



# The interrelationship of attachment style, sense of loneliness, and social dissatisfaction in children aged 60–72 months

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## Abstract

The aim of this correlational survey-based research is to examine the relationships between the attachment styles of children aged 60–72 months and their senses of loneliness and social dissatisfaction. The participants consisted of 103 children of this age who were attending a preschool institution supervised by the Ministry of National Education in Tokat, Turkey. The data was collected through a personal-information form, the Incomplete Stories with Doll Family Scale, and the Loneliness and Dissatisfaction Scale. Data analysis indicated that fewer than two-fifths of these children were securely attached, with nearly half (46.6%) exhibiting avoidant attachment, and the remaining 16.5%, negative attachment. Significant negative correlations were found between secure attachment style, and senses of loneliness and social dissatisfaction. It also revealed that the mean loneliness and social dissatisfaction of those children who had been cared for by their mothers between birth and the age of two were lower than those of their peers who had not been cared for by their mothers at those ages. However, mean loneliness and social dissatisfaction were higher among children whose mothers were aged 20–25 at the time of the survey than among those whose mothers were 26–30.

**Keywords** Young children · Attachment styles · Sense of loneliness · Sense of dissatisfaction · Correlational survey

## Introduction

Emotional development of a baby is important to develop as a healthy individual, and a good mother-child relationship can be thought as the base of this progress. Attachment is critical for an effective mother-child relationship and emotional development. The concept of attachment was defined by Bowlby (2003) as a continuous emotional bond, characterized by a tendency to seek and maintain closeness to a particular figure, especially in stressful situations. It most notably includes the emotional bond between an infant and the person caring for it (Ainsworth 1967); and if attachment is not secure, the possibility of the infant suffering psychopathological conditions in childhood and adolescence increases (İlaslan 2009; Joeng et al. 2017; Mortazavizadeh and Forstmeier 2018; Soysal et al. 2005; Spruit et al. 2020).

Scholars have subdivided attachment into multiple types. In the 1970s, for instance, Ainsworth and her colleagues (cited in Bretherton 1992) proposed a three-part typology consisting of secure, insecure-avoidant, and insecure-ambivalent/resistant attachment. Main and Solomon (1986) argued for the existence of a fourth: disorganized/disoriented attachment. Securely attached children trust that the people to whom they are attached will meet their needs for protection while at the same time allowing them their autonomy. When such a person comes back after leaving a room, the securely attached child becomes happy and shows it. Likewise, the attachment figure is sensitive to the child. Children with insecure-avoidant attachment, on the other hand, do not like physical contact, do not react when their attachment figure leaves, and show no sign of happiness when s/he returns; and the attachment figure is generally inattentive to the child's needs. Children with insecure-resistant attachment worry and become unhappy when their attachment figures leave the room, but do not become happy again when they return, and their attachment figures meet their needs only inconsistently. And lastly, a child with disorganized attachment – generally, one whose attachment figure is prone to violence (Meins 1997) – does not have any obvious reaction to that person's departure, but exhibits a range of different responses, notably including worry, when s/he comes back.

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This study was produced from first author's master's thesis.

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A child's first social experiences are almost always within the family, and include the mother's level of interest in the infant from birth onward, the intensity with which its needs are met, and the ways she responds to its invitations to communicate. These early social experiences can lead either to unproblematic communication with other people, or future social-communication problems (Kandır and Alpan 2008) that have been linked to loneliness (Yazıcı et al. 2013).

Loneliness is a common human experience (Besevegis and Galanaki 2010) and has been defined in the literature as negative and unwanted experiences causing a negative sense of self and inadequate social skills (Çeçen 2008). That is, the lonely individual – not by choice – engages only infrequently in communication with friends and acquaintances. Though this phenomenon can be amplified by his/her own decisions to put up various kinds of barriers to communication (Aral and Gürsoy 2000; Erözkan 2009), people of all ages feel the need to communicate with others; and loneliness is therefore most usefully seen as *an inability to communicate to the desired extent* (Yöyen 2017).

Amid their rapid social development, young children are expected to establish positive relationships with both adults and peers as an indicator of their happiness and good mental health. Yet, sometimes the opposite occurs, and young children experience a sense of loneliness and/or social dissatisfaction (Yazıcı et al. 2013). Thus, loneliness, seen from the perspective of children's social-emotional development in general and attachment in particular, can also be defined as a subjective need for closeness, love and care that is not being satisfied by the attachment figure (Weiss 1973). Based on this latter definition, one can reasonably speculate that connections exist among children's loneliness, their social dissatisfaction, and their attachment styles.

Prior studies have focused on the effects on children of their attachment to parents or other adults (Boldt et al. 2014; Ebbeck et al. 2015; Görgü 2015; Pinto et al. 2015; Psychogiou et al. 2018; Richaud de Minzi 2010; Yerlioğlu 2010); differences that arise from attachment to mothers vs. fathers (Di Folco et al. 2017); the causes and possible consequences of parent-child attachment (Boldt et al. 2016); and the effects on attachment produced by a range of variables (İlaslan 2009; Koyuncu 2017; Toth et al. 2013; Trapolini et al. 2007). Other researchers have examined patterns of change in children's loneliness (Jobe-Shields et al. 2011); how they cope with it (Besevegis and Galanaki 2010); its relationship to their social dissatisfaction (Coplan et al. 2007; Vellymalay 2010); their conceptualizations of it (Chipuer 2004; Liepins and Cline 2011); and its intergenerational transmission (Junttila and Vauras 2009). And Bogaerts et al. (2006) examined the relationship of attachment to loneliness, but only among university students.

In Turkey, loneliness and social dissatisfaction have been studied together before, but seldom with young children. Such

research has looked at changes in the loneliness styles of young people with divergent experiences (Yenidünya 2017), the relationship between the self-esteem and loneliness levels of university students (Yöyen 2017), the variables affecting the loneliness of vocational-school students (Yalaz Seçim et al. 2014), the senses of loneliness and social dissatisfaction experienced by primary-school children in after-school care (Demircan and Demir 2014), the power of attachment styles to explain loneliness in adolescents (Karakuş 2012) and perceived social support from friends as a determinant of primary school students' loneliness (Kalkan and Epli-Koç 2011). Gülay (2009) examined some variables that affect the social status of five and six-year olds and such variables' interrelationships, and Yazıcı et al. (2013) adapted the Loneliness and Social Dissatisfaction Scale for Turkish children aged 60–72 months. Nevertheless, amid the strictly limited number of Turkish studies to have touched on preschool children's loneliness and social dissatisfaction, none appear to have considered these feelings' relationships to their participants' attachment styles. The present study is intended to fill this gap in the literature.

In addition, from the perspective of attachment, the relevant literature emphasizes that loneliness can be produced by unhealthy attachment situations, and/or attachment figures not meeting the needs of those attached to them (Erözkan 2004). Therefore, it is reasonable to expect that explicating the relationships between the attachment styles of preschool children and their loneliness and social dissatisfaction will provide key information for practitioners seeking to ameliorate these two problems via either parent or teacher training.

Specifically, the aim of this study is to investigate the relationship between the attachment styles of 103 Turkish five-year olds and their senses of loneliness and social dissatisfaction. It will be guided by the following research questions:

1. What is the structure of the relationships among the participants' attachment styles and their senses of loneliness and social dissatisfaction?
2. Are there significant differences in the participants' loneliness and social dissatisfaction based on a) their gender, b) whether they have their own bedroom, c) who cared for them from birth to age two, d) whether their mothers worked outside the home before they were two, e) their parents' ages, f) their parents' education levels, g) their households' monthly income, h) the number of children at home, and i) their birth order?
3. Are there significant differences in the participants' attachment styles based on a) their gender, b) whether they have their own bedroom, c) who cared for them from birth to age two, d) whether their mothers worked outside the home before they were two, e) their parents' ages, f) their parents' education levels, g) their households' monthly income, h) the number of children at home, and i) their birth order?

## Methods

### Research Design

The researchers adopted a correlational survey design because it “investigates one or more characteristics of a group to discover the extent to which the characteristics vary together” (Simon and Goes 2011; p.1). Since this study aimed to examine the relationships between the attachment styles of children aged 60–72 months and their senses of loneliness and social dissatisfaction, the correlational survey design was preferred.

### Participants

The voluntary participants were all aged between 60 and 72 months and attending preschool institutions in Tokat, Turkey, supervised by that country’s Ministry of National Education. Two additional selection criteria were that both their parents were still living at the time of the study, and that they had not been identified as having any developmental abnormalities. From among the children who met all four of these criteria, 103–52.4% girls and 47.6% boys – were selected randomly. Nearly four-fifths had their own bedroom and had been cared for primarily by their mothers up to the age of two, with many of the remainder having had paid carers or grandparental care. A plurality of the mothers, 48.5%, were aged 26–30 at the time of the study, with the remainder being younger (27.2%) or older (24.3%). None were under age 20 or over age 35, and 77.7% had not worked outside the home while their participating children were under age two. The majority (57.3%) of the participants’ fathers were aged 26–30, and all of the rest were older: i.e., 31–35 (22.3%) or 36–40 (20.4%).

In terms of educational attainment, an equal proportion of mothers and fathers, 23.3%, had finished primary school but not gone higher. The mothers were more likely than the fathers to have ended their education at the end of high school (56.3% vs. 40.8%) and less likely to have gone to university (20.4% vs. 35.9%). Of the 50.5% of mothers who were part of the formal labor force, slightly less than half (i.e., 22.3% of all mothers) earned less than 1700 Turkish Lira (TL) per month and the remainder, more, though none had a monthly income of more than 3500 TL. The children’s fathers all worked outside the home, with 35.9% earning less than 1700 TL (35.9%) and the remaining 64.1%, 1700–3500 TL.

Just under two-fifths of the sampled children had no siblings, whereas 37.9% had one sibling, and 22.3%, two or more. Nearly half (47.6%) were first-born children, 30.1% second-born, and 22.3% third-born.

The Ethical Committee of Fatih Sultan Mehmet Vakıf University in Turkey approved the study. Then, permissions of each child and their parents were asked for participation, and informed consent form was obtained from parents.

### Data-Collection Tools

The three instruments used for data collection are described in turn below.

**Personal Information Form** The personal-information form, developed by the researchers, covers the gender of the child; whether s/he shares a bedroom; the person who cared for him/her from birth to age two; whether his/her mother worked outside the home s/he was two; the structure of the family; the ages, educational levels and monthly incomes of his/her parents; and his/her number of siblings and birth order.

**Incomplete Stories with Doll Family Scale** The Incomplete Stories with Doll Family Scale (ISDFS) was developed by Cassidy (1988) for six-year-old children, and adapted for Turkish children by Seven and Güngör Aytar (2010). In it, the child respondent completes six stories, each lasting approximately three minutes (Seven 2006; Seven and Güngör Aytar 2010). Each story is scored out of five points, and the higher the cumulative score, the more secure the respondent’s secure relationship with his/her attachment figure. Stories are coded separately to avoid halo effects. Confirmatory factor analysis, Cronbach’s alpha coefficient (.83) and Spearman-Brown split-half correlation (.83) confirmed that the scale is reliable, valid, and suitable for Turkish children (Seven and Güngör Aytar 2010).

**The Loneliness and Dissatisfaction Scale** The Loneliness and Dissatisfaction Scale (LDS) was developed by Cassidy and Asher (1992) and adapted for Turkish children by Yazıcı et al. (2013). The final, validity- and reliability-tested Turkish version consists of 23 items, of which 15 measure loneliness and dissatisfaction, and eight relate to children’s hobbies. All items are answered via the same three-point Likert scale where 1 = *yes*, 2 = *sometimes* and 3 = *no*. Thus, total scores on this instrument can range from 15 to 45, with higher scores indicating higher levels of loneliness and social dissatisfaction, and low ones, lower levels of these two constructs. The scale has a one-factor structure (Yazıcı et al. 2013).

### Data Analysis

The normality of data was checked to facilitate the researchers’ decision-making about statistical tests. Because the sample size was larger than 50, a Kolmogorov-Smirnov test was used, as recommended by Büyüköztürk (2011).

From Table 1, it can be seen that the means and medians of the two scales are quite similar, and that their skewness and kurtosis are both between  $-1$  and  $+1$ , indicating that the data is normally distributed. Therefore, parametric tests were used for data analysis.

Descriptive statistics such as frequencies and percentage distributions were calculated for the data obtained from the personal-information form, along with means and standard deviations for all the data. Next, for data analysis, independent-samples *t*-testing was used for comparisons of exactly two groups, and one-way analyses of variance (ANOVAs) for comparisons among three or more groups. Pearson correlation coefficients were then calculated to find the relationships among the variables.

## Findings

The attachment styles of the child participants, arrived at via their scores on the Turkish ISDFS, are shown in Table 2. As the table indicates, nearly two-thirds (63.1%) had one or another form of insecure attachment.

### The structure of the relationships among the participants' attachment styles and their senses of loneliness and social dissatisfaction

As shown in Table 3, Pearson correlation coefficients revealed a significant negative correlation ( $r = -.300$ ,  $p < .05$ ) was found between the children's secure attachment, as measured by higher scores on the the ISDFS, and their senses of loneliness and social dissatisfaction, as measured by higher scores on the LDS.

### Participants' Loneliness and Social Dissatisfaction Based on Several Variables

An independent-samples *t*-test conducted to compare the means of the boys' and girls' senses of loneliness and social dissatisfaction found that, while the girls' mean was slightly higher ( $\bar{x} = 23.72$  vs.  $\bar{x} = 23.14$ ), this difference was not statistically significant ( $t_{101} = -.702$ ,  $p > .05$ ). Therefore, it can be said that gender was not a factor that influenced these children's senses of loneliness and social dissatisfaction.

Another independent-samples *t*-test was conducted to compare the means of children's senses of loneliness and social dissatisfaction according to whether they shared a bedroom.

**Table 2** Attachment styles of the sampled children

Attachment styles	(n)	(%)
Secure	38	36.9
Avoidant	48	46.6
Negative	17	16.5
Total	103	100

Again, no statistically significant differences were found between those who had their own room ( $\bar{x} = 23.64$ ) and those who did not ( $\bar{x} = 22.72$ ) ( $t_{101} = -.912$ ,  $p > .05$ ). Therefore, it can be said that having one's own room is not a factor in children's senses of loneliness and social dissatisfaction.

Independent-samples *t*-testing conducted to compare the means of children's senses of loneliness and social dissatisfaction according to who cared for them from birth to age two did find a statistically significant difference ( $t_{101} = 2.424$ ,  $p < .05$ ) between those who were cared for by their mothers ( $\bar{x} = 21.52$ ) and those who were cared for by other people ( $\bar{x} = 23.93$ ). Therefore, it seems likely that the identity of their early carers is a factor that influences children's senses of loneliness and social dissatisfaction later (see Table 4).

Independent-samples *t*-testing of the means of the sampled children's senses of loneliness and social dissatisfaction vis-à-vis whether their mothers worked outside the home before they were two found no statistically significant differences ( $t_{101} = .808$ ,  $p > .05$ ), with the loneliness and social dissatisfaction of those whose mothers stayed at home being slightly higher ( $\bar{x} = 23.62$  vs.  $\bar{x} = 22.82$ ). Thus, maternal working status appears not to be a factor in children's senses of loneliness and social dissatisfaction.

A one-way ANOVA was conducted to assess the relationships between the means of children's senses of loneliness and social dissatisfaction and their mothers' ages, which were divided into three groups (A: 20–25 years old, B: 26–30, and C: 31–35). A statistically significant difference was found between the children of group A and those of group B ( $F_{(2, 100)} = 3509$ ,  $p < .05$ ), which post-hoc Scheffé comparisons confirmed (A:  $\bar{x} = 25.17$ ; B:  $\bar{x} = 22.72$ ). Therefore, it can be said that ages of their mothers may be a factor in children's senses of loneliness and social dissatisfaction (see Table 5). However, the same test, but for fathers' ages, found no statistically significant differences ( $F_{(2, 100)} = .689$ ,  $p > .05$ ).

**Table 1** Descriptive Statistics for the Instruments

Scale	Mean	Median	Std. deviation	Skewness	Kurtosis
ISDFS	22.29	23.00	4.85	-.719	.169
LDS	23.44	24.00	4.16	.312	.829

**Table 3** Correlation between the sampled children's attachment styles and their senses of loneliness and social dissatisfaction

Variables	1	2
1. Secure attachment	1	-.300 ** *
2. Senses of loneliness and social dissatisfaction		1

\* $p < .05$ ; \*\*  $p < .01$ .

**Table 4** Children's senses of loneliness and social dissatisfaction, by who cared with them before age two

	N	$\bar{x}$	S.s	t	p
Mother	82	21.52	3.54	2.424	
017					
Others	21	23.93	4.19		

One-way ANOVAs conducted to compare the means of children's senses of loneliness and social dissatisfaction based on their mothers' and fathers' educational levels also found no statistically significant differences (mothers:  $F_{(2, 100)} = .488$ ,  $p > .05$ ; fathers:  $F_{(2, 100)} = 1.312$ ,  $p > .05$ ). Neither did the same type of test identify any statistically significant differences in loneliness and social dissatisfaction by the monthly income of either their mothers ( $F_{(2, 100)} = 3.006$ ,  $p > .05$ ) or their fathers ( $t_{101} = 1.714$ ,  $p > .05$ ).

Likewise, one-way ANOVAs conducted to compare the means of children's senses of loneliness and social dissatisfaction across different numbers of children in their homes ( $F_{(2, 100)} = 2.187$ ,  $p > .05$ ) and different positions' in the birth order ( $F_{(2, 100)} = 1.113$ ,  $p > .05$ ) revealed no significant differences.

### Participants' Attachment Styles Based on Several Variables

Turning now to attachment styles, independent-samples *t*-tests found no significant differences in such styles between the sampled boys and girls ( $t_{101} = -1.650$ ,  $p > .05$ ; boys:  $\bar{x} = 21.46$ ; girls:  $\bar{x} = 23.03$ ); between those children who slept in their own rooms and those who did not ( $t_{101} = -.078$ ,  $p > .05$ ; own room:  $\bar{x} = 22.27$ ; shared room:  $\bar{x} = 22.36$ ); between those who were cared for by their mothers vs. by other people before age two ( $t_{101} = -.697$ ,  $p > .05$ ; mothers:  $\bar{x} = 22.12$ ; others:  $\bar{x} = 22.95$ ); or between those whose mothers worked before they were two, and those whose mothers stayed home ( $t_{101} = -1.186$ ,  $p > .05$ ; worked outside the home:  $\bar{x} = 23.34$ ; stayed home:  $\bar{x} = 21.98$ ).

One-way ANOVAs revealed no significant correlations between the sampled children's attachment styles, on the one hand, and on the other, their mothers' ages ( $F_{(2, 100)} = .374$ ,  $p > .05$ ), their fathers' ages ( $F_{(2, 100)} = 1.885$ ,  $p > .05$ ), their mothers' educational levels ( $F_{(2, 100)} = 1.284$ ,  $p > .05$ ), or their fathers' educational levels ( $F_{(2, 100)} = .540$ ,  $p > .05$ ). Therefore, it can be said that the above eight factors were not important influences on their attachment.

A one-way ANOVA conducted to assess the relationship of the sampled children's attachment style to their mothers' monthly income found no statistically significant differences ( $F_{(2, 100)} = 2.276$ ,  $p > .05$ ). The fathers' incomes in the sample

fell into only two bands, not three, since unlike the mothers, all worked outside the home at the time of data collection. Therefore, an independent-samples *t*-test rather than an ANOVA was used to examine the relation of the children's attachment styles to paternal incomes. The children whose fathers' earnings were in the higher of the two bands were marginally more securely attached,  $\bar{x} = 22.56$  vs.  $\bar{x} = 21.81$ , but again, no statistically significant relation was found ( $t_{101} = .750$ ,  $p > .05$ ). Therefore, it can be said that parental monthly income was not a factor in children's attachment security.

Lastly, the one-way ANOVAs conducted to explore the relations between the sampled five year olds' attachment and the number of children at home and their birth order revealed no statistically significant differences in either case (number of children:  $F_{(2, 100)} = .600$ ,  $p > .05$ ; birth order:  $F_{(2, 100)} = .199$ ,  $p > .05$ ).

### Discussion

One key finding of this study was of a significant negative correlation between attachment security, on the one hand, and senses of loneliness and social dissatisfaction among 103 Turkish five-year olds. This echoes Mikuliner and Shaver (2014) conclusion that some attachment-related insecurity stimulated a sense of loneliness, as well as findings by Uluç (2005), Karakuş (2012) and Kaya (2017) that social dissatisfaction was lower in children who were securely attached than in others.

The fact that this study found no statistically significant gender differences in the three focal constructs is in keeping with Çeçen's (2008) results university students. However, it is at odds with the findings of a larger number of prior studies, which reported clear relationships between gender and sense of loneliness (Aral and Gürsoy 2000; Erözkan 2009; Jobe-Shields et al. 2011; Karaoğlu et al. 2009; Salı 2016). This might be related to the youth of the present study's participants, since – according to Koenig and Abrams (Koenig and Abrams 1999) – there is no gender difference in sense of loneliness during childhood, but in adolescence and adulthood, this sense is more pronounced in males. The gender-difference results of attachment studies have also been mixed: with Akyıldız (2017), Görgü (2015) and Kaya (2017) reporting parallel results to those of the present study, but Yıldız (2008) finding that Turkish girls aged 9–10 were more securely attached than their male counterparts.

The current research also found that the mean sense of loneliness and mean social dissatisfaction of those five-year olds whose mothers had cared for them before their second birthdays were both significantly lower than for those who had been cared for by other people at the same ages. Mikuliner and Shaver (2014) noted that individuals who were

insecurely attached experienced some problems related to their relationships with people, and that their sense of loneliness was in part induced by these inconsistent relationships. In this case, it is noteworthy that the participant children who had been cared for by their mothers from birth to age two were more likely than others to be securely attached. Thus, consistent care by the mother in the first two years of life could be indirectly linked to lesser degrees of loneliness and social dissatisfaction later. That being said, however, the present researchers' examination of the direct relation of attachment security to loneliness and social dissatisfaction found no meaningful difference associated with who their caregivers had been. The key point may be that identity of the caregiver is less important to the child than whether his/her needs are met by that person. Again, prior results are mixed: with İlaslan (2009) and Ayaz (2015) reporting parallel findings to those of the current study, but Görgü (2015) noting that children's attachment styles differed based on who had cared for them during the first year of their lives.

No statistically significant differences were found between the senses of loneliness, social dissatisfaction, or attachment security of children whose mothers worked outside the home before they were two, and those whose mothers did not. In the case of loneliness and social dissatisfaction, this may merely indicate that mothers in both these categories are sensitive to their children's needs and tend to meet them on time (Crain 2005). In the case of attachment, İlaslan (2009) also reported a parallel result: since adult carers who stand in for working mothers often have parallel practices to those mothers, children may feel just as safe with them.

Turning now to the relation between sense of loneliness and social dissatisfaction, on the one hand, and parental age, on the other, the present study found that children whose mothers were 20–25 years old were significantly lonelier and more dissatisfied than those whose mothers were 26–30. This could be because older mothers – who might also be more experienced, in the sense of having other, older children – are more aware of their children and communicate with them more effectively than younger mothers do. However, the fact that no such effect was observed based on fathers' ages calls this into question. It may have been related to that the fathers in this study had less interaction with their children than mothers have, or perhaps to the fact that none of the fathers were as young as the younger group of mothers, i.e., all were aged 26 or above at the time of the survey. Thus, no conclusions can be drawn from the present results regarding fathers aged 25 or below. Also, no statistically significant differences were found in attachment style based on mothers' and fathers' ages. These results differ from those reported by Görgü (2015) and Nalbantoğlu (2016), that children's attachment did not differ based on their mothers' ages, but echo those of Ayaz (2015) and Nalbantoğlu (2016), who found no statistically significant differences in attachment style based on fathers'

ages. Because attachment is related to the extent to which children can use parental support in dealing with difficulties (Kobak et al. 2005), children's attachment styles may be influenced by the support their parents provided them with, regardless of their ages.

The present study's finding of no statistically significant differences in any of the three focal constructs among children based on their parents' educational levels echoes the loneliness results previously reported by Şahin Kırılalp and Serin (2017), Baran et al. (2015), and Uruk and Demir (2003). However, Kaya (2017) found that, while adolescents' sense of loneliness did not vary with their mothers' educational levels, it did vary with their fathers'. With regard to attachment style and parental education, Akyıldız (2017), Ayaz (2015) and Kaya (2017) reported parallel findings to those of the current research, but İlaslan (2009) and Görgü (2015) both reported that mothers' educational levels influenced children's attachment.

The present study's finding of statistically significant differences in the three focal constructs based on parents' monthly income again supports some prior studies, but not others. In the sphere of loneliness and social dissatisfaction, findings of Erözkan's (2009) and Yalaz Seçim et al. (2014) studies were not parallel with those of the current research. In the sphere of attachment style, on the other hand, the present results are very well aligned with those of Akyıldız (2017) and Ayaz (2015), presumably because the quality of adult-child relationships depends more on parents' awareness and effective interaction with children than on income.

The present study's finding that none of the three focal constructs differed based on the number of children in the household was unexceptional, echoing results previously reported for loneliness by Aral and Gürsoy (2000) and Karaoğlu et al. (2009), and for attachment by Çamurlu Keser (2006) and Akyıldız (2017) among six to 11 year olds and high-school students, respectively. Though birth order was not previously looked at as an influence on any of the three focal constructs, it seems likely that the lack of a clear-cut relationship reflects that parents' attitudes toward their children, and the degree to which they are willing and able to meet their needs, are only marginally influenced by the latter's place in the birth order.

**Table 5** Children's senses of loneliness and social dissatisfaction, by their mothers' ages

Age	n	$\bar{x}$	S.s.	sd	F	p	Significant difference
A: 20–25	28	25.17	4.08	2/100	3509		034
A-B							
B: 26–30	50	22.72	3.95				
C: 31–35	25	22.96	4.28				

In conclusion, it was found that fewer than two-fifths of these children were securely attached, with nearly half exhibiting avoidant attachment, and the remaining 16.5%, negative attachment. Significant negative correlations were found between secure attachment style, and senses of loneliness and social dissatisfaction. It also revealed that the mean loneliness and social dissatisfaction of those children who had been cared for by their mothers between birth and the age of two were lower than those of their peers who had not been cared for by their mothers at those ages. However, mean loneliness and social dissatisfaction were higher among children whose mothers were aged 20–25 at the time of the survey than among those whose mothers were 26–30.

Based on this study's findings, the authors recommend that educators take steps to boost their awareness of who cared for their students up to the age of two, as part of a more informed approach toward kindergartners' and schoolchildren's attachment styles. Educators should also provide parents with detailed information about how they can support their children's healthy development – including through mother-sensitivity activities organized by family physicians, and programs related to attachment styles. It is thought that parenting attitudes are important for healthy emotional development of children so it will be useful to provide parents with the necessary information about effective relationship with their children and to help them raise awareness about democratic parenting attitudes through several parent education programs (Sak et al. 2015).

Further research on this topic could benefit from the use of separate data-collection tools for sense of loneliness and social dissatisfaction. It could also be useful to examine parents' own attachment styles and sense of loneliness and social dissatisfaction, alongside those of their children, and to delve deeper into the reasons for loneliness and social dissatisfaction, perhaps through qualitative or mixed-methods research. In future quantitative research, additional variables should also be considered, including parenting styles.

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare that they have no conflict of interest.

**Ethical Approval** The Ethical Committee of Fatih Sultan Mehmet Vakıf University in Turkey approved the study.

**Informed Consent** Informed consent form was obtained from parents of children in the study.

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