = 0.034$	$t = 0.449$ $p = 0.653$	$t = 0.060$ $p = 0.952$	$t = 752$ $p = 0.452$	$t = 2.021$ $p = 0.044^*$
Having been imprisoned previously					
Yes	24.80 ± 9.38	21.70 ± 7.74	16.58 ± 5.00	16.17 ± 3.10	22.48 ± 6.16
No	26.73 ± 9.93	19.21 ± 6.62	15.85 ± 4.96	15.12 ± 4.30	23.25 ± 5.61
Test/p	$t = -2.122$ $p = 0.034^*$	$t = 3.548$ $p = 0.000^{**}$	$t = 1.647$ $p = 0.100$	$t = 2.287$ $p = 0.023^*$	$t = -1.349$ $p = 0.178$

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

those who were imprisoned for the first time ($p = 0.034$).

Male participants had higher means scores on the anger-out sub-dimension ($t = 2.404$, $p = 0.017$) compared to females, whereas female participants had higher mean scores on anger management than males ($t = -2.145$, $p = 0.032$). Participants with children had higher levels of anger management compared to those without children ($t = 2.021$, $p = 0.044$). Convicts who have been imprisoned before had a higher state anger ($t = 3.548$, $p = 0.000$) and anger-out ($t = 2.287$, $p = 0.023$) mean scores compared to those who were imprisoned for the first time. Anger sub-dimension mean scores of participants did not show a statistically significant difference according to their educational level or profession.

Discussion

According to Karataş, The Australian Center for Posttraumatic Mental Health (2003) defined anger as a situation that provokes aggression, causes the emergence of aggression or violence (Karataş, 2009). Angry behaviors, no matter what the reason, may result resisting rules, fighting, or bodily injury or death (Şahin, 2006).

According to the examination of participants' levels of state anger, anger expression styles between the possible highest and lowest score interval, it can be stated that participants' mean scores on state anger (20.89 ± 7.48), anger-in (16.34 ± 4.69), and anger-out (15.83 ± 4.88) were not too high or too low, and that their anger management sub-dimension (22.73 ± 5.99) was above the mean. A study by Unver et al. of 658 convicts (in two prisons in Bursa and one in Istanbul) determined that convicts had a moderate level of signs of anger and aggressive behaviors (Ünver et al., 2013). According to a study by Ozdemir, convicts' mean scores of state anger, of anger-in, of

anger-out, and of anger gotten under control were 22.30 ± 4.10 , 20.52 ± 2.24 , 18.01 ± 2.59 , and 21.89 ± 6.60 , respectively. These findings showed that convicts' state anger mean scores were higher than their mean scores on anger gotten under control, anger-in, and anger-out (Ozdemir, 2009). Another study reported that people who displayed voluntary manslaughter behavior were unable to manage their anger during arguments (Tortamış, 2010). Ayan (2013) conducted a study with 100 male convicts who had committed voluntary manslaughter and, as a control group, with 100 men who have never been involved in judicial crime; the prison group had higher mean scores of anger-in, anger-out and anger management. Like the present study, a study of convicts by Kroner and Reddon (1992) determined participants' scores on sub-dimensions of anger-in (17.2 ± 4.1), anger-out (15.7 ± 4.1), and anger management (23.5 ± 5.5) to be at a moderate level, whereas their state anger scores (56.4 ± 5.2) were found to be higher. The reason postulated for published studies obtaining results different from the present study is that convicts may not give objective answers while completing the questionnaire. The present study found convicts had lower scores of state anger, anger-in, and anger-out, whereas their anger management mean scores were higher. Prisoners may have learned to correct their anger in prison.

It was also determined that convicts' tolerance (endurance) levels were lower. Cuervo, Villanueva, González, Carrión, and Pilar Busquets (2015) determined that those committing a crime against other persons had higher risk scores for physical aggression, bursts of anger, a decrease in tolerance level, and insensitivity. Baltas emphasized that intolerance is associated with feelings of hate and hostility. Another study stated that the feelings of anger and hostility become prominent among people and society because of intolerance (Yazgan, 2007). According to the present study's results, given that lower tolerance can increase the tendency toward anger and to commit crime, it is believed that it will be beneficial to determine which people have lower levels of tolerance, then to provide educational programs to increase their tolerance (endurance, indulgence) levels.

Literature has shown that women are encouraged not to express their anger while becoming socialized, are taught that this is ugly or not feminine. Additionally, one study stated that boys are allowed more freedom, are encouraged to be more aggressive, ambitious, and extroverted, and that girls are expected not to be aggressive, not to use weapons, and not to have a tendency toward violence (Walker, 2001). In parallel, researchers have reported that women have less tendency to violence compared with men; also, they are involved in less destructive types of violence (Harer & Langan, 2001). In a similar manner the present study determined that the anger-out levels of female convicts were lower than those of male convicts, whereas females had higher levels of anger gotten under control. Suter, Byrne, Byrne, Howels, and Day (2002) showed that female convicts had higher levels of anger-out compared with males, whereas their anger management levels were higher compared with females. Kroner and Reddon (1992) determined a strong relationship between state anger and anger management, and reported that people who can manage their anger get angry less often and less often tend to be provoked. The present study also concluded that female convicts could manage their anger; therefore, they keep their levels of anger-out at low levels.

The present study found that convicts who had children had higher levels of tolerance compared to those who had no children. Also, anger management scores of convicts with children were determined to be higher than those who had no children. This result led researchers to believe that convicts having children feel more responsible for others and therefore, attempt to manage their anger by displaying more controlled behaviors.

The present study determined state anger and anger-out scores of convicts who had previously been imprisoned to be higher compared to those who were in the prison for the first time. In other studies, it was reported that being trapped generally increases disappointment and aggressive tendencies and to experience emotional outbursts

(Valliant & Raven, 1994). Ünver et al. (2013) found that convicts who had previously been imprisoned had significantly higher levels of anger symptoms compared to those who were imprisoned for the first time. The study suggests that repetitive imprisonment can cause convicts to become angrier and less tolerant. Similarly, the present study also found that tolerance levels of participants who had been previously imprisoned were lower than those who were in the prison for the first time had. That suggests preventive measures decrease the negative effect of being previously imprisoned on the anger status and tolerance levels of convicts. This also suggests that it will be beneficial to organize training programs for increasing indulgence and to organize anger management education programs for convicts who have previously been imprisoned.

Psychiatry Nurses' Practices in Prisons

Preventive health services provided in prisons are a part of a nurse's preventive, promotive, and educational role (İşlegen, 1996; Öztekin, 2000). In this respect, it is believed that psychiatry nurses will be effective in reducing recidivism rates by doing research in this field and by providing anger management educational programs for convicts.

Embracing the research agenda with convicts will lead the way for nursing practices in this profession, will present new information to primary, secondary, and tertiary health services, and will contribute to nursing science by improving nursing knowledge relevant to sensitive segments (Peternelj-Taylor, 2005). Moreover, psychiatry nurses generally perform their roles such as improving mental health, giving psychosocial counseling, psychotherapy, and education in groups of persons at risk (Özbaş & Buzlu, 2011).

Conclusion

The present study determined that convicts' mean scores of state anger, anger-in, and anger-out were below mid-level, whereas their anger management mean score was above mid-level. Study participants' tolerance levels were below the mean. The fact that prisoners have children and that they have previously lived in prison has affected their tolerance levels. Prisoners who have children and are in prison for the first time are more tolerant. The gender of the prisoners, having children and being in prison before, also affect the level of anger expression and anger levels. Anger management/control of prisoners who are women and children are better than male and prisoners who have previously been in prison have higher anger scores. These results suggest that organizing educational programs for convicts to increase their anger management and tolerance will be beneficial, and that this education should be implemented by determining the groups at risk. Moreover, it will be helpful to conduct separate studies in both a closed and an open prison.

References

- Akkoç-Sener, M. (2011). *The relation between anger control and tolerance level of health personnel working in the Emergency Department* (Master Thesis). İstanbul: Marmara University, Department of Health Sciences (In Turkish).
- Ayan, S. (2013). *Analyse the attachment styles, childhood traumatic experiences and the state-trait anger expression of male offenders who committed murder* (Master Thesis). İstanbul: Maltepe University, Social Sciences Institute (In Turkish).
- Ayup, N., Nasir, R., Abdul Kadir, N. B., & Mohamed, M. S. (2016). Cognitive behavioural group counselling in reducing anger and aggression among male prison inmates in Malaysia. *Asian Social Science*, 12(1), 263–273.
- Bahrami, E., Mazaheri, M. A., & Hasanzadeh, A. (2016). Effect of anger management education on mental health and aggression of prisoner women. *Journal of Education and Health Promotion*, 5, 5.
- Burhaniye, T. Type closed and open criminal detention house introduction. <http://www.burhaniyettkacik.adalet.gov.tr>, Accessed date: 4 November 2017.
- Cantürk, G., & Cantürk, N. (2004). Criminal profile. *Journal of Forensic Medicine*, 18(2), 27–37 (In Turkish).
- Cuervo, K., Villanueva, L., González, F., Carrión, C., & Pilar Busquets, P. (2015). Characteristics of young offenders depending on the type of crime. *Psychosocial Intervention*, 24, 9–15.

- Ersanlı, E. (2014). The validity and reliability study of tolerance scale. *Journal of Basic and Applied Scientific Research*, 4(1), 85–89.
- Ersen, H., İlnem, M. C., Havle, N., Yener, F., Karamustafaloğlu, N., & İpekçioğlu, D. (2011). Evaluation of sociodemographic characteristics, parental attitude and anger expression among female offenders. *Clinical Psychiatry*, 14, 218–229 (In Turkish).
- Görgülü, T., & Cankurtaran Öntaş, Ö. (2013). Prisoners' opinions regarding reasons and risk factors of criminal behaviour. *Community and Social Work*, 24(2), 59–82 (In Turkish).
- Harer, M. D., & Langan, N. P. (2001). Gender differences in predictors of prison violence: Assessing the predictive validity of a risk classification system. *Crime & Delinquency*, 47(4), 513–536.
- Howells, K., Day, A., Buhner, S., Jauncey, S., Williamson, P., Parker, A., & Heseltine, K. (2008). Anger management and violence prevention: State of the art and improving effectiveness. www.aic.gov.au.
- Howels, K., Day, A., Williamson, P., Bubner, S., Jauncey, S., Parker, A., & Heseltine, K. (2005). Brief anger management programs with offenders: Outcomes and predictors of change. *The Journal of Forensic Psychiatry & Psychology*, 16(2), 296–311.
- İşlegen, Y. (1996). Cezaevlerinde insan hakları ve sağlık. *Toplum ve Hekim*, 11, 70–74 (In Turkish).
- Kaleli, A. (2013). *The relationship between self-esteem and tolerance levels* (Master Thesis). Samsun: Ondokuz Mayıs University, Department of Educational Sciences (In Turkish).
- Karataş, Z. (2009). The effect of anger management programme through cognitive behavioral techniques on the decrease of adolescents aggression. *Pamukkale University Journal of Education*, 26, 12–24 (In Turkish).
- Kıran, H. (2012). *The relation of criminal women's anxiety and problem solving scales and anger management styles whom stayed in the prison as a result of murder* (Master Thesis). İstanbul: İstanbul Arel University, Department of Social Sciences (In Turkish).
- Kızılkaya, M. (2014). *The assessment of the training that has been developed for the psychosocial needs of the women who are in penal institutions* (Doctoral Thesis). İstanbul: Marmara University, Department of Health Sciences (In Turkish).
- Kroner, G. D., & Reddon, J. R. (1992). The Anger expression scale and State-Trait Anger Scale stability, reliability, and factor structure in an inmate sample. *Criminal Justice and Behaviour*, 19, 392.
- Özbaş, D., & Buzlu, S. (2011). The ideas of the nursing students about psychiatric nursing lesson and roles of psychiatric nurse. *Journal of Anatolia Nursing and Health Sciences*, 14(1), 31–40 (In Turkish).
- Özdemir, E. (2009). *The investigation of relationship between aggression and anger and styles of anger expression in prisoners who had sentenced from homicide in Muş E Type Prison* (Master Thesis). Adana: Çukurova University, Department of Health Sciences (In Turkish).
- Özer, K. A. (1994). Preliminary study of trait anger (T-anger) and anger expression (AngerEX) scales. *Türk Psikol Journal*, 9(31), 26–35 (In Turkish).
- Öztek, Z. (2000). Sağlık kavramı ve birinci basamak sağlık hizmetleri. *Hacettepe Tıp Dergisi*, 31(1), 73–75 (In Turkish).
- Peternelj-Taylor, C. A. (2005). Conceptualizing nursing research with offenders: Another look at vulnerability. *International Journal of Law and Psychiatry*, 28, 348–359.
- Petkova, M., Nikolov, V., & Panov, G. (2005). Psychological assessment of anger and aggression. *Trakia Journal of Sciences*, 3(4), 61–63.
- Ramirez, R. S., Jeglic, E. L., & Calkins, C. (2015). An examination of the relationship between childhood abuse, anger and violent behaviour among a sample of sex offenders. *Health and Justice*, 3, 14.
- Robertson, T., Daffern, M., & Bucks, R. S. (2012). Emotion regulation and aggression. *Aggression and Violent Behavior*, 17, 72–82.
- Şahin, H. (2006). Effect of anger management training on aggressive behaviours of children. *Turkish Psychological Counseling and Guidance*, 3(26), 47–60 (In Turkish).
- Soykan, Ç. (2003). Anger and anger management. *Crisis Journal*, 11(2), 19–27 (In Turkish).
- Suter, J. M., Byrne, M. K., Byrne, S., Howels, K., & Day, A. (2002). Anger in prisoners: Women are different from men. *Personality and Individual Differences*, 32, 1087–1100.
- Tortamış, B. (2010). *Profiles of offenders at murder cases* (Master thesis) Ankara. Police Academy, Institute of Security Sciences (In Turkish).
- Ünver, Y., Yuce, M., Bayram, N., & Bilgel, N. (2013). Prevalence of depression, anxiety, stress, and anger in Turkish prisoners. *Journal of Forensic Sciences*, 1–9.
- Valliant, P. M., & Raven, L. M. (1994). Management of anger and its effect on incarcerated assaultive and nonassaultive offenders. *Psychological Reports*, 75, 275–278.
- Walker, R. (2001). *Anger and women prisoners: Its origins, expression and management*. Master of Social Work School, University of Soth Australia.
- Website of the General Directorate for Penal and Arrest Centers.** <http://www.cte.adalet.gov.tr/index.html/>, Accessed date: 20 January 2017 (in Turkish).
- Yazgan, S. (2007). *The relation between anger control and tolerance level* (Master Thesis). Samsun: Ondokuz Mayıs University, Department of Education Sciences (In Turkish).