The Relationship Between Nurses’ Sociotropy–Autonomy Personality Characteristics and Trait Anger: Anger Expression Styles

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Abstract
The aim of the study is to determine the relationship between the nurses’ sociotropy–autonomy personality characteristics and trait anger–anger expression styles. This study was conducted in a cross-sectional design, and the sample included 776 nurses in a university hospital. The sample consisted of 370 nurses who were selected by stratified random sampling method in a university hospital. The Sociotropy–autonomy Scale and the State-Trait Anger Scale were used in data collection. The mean value of the Anger-In subscale was 16.24 point, the Anger-Out subscale was 15.38 point, and the Anger Control subscale was 22.86 point. The mean value of the sociotropy level of nurses was 66.71, and the mean value of the autonomy level of nurses was 75.41. Statistically significant relationships were observed between the Sociotropy–autonomy Scale and the Trait Anger–Anger Expression Scales scores. The higher the sociotropy–autonomy personality characteristics of the nurses are in an investigation, the higher the Trait Anger, Anger-In, and Anger-Out scores are. Furthermore, the anger control expression style was only related to the “Concern About Disapproval” in a negative way.

Keywords
anger expression styles, autonomy, nurses, sociotropy, trait anger

Introduction
Anger is an uncomfortable emotional feeling that varies from mild irritation to rage. On the contrary, anger is a normal response to an assault to one’s self-esteem or sense of integrity (Kaya et al., 2012; Kaya & Solmaz, 2009). Furthermore, according to Beck’s cognitive model, the cognitive personality characteristics are stated as sociotropy and autonomy. Sociotropy reflects a personality orientation involving an investment in positive social interactions, whereas the autonomous personality mode reflects an investment in preserving independence from other people, mobility, and freedom of choice. It is believed that the individuals’ sociotropy–autonomy personality characteristics have an impact on trait anger levels and anger expression styles (Beck, Epstein, Harrison, & Emery, 1983).

There are various studies that analyze the factors affecting the anger and anger expression styles (Greenglass & Burke, 2000; Kaya et al., 2012; Kaya & Solmaz, 2009; Keskin, Gümüş, & Engin, 2011). It is observed that most of these studies compare anger and anger expression styles mostly with psychopathological situations and personality characteristics. On the contrary, it is believed that the investigation of the direct impact of personality characteristics on anger and anger expression styles is necessary as well as the investigation of the impact of psychopathological situations that result from personality characteristics on anger. However, the literature review did not reveal any studies that analyzed the relationship of nonpathological situations to anger and anger expression styles. Based on this necessity, the present study investigated the impact of nonpsychopathological personality characteristics that were called sociotropy–autonomy on anger and anger expression styles.

Moreover, this study was conducted on nurses because nursing is a human-centered profession. Besides, people come across with various restrictions and limitations when a change in their health occurs, thus the feeling of anger arises. In this situation, nurses should identify the individual’s anger expression behaviors and their reasons, be aware of the positive sides of anger, try to find the reasons of anger with the individual instead of avoiding expression of anger,

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encourage individual to express his or her anger in a safe and impulsive manner rather than in a passive or aggressive manner that could result in a feeling of guilt. Furthermore, nurses should be aware of their own reactions toward anger and control their behaviors (Booth, 2010; Eslamian, Fard, Tavakol, & Yazdani, 2010; Ewashes, McInnis-Perry, & Murphy, 2013). In this regard, nurses should familiarize with their trait anger levels and anger expression styles. Moreover, it is necessary to determine how two important personality characteristics in nursing (sociotropy–autonomy) affect trait anger level and anger expression style. Hence, the present study analyzed the relationship of nurses’ sociotropy–autonomy personality characteristics to anger levels and anger expression styles.

Sociotropy–Autonomy Personality Characteristics

Utilizing a cognitive perspective, Beck described two-dimensional personality “modes,” which he called sociotropy and autonomy (Beck et al., 1983). Sociotropy (social dependency) was described as “the person’s investment in positive interchange with others,” and this personality mode was characterized by a dependence on social feedback for gratification and support. Autonomy was described as the person’s investment in preserving and increasing his independence, mobility, and personal rights. A person highly invested in this mode derives gratification from directing his own activities and attaining meaningful goals (Bagby et al., 2001; Bieling, Beck, & Brown, 2000; Çam & Engin, 2006).

Sociotropy and autonomy are important personality characteristics in nursing. Autonomy is stated as a necessary criterion in the professionalization of nursing. The fact that nurses consist of individuals with autonomy personality characteristics would contribute to the professionalization of nursing. Furthermore, it is necessary to orient nurses to socialize professionally so that they can make use of autonomy (Kaya & Solmaz, 2008; Mrayyan, 2005).

Autonomy in nursing can be defined as the ability of decision making regarding nursing issues and freedom of individuals in their own applications. In other words, it is necessary to give nurses autonomy and orient them to socialize professionally so that they can make use of autonomy for professionalization. On the contrary, socialization is one of the necessary conditions for autonomy and it is required to change individual, cognitive, and behavioral processes for socialization (Mrayyan, 2005).

Trait Anger–Anger Expression Styles

Anger is one of the emotions that has an important role in our daily lives. Even though it is a universal emotion, it is experienced differently in each culture and thus defined differently. Anger is defined in Cambridge Dictionary as “a strong feeling that makes you want to hurt someone or feel unpleasant because of something unfair or unkind that has happened.” Spielberger et al. (1983) defined anger as a gradual emotional state that varies in intensity from a feeling of “mild irritation” or “annoyance,” to more intense “fury and rage.”

Anger can sometimes be short-term, medium strength, and even beneficial to the individual, while it can sometimes be very strong, intense, continuous, and damaging. As it is believed that the expression of this feeling in direct and open manner has a damaging effect, anger is considered to be negative in most cultures. It is suggested that the feeling of anger that is expressed in this manner might put the individual in a situation open to verbal and physical attacks and result in conflicts in families and between individuals. It can further result in significantly reduced self-esteem. Moreover, it is maintained that suppressed anger is related to various physical diseases such as hypertension, coronary artery disease, and cancer (Keskin et al., 2011).

Spielberger differentiates the feeling of anger as “state” and “trait anger.” “State anger” is an emotional state that reflects the strength of subjective feelings such as nervousness, irritability, and rage that result from the prevention of purposeful behavior or from the perception of inequity. On the contrary, “trait anger” is a concept that reflects the frequency that state anger is experienced (Özer, 1994). Furthermore, anger expression styles vary individually. These expression styles are classified as anger-in, anger-out, and anger control. Anger-in reflects the inclination to suppress thoughts and feelings that result in anger, anger-out reflects the inclination to show aggressive behaviors toward people and objects, and anger control reflects the ability to control the experience and the expression of anger (Keskin et al., 2011).

For nurses to control their anger without suppressing it in their personal and professional lives, it is necessary to determine the factors resulting in anger, anger levels and anger expression styles. It is found that the workload in some clinics or characteristics of the clinic and its workers might have an effect on the anger levels of nurses who work there (Kaya & Solmaz, 2009; Keskin et al., 2011). In the present study, anger characteristics of a group of nurses were observed and their relation to sociotropy–autonomy personality characteristics was investigated.

Sociotropy–Autonomy Personality Characteristics in Anger Behavior

The aim of the present study is to examine the impact of personality characteristics in anger behavior. As previously stated, individual differences in anger-related behavior are classified as anger-out, anger-in, and anger control. However, examining the structure of individual differences in terms of behaviors that are related to anger more comprehensively may be useful. Such as, social sharing of emotions is a common result of emotional experiences, including anger. Social sharing (including the sociotropy characteristics) initiates interpersonal relationships to discuss the emotional events and reactions experienced by a person. On the contrary, the autonomous personality is oriented toward mastery and independence so that self-worth is based on productivity, achievement, and control. Therefore, a person who has a dominant autonomy characteristic can experience anger in the case of a
loss of control or achievement, and anger expression style is based on autonomous individual. In conclusion, the experi-
ence and expression of anger might be related to personality characteristics (Karreman & Bekker, 2012; Kuppens, Van
Mechelen, & Meulders, 2004; Otani et al., 2011). Accordingly,
the present study analyzed the relationship of state and trait
anger to sociotropy–autonomy personality characteristics.

Method

Purpose and Research Questions

The present study was conducted in a cross-sectional design
for the purpose of examining the relationship between the
nurses’ sociotropy–autonomy personality characteristics
and trait anger–anger expression styles. Research questions
are as follows:

Research Question 1: What are the nurses’ sociotropy–
autonomy personality characteristics and trait anger–
anger expression styles mean scores?
Research Question 2: Is there a relationship between the
nurses’ sociotropy–autonomy personality characteristics
and trait anger–anger expression styles?

Study Population and Sample Selection

The research population included 776 nurses in a university
hospital. In all, 370 nurses from this population were recruited
to the study by the stratified random sampling method. The
nursing units were used as stratified criterion, and all nursing
units in the hospital were included in the study. A study in this
topic was used to determine the number for the sample group
(Kaya & Solmaz, 2008). The mean value of the Sociotropy–
autonomy Scale (SAS) score of nurses was 141.49 (SD = 26.3)
point in this study. In other words, the number for the sample
group was calculated by taking into consideration the SAS score
of nurses in Kaya and Solmaz’s (2008) study. Accordingly,
when the research was conducted with a 370-person sample
group, the results reflected a 2.3 point error rate and 0.98 confi-
dence interval. As can be seen in the sample calculation, the
sample of the study was able to represent the population.

Instruments

Data were collected by distributing the Trait Anger–Anger
Expression Scales and SAS to the nurses. Nurses were given
a brief explanation and written information. Questionnaire
packs, including the questionnaire, an information sheet and
consent form, were given to all nurses. The questionnaires
were filled in by the participating nurses and were collected
back and evaluated by the researcher.

SAS. SAS was originally developed by Beck et al. in 1983. It
was adapted to Turkish by Şahin, Ulusoy, and Şahin (1993),
the Turkish version being an exact translation of the original
English version. SAS is a scale that consists of 60 items and
determines two different personality characteristics. Thirty
items belong to Sociotropy subscale, and 30 items belong to
Autonomy subscale. Respondents were asked to indicate the
degree to which they agree or disagree with each of the state-
ments using a 5-point Likert-type scale (ranging from 0 =
strongly disagree to 4 = strongly agree). Sociotropy and
Autonomy subscale question items were placed randomly
and the highest score that could be obtained from one sub-

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Reliability of SAS. The Cronbach’s alpha values of the SAS
in this study were found to be .86 for sociotropy dimension
and .85 for autonomy dimension. Beck et al. (1983) indicated
the alpha values of the autonomy dimension of the scale as
between .83 and .95, and sociotropy dimension of the scale as
between .89 and .94. In their study, which was conducted
on a group of students in Turkey, Şahin et al. (1993) found
Cronbach’s alpha values for autonomy dimension as .82 and
for sociotropy dimension as .83. These findings are consistent
with the values found in the present study. Therefore, SAS has
been evaluated as a reliable scale for the sample of this study.

Reliability of Trait Anger and Anger Expression Scales. The Trait Anger
and Anger Expression Scales were developed originally by
Spielberger et al. in 1983. It was adapted in Turkish by
Özer (1994). It is a Likert-type scale that consists of 34
items and four levels. It has two subdimensions, which are
Trait Anger (10 questions with potential distribution
between 10 and 40 points) and anger type (24 questions).
The anger type was divided into three subdimensions (each
having the potential distribution between 8 and 32 points)
that were Anger-In (eight questions), Anger-Out (eight
questions), and Anger Control (eight questions). The high
scores obtained from Trait Anger indicate high levels of
anger; high Anger-In subscale scores indicate suppression
of anger; high Anger-Out subscale scores indicate easy
expression of anger; and high Anger Control subscale
scores indicate the control of anger.

Reliability of Trait Anger and Anger Expression Scales. The alpha values of the sample in this study were found as .75 for
Trait Anger subdimension, .81 for Anger Control subdimen-

sion, .63 for Anger-Out subdimension, and .58 for Anger-In
subdimension.

The reliability study of the tool was conducted by Özer
(1994). In his study, the scale was applied to different sample
groups and the internal consistency coefficients were found
as between .67 and .92 for Trait Anger, .80 and .90 for Anger
Control, .69 and .91 for Anger-Out, and .58 and .76 for
Anger-In subdimensions. These findings are consistent with
the values found in the present study. Therefore, Trait Anger

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Table 1. The Distribution of Nurses’ Sociotropy–Autonomy Scale Scores (N = 370).

| Sociotropy–autonomy                  | Expected range | Minimum-maximum | M ± SD   |
|--------------------------------------|----------------|-----------------|---------|
| Sociotropy                           | 0-120          | 25-117          | 66.71 ± 16.15 |
| Concern About Disapproval            | 0-40           | 0-39            | 17.76 ± 6.92   |
| Attachment/Concern About Separation  | 0-52           | 10-50           | 33.24 ± 7.73   |
| Pleasing Others                      | 0-28           | 6-28            | 15.70 ± 4.19   |
| Autonomy                             | 0-120          | 27-112          | 75.41 ± 15.33  |
| Individualistic or Autonomous        | 0-48           | 10-48           | 32.38 ± 6.78   |
| Achievement                          |                |                 |         |
| Mobility/Freedom From Control by Others | 0-48       | 11-46           | 29.58 ± 6.74   |
| Preference for Solitude              | 0-24           | 1-24            | 13.45 ± 4.77   |

Table 2. The Distribution of Nurses’ State-Trait Anger Scale Scores (N = 370).

| Trait anger–anger expression styles | Expected range | Minimum-maximum | M ± SD   |
|------------------------------------|----------------|-----------------|---------|
| Trait Anger                        | 10-40          | 11-40           | 20.58 ± 4.46 |
| Anger-In                           | 8-32           | 9-32            | 16.24 ± 3.48 |
| Anger-Out                          | 8-32           | 9-28            | 15.38 ± 3.13 |
| Anger Control                      | 8-32           | 11-32           | 22.86 ± 4.27 |

Table 3. The Relationship Between the Nurses’ Sociotropy–Autonomy Scale and State-Trait Anger Scale Scores (N = 370).

| Sociotropy–Autonomy Scale          | State-Trait Anger Scale | Trait Anger | Anger-In | Anger-Out | Anger Control |
|------------------------------------|-------------------------|-------------|----------|-----------|---------------|
|                                    |                         | r<sup>a</sup> | r<sup>a</sup> | r<sup>a</sup> | r<sup>a</sup> |
| Sociotropy                         | 0.247**                 | 0.345**     | 0.079    | 0.049     |
| Concern About Disapproval          | 0.256**                 | 0.319**     | 0.103*   | -0.113*   |
| Attachment/Concern About Separation| 0.215**                 | 0.260**     | 0.041    | -0.016    |
| Pleasing Others                    | 0.133*                  | 0.324***    | 0.058    | 0.028     |
| Autonomy                           | 0.228**                 | 0.126*      | 0.231**  | -0.040    |
| Individualistic or Autonomous      | 0.115*                  | -0.020      | 0.176**  | 0.026     |
| Achievement                        |                         |             |          |           |
| Mobility/Freedom From Control by Others | 0.316**          | 0.223**     | 0.264**  | -0.076    |
| Preference for Solitude            | 0.124*                  | 0.117*      | 0.119*   | -0.058    |

<sup>a</sup>Pearson correlation
<sup>*</sup>Correlation is significant at the .05 level (two-tailed). <sup>**</sup>Correlation is significant at the .01 level (two-tailed).

and Anger Expression Scales are evaluated as reliable scales for the sample of this study.

**Ethical Considerations**

Throughout the research, it had been complied with Human Rights Declaration of Helsinki. Application was submitted to the Directorate of Nursing Services of the hospital that was used for collecting the data. The study data were collected from there by providing the information form containing the aim and scope of the study and related consent was received. The aim and benefits of the study and their roles in the study were explained to the nurses who comprise the sample. They were told not to write names on data collection forms. Moreover, the principle of willingness and voluntariness was emphasized for participation to the study.
Data Analysis

Trait Anger and Anger Expression Scales and SAS were tested for reliability by means of the methods of Cronbach’s alpha analysis. Ordinal data were analyzed by means of minimum, maximum, median, arithmetic mean, and standard deviation. Nominal data were analyzed by means of frequency and percentage. One-Sample Kolmogorov–Smirnov test was used to determine the distribution of data obtained from Trait Anger–Anger Expression Scales and SAS. Test distribution was found as normal. Pearson correlation was used during the comparison of the points obtained from Trait Anger–Anger Expression Scales and SAS.

Findings

The results showed that 98.9% (n = 364) of the nurses were women, and the average age was 34.10 years (SD = 7.24). The findings related to the investigation of the relationship between the nurses’ sociotropy–autonomy personality characteristics and trait anger–anger expression styles was elaborated in the following two sections:

The Nurses’ Sociotropy–Autonomy Personality Characteristics and Trait Anger–Anger Expression Styles

The research revealed that the mean value of the sociotropy scale scores of the nurses was 66.71 (SD = 16.15). When the sociotropy scale scores of the nurses were analyzed, it was found that the mean value of Concern About Disapproval subdimension was 17.76 (SD = 6.92), Attachment/Concern about Separation subdimension was 33.24 (SD = 7.73), and Pleasing Others subdimension was 15.70 (SD = 4.19). The mean value of the autonomy levels of the nurses was found as 75.41 (SD = 15.33). When autonomy scale scores of the nurses were analyzed, it was found that the mean value of Individualistic or Autonomous Achievement subdimension was 32.38 (SD = 6.78), Mobility/Freedom From Control by Others subdimension was 29.58 (SD = 6.74), Preference for Solitude was 13.45 (SD = 4.77; Table 1).

When the State-Trait Anger Expression Inventory scores of the nurses were analyzed, trait anger level was found as 20.58 (SD = 4.46). Furthermore, the mean value of the Anger-In subdimension score was 16.24 (SD = 3.48), Anger-Out subdimension score was 15.38 (SD = 3.13), and Anger Control subdimension score was 22.86 (SD = 4.27; Table 2).

The Relationship Between Nurses’ Sociotropy–Autonomy Personality Characteristics and Trait Anger–Anger Expression Styles

When the impact of sociotropy–autonomy personality characteristics on trait anger levels and anger expression styles was analyzed, the following findings were revealed (Table 3).

- It is found that there was a statistically significant (p < .01) relationship between sociotropy personality traits and trait anger level, and anger-in expression style. The higher the sociotropy scores are, the higher the trait anger levels of the nurses and anger-in expression styles at statistically significant rates are. Moreover, it was revealed that sociotropy personality characteristics were not statistically related to anger-out and anger control expression styles (p > .05). The relationship between sociotropy scale subdimension scores and trait anger and anger expression style scores was analyzed and the following results were obtained:
  - It was found that there was a statistically significant relationship between Concern About Disapproval subdimension and trait anger and anger expression style subdimensions (p < .01, p < .05). According to the findings, the higher the nurses’ Concern About Disapproval scores, the higher the Trait Anger, Anger-In, and Anger-Out scores and the lower the Anger Control scores at statistically significant rates. In conclusion, it was found that nurses who had concerns about disapproval had high levels of trait anger, their concern about disapproval played a role in their anger-in and anger-out expression styles, and they hardly controlled their anger.
  - It was found that there was a statistically significant relationship between Attachment/Concern About Separation Subdimension and trait anger level and anger-in expression style subdimensions (p < .01). Accordingly, the higher the nurses’ concern about separation scores, the higher their trait anger levels and anger-in expression style scores. Furthermore, there was not any statistically significant relationship found between Concern About Separation subdimension and Anger-Out and Anger Control subdimensions (p > .05).
  - It was found that there was a statistically significant relationship between the nurses’ scores regarding Pleasing Others subdimension and trait anger levels and anger-in expression style subdimensions (p < .01, p < .05). Furthermore, there was not any statistically significant relationship between Pleasing Others subdimension and Anger-Out and Anger Control subdimensions (p > .05). The results revealed that nurses who had personality characteristics of pleasing others had higher levels of trait anger and suppressed their anger more.
- The results showed that there was a statistically significant relationship between autonomy personality characteristic and Trait Anger, Anger-In, and...
Anger-Out scores \( (p < .01, p < .05) \). Therefore, the higher the nurses' autonomy scores are, the higher the Trait Anger, Anger-In, and Anger-Out scores are. Furthermore, it was found that autonomy personality characteristic did not have a statistically significant relationship with anger control expression style \( (p > .05) \). The relationships between autonomy scale subdimension scores and trait anger and anger expression styles scores were analyzed and following results were indicated:

- It was found that there was a statistically significant relationship between nurses’ personality characteristic of Individualistic or Autonomous Achievement and trait anger and anger-out expression style subdimensions \( (p < .01, p < .05) \). Accordingly, the higher the Individualistic or Autonomous Achievement scores are, the higher the trait anger levels and anger-out scores are. Furthermore, the results indicated that there was not any statistically significant relationship between Individualistic or Autonomous Achievement and anger-in and anger control expression styles \( (p > .05) \).

- It was found that there was a statistically significant relationship between Mobility/Freedom From Control by Others and trait anger, anger-in, and anger-out expression styles \( (p < .01) \). Accordingly, the higher the nurses' scores regarding mobility/freedom from control by others, the higher their scores regarding trait anger levels, anger-in, and anger-out expression styles. Furthermore, there was no statistically significant relationship found between Mobility/Freedom From Control by Others subdimension and anger control expression style \( (p > .05) \).

- It was found that there was a statistically significant relationship between Preference for Solitude subdimension and trait anger, anger-in, and anger-out expression styles \( (p < .05) \). Accordingly, it was suggested that nurses who had a Preference for Solitude had higher levels of trait anger, suppressed their anger more, and expressed their anger more easily. Furthermore, Preference for Solitude subdimension was not related to anger control scores at statistically significant level \( (p > .05) \).

**Discussion**

**Discussion Regarding the Findings About Nurses’ Sociotropy Personality Characteristics, Trait Anger Levels, and Anger Expression Styles**

It was found that the nurses in this study showed sociotropy—autonomy personality characteristics at moderate level and a little more than moderate level. A study conducted by Çam and Engin (2006) revealed that the nurses who worked at psychiatry clinic had average sociotropy score of 56.18 \( (SD = 16.13) \), and average autonomy score of 70.95 \( (SD = 15.44) \). Ahmed and Elmasri (2011) conducted a similar study and stated that the psychiatry nurses have an average sociotropy score of 63.37 \( (SD = 9.15) \), and average autonomy score of 51.16 \( (SD = 8.50) \). Malak and Üstün (2011) found in their research that nurses had an average sociotropy score of 68.16 \( (SD = 17.93) \). They further stated regarding the sociotropy subdimensions that average “Concern About Disapproval” score was 19.11 \( (SD = 7.38) \), average “Concern About Separation” score was 32.88 \( (SD = 8.74) \), average “Pleasing Others” score was 16.17 \( (SD = 4.34) \). Moreover, they found that the average autonomy score was 78.72 ± 15.14 and regarding the subdimensions, the average “Individualistic or Autonomous Achievement” score was 33.72 ± 6.74, the average “Mobility/Freedom From Control by Others” score was 30.79 ± 6.82, and the average “Preference for Solitude” score was 14.21 ± 4.45 (Malak & Üstün, 2011).

In conclusion, studies regarding nurses revealed similar sociotropy scores. Development of the ability of socialization reflects positively at the autonomy personality characteristic (Nelson, Hammen, Daley, Burge, & Davila, 2001). Accordingly, it is a satisfactory result to find in the research a desired level of sociotropy personality characteristic, which is considered to be a condition that enables nurses to be autonomous. Furthermore, according to the cognitive theory of Beck, there is a high probability of getting into depression for individuals who have a dominant level of sociotropy personality characteristic when they encounter a situation that they consider the people whom they respect show disapproving or abandoning behavior (Bagby et al., 2001; Bieling et al., 2000). This risk should be taken into consideration during the development efforts of nurses’ sociotropy personality characteristic. Moreover, to eliminate this kind of risks, primarily an effective professional organization should be founded and accordingly social, professional, and personal rights of nurses should be secured. These steps and the activities that would be promoted to develop sociotropy personality characteristic would contribute to the loyalty to the profession.

It has long been discussed that autonomy in nursing is a primary condition in professionalism (Holden, 1991; Skär, 2010). Holden (1991) states that “autonomous practice implies accountability which entails both personal and professional responsibility. A personal responsibility to endorse ethical conduct consistent with professional practice; and a professional responsibility to exercise discretionary powers to the ultimate benefit of the patient” (p. 399). In the present study as well as in other similar studies, the individual autonomy of nurses has been evaluated instead of professional autonomy. However, it is believed that individual autonomy is an important precondition of professional autonomy. Furthermore, there are studies that have investigated professional autonomy of nurses (Iliopoulou & While, 2010; Mrayyan, 2004).
It is observed that nurses who were taken into investigation did not have very high or very low levels of anger when evaluated in accordance with the potential distribution. Two previous studies that were conducted in the same organizations of the present study revealed that the nurses’ Trait Anger score averages were similar to the results of this present study (Kaya & Solmaz, 2009; Yıldırım, Kutlu, & Çimen, 2002). Engin (2004) found in a research which was applied to the psychiatry nurses that they had average Trait Anger scores of 18.01 (SD = 3.45), average Anger-In scores of 14.62 (SD = 2.88), average Anger-Out scores of 14.32 (SD = 2.77), and average Anger Control scores of 23.36 (SD = 3.96). Bayrılı and Kelleci (2009) found that the nurses in investigation had average Trait Anger scores of 17.17 (SD = 3.05), average Anger-In scores of 12.65 (SD = 5.52), average Anger-Out scores of 15.62 (SD = 3.58), and average Anger Control scores of 30.46 (SD = 2.54). The research of Yılmaz (2009) revealed that nurses’ average Trait Anger score was 19.15 (SD = 3.85), average Anger-In score was 14.28 (SD = 3.30), average Anger-Out score was 12.81 (SD = 2.84), and average Anger Control score was 23.20 (SD = 4.14). Baran (2009) found that nurses’ average Trait Anger score was 19.48 (SD = 4.27), average Anger-In score was 15.12 (SD = 3.15), average Anger-Out score was 14.08 (SD = 2.86), and average Anger Control score was 23.30 (SD = 3.97). Akkoç (2011) observed that nurses had average Trait Anger score of 19.94 (SD = 4.66), average Anger-In score of 15.54 (SD = 3.37), average Anger-Out score of 15.07 (SD = 3.68), and average Anger Control score of 22.73 (SD = 4.91).

The common ground of these studies and the present study is that the average Trait Anger scores are close to each other being at moderate levels. Nurses experience the feeling of anger and its expression frequently, which has still not been explained accurately today. The reason of this situation is that nurses encounter most of the factors that cause anger development both in their daily and professional lives (Kaya & Solmaz, 2009; Yıldırım et al., 2002). Greenglass and Burke (2000), in their study about nurses, declared those factors that affect the feeling of anger as the following:

- Individual person variables: Generalized self-efficacy, escape coping, control coping, and prior job commitment.
- Restructuring variables: Amount of work, use of generic workers, and hospital facilities upkeep.
- Hospital support variables: Participation in restructuring decisions, vision of hospital, morale boosting, and information dissemination by the administration.

It is detected that the highest score average in all of the reviewed studies regarding anger expression style was the anger control dimension. In other words, nurses in these studies prefer mostly anger control as an anger expression style. Control of anger does not mean suppressing the triggers of anger or releasing the anger. The purpose of anger control and the strategies that enable anger control is to reduce the emotional and physiological reactions that are caused by anger. The right approach regarding this situation is to control inner or outer reactions toward people or occasions and to manage them in a productive way. There are various strategies to avoid anger burst. Some of these strategies are deep breathing exercises, relaxation techniques by imagining relaxing moments and sceneries, loosening the muscles by Yoga-like exercises, restructuring in cognition, identifying problem-solving approaches, recovering communication initiatives, inclination to humor, and change of environment (Kaya & Solmaz, 2009). It is a satisfactory result that the nurses in the present research adopt anger control as an anger expression style more than other expression styles. Policies should be determined that support this inclination of nurses, and continuous education programs regarding anger control methods should be repeated regularly.

The review of literature regarding studies about nurses’ anger expression styles revealed that anger-in and anger-out come second or third after anger control expression style (Baran, 2009; Bayrılı & Kelleci, 2009; Kaya & Solmaz, 2009; Keskin et al., 2011; Yılmaz, 2009). Some people prefer mostly repressing anger in or suppressing it. However, the suppressed emotions cause damage to the person. Suppressed emotions result in psychosomatic reactions such as stomach ulcer and hypertension. Furthermore, unexpressed anger does not take away anger, but on the contrary causes damage to the person. For this reason, there should be regulations that would discourage nurses to suppress their anger in (Kaya & Solmaz, 2009). Furthermore, some people prefer expressing their anger explicitly. The reason and the purpose affect this situation. People usually have difficulty in expressing anger to the people who have higher status and who have authority. When they get angry with people who they dislike, they express their anger mostly to the people who have lower status, their relatives and friends, and loved ones. In conclusion, it should be investigated to whom and how nurses express their anger, and these findings should be used in avoiding the conflicts between the nurses and the individuals and/or relatives who need health care.

Discussion Regarding the Comparison Between Nurses’ Sociotropy–Autonomy Personality Characteristics and Trait Anger Levels and Anger Expression styles

The literature review has not revealed any research that related sociotropy–autonomy personality characteristics to trait anger levels and anger expression styles. However, studies that investigated the antecedents of both variables were analyzed. Yazgan (2007) investigated the relationship between anger and tolerance level on university students and found that the higher the sample university students’
tolerance level, the lower the trait anger and anger-out levels, and the higher the anger-in and anger control levels.

Furthermore, there are studies that investigated some situations that could be related to the trait anger and anger expression styles of nurses and candidate nurses. Some of these studies are stated as the following:

- Kaya et al. (2012) found a significant relationship between nursing students’ trait anger–anger expression styles and loneliness. Accordingly, the higher the students’ Trait Anger, Anger-Out, and Anger-In scores are, the higher their loneliness levels are.
- Engin (2004) analyzed the relationship between the anger levels and job motivation of nurses who worked at psychiatry clinic. He found that there was a strong positive relationship between job motivation and anger control score averages, and a negative relationship between job motivation and Anger-In score averages.
- Bayrı and Kelleci (2009) found that nurses with physical illnesses had higher levels of trait anger and anger-in while they express their anger out less. They further suggested that nurses without physical illnesses control their anger better. Furthermore, they indicated that there was no significant relationship between nurses’ trait anger and their general health condition, but the higher the Anger-In score averages and the lower the Anger-Out and Anger Control score averages are, the worse their health conditions are.
- Yılmaz (2009) suggested that nurses who encountered managerial issues at the work place, coped with the problems by sharing them with the family and had difficulty in saying no to others, had higher Trait Anger scores; nurses who defined themselves as shy in their communication style could not express themselves among health crew, and coped with the problems by themselves, had higher scores of anger-in; nurses who had children and who could express themselves among the health crew had higher anger control scores. He further declared that married nurses had high anger control scores and nurses who had difficulty in saying no to others had lower Anger-In scores. Moreover, in that study, Rathus Assertiveness Inventory and Trait Anger and Anger Expression Scale scores were compared, and it was found that the nurses’ Rathus assertiveness score increased as the Trait Anger, Anger-In, and Anger-Out scores decreased and the anger control scores increased.
- Baran (2009) studied the impact of nurses’ anger levels on job satisfaction and found that there was no relationship between anger control and job satisfaction, and the higher the Trait Anger, Anger-Out, and Anger-In scores were, the lower the job satisfaction was.

Yıldız analyzed the relationship between personality characteristics and trait anger–anger expression styles of the football players who played at different leagues (professional candidate football players [PAF], amateurs and professionals). It was revealed that there was a significant relationship between the trait anger–anger expression styles and psychoticism personality character for the football players who played at PAF league. Furthermore, a significant relationship was found between trait anger–anger expression styles and all the subdimensions of personality characteristics (psychoticism, extroverted, neurotic, and lie) for the amateur and professional league football players (Yıldız, 2008). Moreover, Doğan (2010) studied the relationship between sociotropy–autonomy personality characteristics of the married people and the conflicts in their marriage and found a significant relationship between sociotropy–autonomy personality characteristics of the married people and the conflicts in their marriage.

In the present study, a significant positive linear relationship was found between sociotropy–autonomy personality characteristic and trait anger. This finding is regarded as noteworthy as it suggests taking personality characteristics into consideration in recognizing trait anger levels of the individuals. The same suggestion can be made regarding the anger-in and anger-out expression styles except for some of the subdimensions of sociotropy–autonomy personality characteristics. It is determined that anger control, which is considered to be the most positive anger expression style, does not show any significant relationship with other sociotropy–autonomy personality characteristics than “Concern About Disapproval.” The issue that should be focused in this data is the anger control for the nurses. However, only there was a weakly significant relationship between “Concern about Disapproval” and “Anger Control.” Apart from this, it was seen that sociotropy–autonomy personality characteristics did not affect the anger control. So the studies that investigate nurses’ anger control and effect factors are needed to carry out.

**Conclusion**

The present research revealed that nurses in investigation had moderate level of sociotropy personality characteristics and that autonomy personality characteristic score average was higher than sociotropy. The trait anger levels of the nurses were found similar to the ones found at other studies that analyzed nurses as a sample. Moreover, the anger control was found to be the most adopted anger expression style. It was detected that the higher the sociotropy–autonomy personality characteristics of the nurses are in investigation, the higher the Trait Anger, Anger-In, and Anger-Out scores are. Furthermore, it was found that the anger control expression style was only related to the “Concern about Disapproval” in a negative way.
It has hitherto emphasized that it is necessary to develop nurses’ sociotropy–autonomy personality characteristics and accordingly policies in this direction have been suggested (Kaya & Solmaz, 2008). The present study showed that methods regarding anger control should be studied as well while developing nurses’ sociotropy–autonomy personality characteristics.

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