



The mediating role of mothers' conflict resolution skills in the relationship between mothers' communication skills and behavioral problems of children aged 3–6 years

Nicel Masaroğulları¹ · Yağmur Çerkez¹

Accepted: 15 March 2024
© The Author(s) 2024

Abstract

Although studies have revealed the importance and effect of mothers' communication levels on behavioral problems seen in children, the role of the other key variable in this relationship has not been adequately examined. This study aims to test a theoretical model developed based on the relevant literature to evaluate the mediating role of the mother's conflict resolution skills in the relationship between the behavioral problems of children aged 3–6 years and the mother's communication skills. The study was prepared based on the correlational survey model. Its sample consists of 410 mothers who have children in the age group of 3–6 years and live within the borders of Northern Cyprus. The mothers included in the sample were contacted using a stratified sampling method. The personal information form, Communication Skills Scale-Adult Form, Conflict Resolution Scale, and Social Competence and Behavior Assessment Scale were used to collect the data. Statistical data were analyzed using the SPSS 24.0 and Amos 21.0 software. The statistical analysis of the research data indicates that the fit indices, except for RMSEA, demonstrate that the χ^2/df value has an acceptable fit and the GFI, NFI, and CFI values fall within the fit limits. According to the research findings, mothers' tendencies in conflict resolution significantly predict children's social competence and behaviors. Furthermore, the study reveals that mothers' communication skills do not significantly predict children's social competence and behaviors. As a result, it is determined that mothers' conflict resolution tendencies mediate the relationship between their communication skills and children's social competence and behaviors. In light of these findings, several recommendations are proposed for future research and practical applications.

Keywords Mother–child relations · Conflict resolution · Externalized problems · Internalized problems · Structural equation model

Introduction

Children grow and develop physically, mentally, emotionally, and socially from the moment they are born. Through the instructive and guiding active roles played by their parents who are closest to them (Hortacsu, 2003), children who are influenced by the environment in which they are born, can raise their hidden strengths to the highest level by revealing them in these multidimensional developmental processes (Ural & Ramazan, 2015). In the preschool period,

in particular, the relationship between children and parents is crucial (Knauth, 2000).

It is known that the mother, the first person with whom the child interacts before and after birth, is very important to the child and generally assumes responsibility for raising children (Gezova, 2015). Mothers, in particular, are expected to become good role models for their children; by communicating effectively with the adults around them. It's known that; communication between the child and the mother, taken as a role model, can increase the child's cognitive development levels in qualitative terms, improve their social and academic skills, and reduce the behavioral problems in children. In interpersonal relationships, people who have adopted conflict resolution skills are more likely to have positive and effective communication skills (Gur et al., 2015). These findings can reflect the positive developmental characteristics that are expected in children.

✉ Nicel Masaroğulları
nicel_masar@hotmail.com

¹ Faculty of Education, Guidance and Psychological Counselling Department, Near East University, Nicosia, Cyprus

The quality of parent–child communication affects numerous psychosocial outcomes (Zapf et al., 2023). Therefore, for healthy interpersonal communication and to ensure its continuity, it is particularly important to develop communication skills (self-expression, caring communication, willingness to establish relationships, active listening, compliance with communication principles, etc.). Children brought up in a family environment characterized by effective communication may grow into individuals who can express themselves and their emotions, have self-confidence, and respect others' rights (Tekin & Temiz, 2023). Additionally, developing communication skills also helps individuals to achieve satisfaction in their family relationships, school and working life but also contributes to their success, productivity and overall happiness. Therefore, it is of utmost importance for children, who experience their first social interactions within the family where communication originates, to acquire communication skills, especially during the preschool period. These early social experiences play a significant role in the development of communication skills. Communication within a family should be built on an effective, sound and accurate ground. Parents who establish intimate and warm relationships foster a healthy and effective communication system and make their children learn these behaviors. Based on the studies conducted on child behaviors, children of parents who are capable of establishing effective communication are also likely to establish effective communication. On the other hand, the unsafe and anxious environment created by the parents who are nervous, angry, maladjusted and have strict rules causes a lack of interest, love and communication (Njegovan et al., 2011). In other words, communication skills that are not taught effectively and appropriately to children can lead to failure in their interpersonal relationships (Plummer, 2011), shaping their future lives on such a basis. Thus, this can have permanent detrimental effects on their developmental process, influencing their personality, attitudes, habits, belief systems and values (Kandır & Alpan, 2008), shaping them in an unfavorable manner. In this context, the influence of parent–child communication is highly significant in the emergence of behavioral problems in children (Kandır, 2000), also an important determinant of aggressive behavior in children and adolescents (Bullo & Schulz, 2022). In support of this, Topcu Bilir and Sop (2016) found a significant correlation between the levels of mother–child relationships and problem behaviors in preschool children. They further discovered that as the level of conflict in mother–child relationships increases, the incidence of behavioral problems in children also increases.

Behavioral problems, which are common today and a serious social issues, stem from negative developments that can be experienced in the developmental processes of children. It is extremely important to determine the real causes of the

factors; affecting the frequency of behavioral problems that cannot be explained by a single reason and their acceptance as problems (Sirin Kaya & Ozyurek, 2022). Some of these reasons are unhealthy relationships between parents, communication problems between parents; the fact that parents have arguments and fights due to these communication problems, and children being exposed to stress in social environments (Gleason et al., 2016; Manti et al., 2019). These negatively affect children's development and cause behavioral problems in them (Yavuzer, 2013). For instance; as conflicts between parents increase, emotional and behavioral problems among children also increase (Chavda & Nisarga, 2023). By the broadest definition, a behavior is considered problematic if the child continues to repeat it even though he/she is capable of not showing that behavior and is asked not to behave so (Birkan, 2002). Behavioral problems in children differ according to age periods (Kapisiz & Karaca, 2018) and are classified into two general categories, namely, externalized and internalized behaviors (Poulou, 2015; Liman, 2020; Gozun-Kahraman & Derdiyok, 2022; Schneider et al., 2022; Altindal & Sop, 2023). The main indicators of extrinsic behaviors refer to various manifestations of aggression, opposition to one's circle, impulsivity, destructiveness, and antisocial tendencies, whereas intrinsic behaviors express personality issues related to inhibition, anxiety, and excessively controlled behaviors (Babicka-Wirkus et al., 2023). Unlike externalized problems (hitting, biting, shouting, spitting, etc.), which are more easily noticed by parents because they are easily spotted, internalized problem behaviors (introversion, shyness, depression, etc.) take longer to be noticed (Weist et al., 2018). If preventive measures are not taken regarding externalized and internalized problems, these behaviors can potentially turn into negative and aggressive behaviors in later years (Ural et al., 2007), increasing the potential of weak academic performance, antisocial behavior, criminal activities, difficulties in peer relationships and mental health problems (Aunola et al., 2000; Fergusson et al., 2005), among many other negative developmental outcomes. Up to 20% of children between the ages of 1–7 experience emotional and behavioral issues that are classified as internalizing or externalizing disorders, such as disruptive behavior, sadness, and anxiety (Vasileva et al., 2020). In recent years, studies conducted in Western countries have drawn attention to the prevalence of behavioral problems among preschool and school-age children (Bao et al., 2016). In a study conducted in Brazil, 31.8% of children exhibited extrinsic behavioral problems such as aggressive behaviors, hyperactivity, violating the rules, low impulse and anger control, while 15.2% displayed intrinsic behavioral problems, including introversion, somatic complaints, anxiety, fear, sadness, and depression (Anselmi et al., 2004). According to the data of another study obtained from caregivers of over 6,000 children, the prevalence of

intrinsic behavioral problems among children aged 5 to 7 years was 5.3%, while the prevalence of extrinsic behavioral problems was 7.3% (Basten et al., 2016). Aguilar et al. (2000) stated that common emotional and behavioral problems among children primarily stem from problems in the parent–child relationship. Similarly, Hill and Bush (2001) underlined the impact of family interactions on anxiety and problem behaviors observed in children. The key point in problem behaviors that may occur in children is the child's inability to comprehend human behaviors well and possess the effective communication skills needed (Koycegiz & Ozbey, 2018). According to the studies conducted, the most effective tool that contributes to healthy development of a child is the communication of the mother (Hol, 2017). Therefore, it is crucial for the mother to establish the healthy relationship with the child and to provide him/her with effective communication skills by being a good role model.

Theoretical Background

The theoretical model of the present study is based on Albert Bandura's social learning theory, one of the fundamental theories of child development. Effective parent–child communication is a critical factor in shaping child development outcomes, particularly regarding behavioral problems. This study anticipates that the intervention recommended to enhance communication skills between mothers and children can have a positive impact on child development by improving the quality of the mother–child relationship, providing positive role models, and promoting psychosocial development.

The social learning theory emphasizes the role of modeling and observational learning in child development. In other words, the social learning theory suggests that humans are social beings and learn by observing and modeling behaviors of people around them from the moment they are born (Senemoglu & Subasi-Kurc, 2005 p.49). Based on this theory, during the learning process, children first pay attention to the closest model in their environment, typically the mother. As a result, children observe the behaviors of their closest model and exhibit what they have observed. On this basis, children shape their own behaviors by observing their mothers. Thus, if they mismanage their anger, for example, their children may model their poor conflict resolution skills and thus perpetuate recurrent conflict situations with their children at a high rate (Donohue et al., 2022). Therefore, according to this theory, it is extremely important that mothers, who are adopted as role models, demonstrate positive behavior.

According to this theory, the behaviors of parents, particularly mothers, play a significant role in a child's socialization. Therefore, the behaviors that parents wish to impart

to their children should primarily be demonstrated by the mother, as the role model (Senemoglu & Subasi-Kurc, 2005, p.53). The behavior, attitude, and discourse of the mother in her social relationships both with the child and her circle, have a determining role in the child's relationships with his/her own environment. Considering that the caregiver (the mother) is the primary and most significant model for children, the importance of the caregiver's child-rearing attitudes and behaviors becomes evident. Therefore, effective mother–child communication can serve as a model for healthy interpersonal communication skills that children can adopt and use in their interactions with peers and others. Consequently, children can learn communication patterns from the mother as their model (Malatesta et al., 1986, p.328) and they can develop attitudes and behaviors in this sense.

Another important aspect of the social learning theory is the delayed manifestation of observed behavior. Accordingly, such behavior can be learned but may not be immediately practiced. This acquired behavior may be observed in an individual's experiences at a later period or in future years. For example, a child who has learned the behavior of not telling the truth by the observation of a friend during the preschool years may exhibit such behavior days later by giving a wrong answer to a question posed by his/her mother (Bacanli, 2003, p.103). As a result, the act of imitation or observation can play a role not only in learning positive behaviors but also in the development of negative behaviors (Bandura & Walters, 1963). Therefore, mothers responsible for the care and education of their children, particularly during the preschool period, guide their children in developing positive behavior patterns by observing their mothers in effective communication with both them and other adults in their circle. Being constantly engaged in communication can sometimes lead to conflicts and problems (Koc et al., 2015). Therefore, it is extremely important for mothers to have conflict resolution skills so that they can effectively address and resolve conflicts and problems (Cam & Tumkaya, 2008; Erözkan, 2013) to prevent problem behaviors that may arise in children who observe and model their mothers' behaviors.

The Mediating Role of Conflict Resolution Skills

According to the literature, conflicting family relationships caused children to exhibit behavioral problems in their preschool and school years. In other words, when there is conflict or tension within a child's family or environment, there may be disruptions in positive relationships and behavioral maladjustments (Altindal & Sop, 2023). A study that is an example of this found that the conflicts between parents and children were related to the conflicts that children had with

their best friends (Laursen & Mooney, 2008). This shows that interpersonal conflict resolution skills can be shaped in the child's family environment and reflected in the child's school environment (Nelson et al., 2014) or interpersonal relationships in his/her social surroundings. Therefore, the present study aims to test a theoretical model developed to explain certain variables that may influence problem behaviors observed in preschool children in order to map out effective group counseling services aimed at enhancing conflict resolution skills in mothers of preschool children (Fig. 1). In this sense, the study is important because it can help identify the variables that influence problem behaviors in preschool children, thus assisting in the implementation of necessary preventive measures. Furthermore, it can contribute to the studies on social learning theory by providing valuable insights and information.

From birth, children are affected by their circles and are prepared for adulthood with the support of their parents who are the closest people to them. Therefore, it is very important that parents, especially mothers who act as role models for children between the ages of 3 and 6 years in the preschool period have communication and conflict-resolution skills. This is supported by Mastow (2004) finding that most attitudes and behaviors in adulthood are based on childhood experiences. Hence, it is of crucial importance that mothers with children of these ages have these mentioned skills.

In the literature review, there was a limited number of studies discussing communication and conflict resolution skills of mothers with children aged 3 to 6 years in the preschool period or referring to these children implicitly. However, there were numerous studies conducted directly on adults, children or young people. Furthermore, there were other studies on children, young people and adults regarding prediction of communication and conflict resolution skills through other fields. In particular, the studies conducted on conflicts emphasized early childhood, which was based on

the fact that this period is the most critical one in terms of development stages. However, there is a lack of studies in these fields in Cyprus and the literature has many deficiencies in this regard. Accordingly, this study is believed to fill this gap and make a contribution to the field. Furthermore, the study can provide perspectives to both mothers and educational institutions regarding the attitudes and behaviors that are necessary for children of those ages to prepare for healthy adulthood. In addition, informative seminars and/or psycho-educational programs can be developed for families. The present study can guide research, particularly regarding preschool children, during the most critical period.

Method

Research Model

The present study employed the correlational survey model, commonly used in quantitative research, to test the mediating role of the mother's conflict resolution skills in the relationship between behavioral problems of children aged 3–6 years and the mother's communication skills. The correlational survey model aims to determine the presence and/or degree of change with the common effect of two or more variables included in the study (Karasar, 2013). The independent variable is mothers' communication skills, the dependent variable is behavioral problems in children aged 3–6 years and the mediating variable is mothers' conflict resolution skills. In this respect, there is a widespread consensus that if one of the variables of the study is known, it becomes possible to predict the others.

Population and Sampling

The population of the study consists of mothers with children aged 3–6 years and the sample consists of 410 mothers selected using the stratified random sampling method among mothers with children aged 3–6 years living in the north of Cyprus. The basis of the stratified random sampling method is to divide the population into various strata and select the sample from among these strata (Onwuegbuzie & Collins, 2007). Accordingly, Northern Cyprus was initially divided into six categories by districts/strata (Nicosia, Famagusta, Kyrenia, Morphou, Trikomo, and Lefka). After verifying 6 strata/distinct, data were collected by reaching out to mothers randomly who has children aged between 3–6 years regardless of sociodemographic characteristics in each district/strata. However, the sample size calculation formula was used because the number of individuals in the research population and the incidence of the case were unknown.

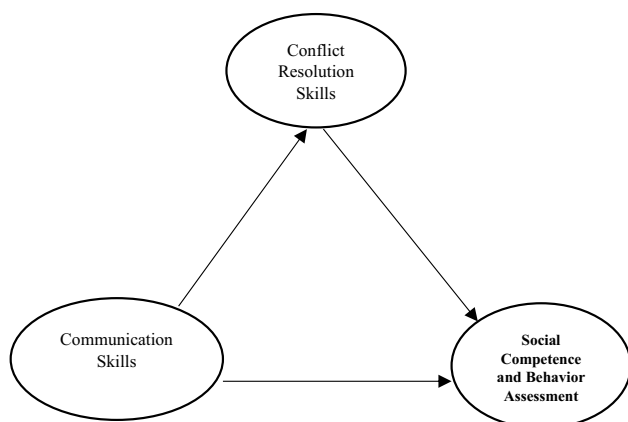


Fig. 1 The model recommended for variables

Sample Size

- n** Number of individuals to be samples.
- p** Probability of occurrence of an event.
- q** Probability of non-occurrence of the event.
- z** The theoretical value found according to the z table at a certain significance level.
- D** Sampling error.

$$n = \frac{z_{\alpha}^2 * q}{d^2} n = \frac{(1.96)^2 * 0.50 * 0.50}{(0.05)^2} = 384$$

According to the formula above, collecting data from 384 individuals through surveys with a 95% confidence level and a 5% sampling error would be sufficient, but taking the margin of error into account, were reached out to 410 individuals. The 410 questionnaires that were gathered were used for analysis due to the research data contained no missing data, i.e. items left blank.

Demographic data of 410 mothers with children aged 3–6 years, and their children are given in Table 1.

Table 1 shows the findings regarding the distribution of participants by their socio-demographic characteristics

According to Table 1, 20.49% of the children's mothers were 30 years old and under, 36.10% were 31–35 years old, 29.76% were 36–40 years old and 13.66% were 41 years old and over. Of them, 14.63% had a primary school education, 27.80% had a high school education, 37.07% had a college degree, 20.49% had a master's degree, and 92.68% were married.

The results showed that 50.24% of the participants' children were girls, 49.76% were boys. 16.10% were 3 years old, 15.61% were 4 years old, 36.10% were 5 years old, and 32.20% were 6 years old.

The study determined that 36.10% of the mothers spent 1–2 h with their children, 39.02% spent 3–4 h, and 24.88% spent more than 5 h on the child's social-emotional development.

Of the participants, 30.24% lived in Nicosia, 23.66% in Famagusta, 22.93% in Kyrenia, and 23.17% in Morphou/Trikomo/Lefka.

Data Collection Process

The data were collected through surveys from mothers at locations suitable for them (schools, kindergartens, etc.) and from those who voluntarily participated between January

Table 1 Sociodemographic Characteristics of Participants

	Number (n)	Percentage (%)
Mother's age		
30 years and below	84	20.49
31–35 years old	148	36.10
36–40 years	122	29.76
41 years and older	56	13.66
Mother's education level		
Primary school	60	14.63
High school	114	27.80
College degree	152	37.07
Postgraduate degree	84	20.49
Mother's marital status		
Married	380	92.68
Divorced	30	7.32
Mother's employment status		
Employed	280	68.29
Unemployed	130	31.71
Sex of child		
Female	206	50.24
Male	204	49.76
Child's age		
3 years old	66	16.10
4 years old	64	15.61
5 years old	148	36.10
6 years old	132	32.20
Social-emotional development of the child time spent together		
1–2 h	148	36.10
3–4 h	160	39.02
5 h or more	102	24.88
Resides in which district of TRNC		
Nicosia	124	30.24
Famagusta	97	23.66
Kyrenia	94	22.93
Morphou/Trikomo /Lefka	95	23.17

and March 2022. During the data collection process, participants were provided with an informed consent form that briefly explained the general purpose of the study, emphasized the voluntary nature of participation, and clarified their right to withdraw from the study at any time. Participants were assured that their participation would remain completely anonymous, and they were not required to provide any personally identifiable information. Participants were also informed that their responses would be securely stored and used for research purposes only. The average time taken to complete the questionnaires was approximately 15 min.

All data and information presented in this study were collected in accordance with academic and ethical guidelines. Prior to data collection, the necessary approvals were obtained from the Near East University Scientific Research

Ethics Committee and the Ministry of National Education (Approval No: EB/2021/745).

Data for this study were collected using the following instruments: the Personal Information Form, the Social Competence and Behavior Assessment Scale (SCBA), the Communication Skills Scale-Adult Form (CSS-AF), and the Conflict Resolution Scale (CRS). Data were collected from mothers of children aged 3–6 years in Northern Cyprus.

Data Collection Tools

The study collected data on the demographic characteristics of the participating mothers using the personal information form developed by the researcher. The problem behaviors in children were evaluated using the Social Competence and Behavior Assessment Scale (SCBA) that was filled in by participant mothers. The interpersonal communication skills were evaluated using the Communication Skills Scale-Adult Form (CSS-AF) and interpersonal conflict skills were evaluated using the Conflict Resolution Scale (CRS).

Personal Information Form The personal information form consists of items aimed at obtaining information about the demographic characteristics of mothers and their children. The personal information form was filled in by the mothers participating in the study. Personal information form was developed by researchers that includes as age, educational status, profession, and district of residence of the participating mothers.

Social Competence and Behavior Assessment Scale-30 (SCBA-30) The SCBA-30 was utilized to evaluate the behavioral problems and social skills of preschool children. This scale was adapted to Turkish by Corapçı, Aksan, Yalcın and Yagmurcu (2010). The SCBA-30 evaluates the number of behavioral problems and social skills of preschool children and has three subscales, each containing 10 items. The social competence (SC) subscale aims to measure positive characteristics such as children's cooperation with their peers and seeking resolutions to disputes (e.g., “Seeks solutions to conflicts”). The anger-aggression (AA) subscale evaluates externalizing problems such as defying adults and behaving disagreeably and aggressively in peer relationships, (e.g., “He/she hits, bites or kicks other children.”), and the anxiety-introversion (AI) subscale evaluates children's depressive moods and internalizing problems such as shyness within the group (e.g., “Sad, unhappy or depressed.”). The scale has a 6-point Likert grading (1 = Never, 2 or 3 = Rarely, 3 = Sometimes, 4 or 5 = Frequently, 6 = Always). High scores on the scale indicate high anger, high social competence and high introversion; low scores indicate low anger, low social competence, and low introversion. The internal consistency coefficients calculated with Cronbach's alpha (0.88 for SC,

0.87 for AA, and 0.84 for AI) and the test–retest coefficients (0.64 for SC, 0.71, for AA, and 0.45 for AI) supported the reliability of the scale. These values indicate a high level of internal consistency.

Communication Skills Scale-Adult Form (CSS-AF) The CSS-AF was utilized to evaluate communication skills in adults to provide more information about relationships in daily life. It was adapted to Turkish by Korkut Owen and Demirbas-Celik in 2017 to measure the communication skills of adults. The CSS-AF can only be completed by adults, evaluates the number of communication skills and consists of five sub-dimensions. The first is termed “basic skills and self-expression” (BS-SE) that contains 9 items (e.g., “I can easily express my feelings”). The second is termed “willingness to communicate” (WC) that contains 5 items (e.g., “When others are speaking, I wait for them to complete before responding.”). The third is termed “willingness to establish relationships” (WER) that contains 3 items (e.g., “I make time to listen to what the people I interact with want to say.”). The fourth is termed “effective listening and non-verbal communication” (EL-NVC) that contains 5 items (e.g., “When I listen to someone, I try to understand what they mean rather than what to respond to.”). The fifth is termed “compliance with communication principles” (CCP) that contains 3 items (e.g., “I accept people as they are.”). It was defined as a 25-item 5-point Likert scale (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Frequently, 5 = Always). The lowest obtainable score is 5, while the highest score is 25. A high score from the scale indicates that the individual evaluates themselves positively in terms of communication skills. In the scale consisting of 25 items, internal consistencies were calculated with Cronbach's alpha coefficient and found to be 0.94. As a result of the analysis, the total variance of the scale was 71.93. The internal consistency coefficients for the sub-factors of the scale were found to be 0.95 for BS-SE, 0.81 for WC, 0.74 for WER, 0.76 for EL-NVC and 0.65 for CCP. These values show that the reliability level of the CSS is adequate.

Conflict Resolution Scale (CRS) The CRS was developed by Akbalık (2001) to determine the conflict resolution levels of university students. It consists of five sub-dimensions. The first is termed “empathy towards the person experiencing conflict” (E) that contains 13 items. (e.g., “When I have a disagreement with someone, I put myself in the position they are in.”). The second is termed “respect for differences and listening skills” (LS) that contains 14 items (e.g., “I believe I am a good listener.”). The third is termed “focusing on the needs of both sides” (FN) that contains 10 items (e.g., “only my own needs are important to me.”, “I try to understand the needs of the person with whom I have a problem.”). The fourth is termed “social extroversion” (SE) that contains 12 items (e.g., “I can't establish good relationships with my

friends.”, “In my surroundings, I’m a wanted person.”). The fifth is termed “anger management” (AM) that contains 6 items (e.g., “I can control my anger.”). The 55-item scale created in the form of positive (contains 34 items) and negative (contains 21 items) judgments was defined as a 4-point Likert scale (1 = Very Much Like Me, 2 = Much Like Me, 3 = Somewhat Like Me, and 4 = Not at All Like Me). However, some items are reverse-scored. The lowest obtainable score is 55, while the highest score is 220. The Cronbach’s alpha internal consistency was found to be 0.91. In the scale consisting of 55 items, the correlation values of the items with the total score range between 0.27 and 0.57. The total variance value of the scale factors is 39.3%.

Statistical Analysis of the Data

The statistical data were analysed using Package for Social Sciences (SPSS) 24.0 and AMOS 21.0 software. Descriptive statistics were provided for the scores obtained from the mother’s Communication Skills Scale (CSS), the mother’s CRS, and the children’s SCBA. The normal distribution of scale scores was examined using the Kolmogorov–Smirnov test and skewness-kurtosis values and was determined to conform to a normal distribution. Therefore, parametric tests were used in the research. The Pearson test was used to assess correlations between the scores of the Conflict Resolution Scale for Mothers, the Communication Skills Scale, and the Social Competence and Behavior Evaluation Scale for Children. Structural equation modeling was applied to examine the mediating role of the mother’s CRS scores in the relationship between the mother’s communication skills scale scores and the children’s SCBA scores. The structural equation model (SEM) is a widely used statistical modeling technique in behavioral sciences (Hox & Bechger, 1999). It is a comprehensive statistical approach that aims to test a theoretical model by revealing the causal and reciprocal relationships between observed and latent variables (Raykov & Marcoulides, 2006).

Findings

This section initially involved tabulating and analyzing the data, considering the correlations between the scales. Subsequently, upon finding acceptable goodness-of-fit values, the analysis proceeded using structural equation modeling. Finally, the goodness-of-fit indices were assessed in alignment with the study’s objectives.

According to Table 2, there were significant positive correlations between the mothers’ scores from the CRS and empathy, listening skills, focusing on needs, social extroversion, and anger management scores and the scores obtained by the children from social competence in the

SCBA. However, there were negative correlations between their scores from anger-aggression and anxiety-introversion ($p < 0.05$).

Positive correlations were found between the mothers’ scores from the CSS and basic skills and self-expression, willingness to communicate, willingness to establish relationships, effective listening and non-verbal communication, and compliance with communication principles scores and the children’s social competence scores from the SCBA. Negative correlations were found between the scores they obtained from anger-aggression and anxiety-introversion ($p < 0.05$).

Structural equation modeling was used to examine the mediating role of the mother’s CRS scores in the relationship between the mothers’ CSS scores and the children’s SCBA scores.

According to Fig. 2, the CSS scores of the mothers significantly predicted the CRS scores ($\beta = 0.68$; $p < 0.05$). The scores obtained by the mothers from the CRS and the scores obtained from the children’s SCBA were found to be statistically significant ($\beta = 0.36$; $p < 0.05$). Mothers’ CSS scores were not significant predictors of children’s SCBA scores ($\beta = 0.15$; $p > 0.05$).

As can be seen in the figure, when the predictive status of the CSS and CRS scores of the mothers was examined, the mothers’ CRS scores continued to predict the SCBA scores of the children but the CSS scores did not. Accordingly, the mother’s CRS scores had a mediating role in the relationship between the mother’s CSS scores and the children’s SCBA scores.

Table 3 shows the goodness of fit values regarding the model, the χ^2/sd was found to be 4.193, meaning that the model had an acceptable fit. According to Kline (2005), a χ^2/sd value below 3 indicates a perfect fit, and between 3 and 5 indicates an acceptable fit

The Table 3 shows the goodness of fit index was (GFI=0.924), normed fit index (NFI=0.901), and comparative fit index (CFI=0.921). The acceptable limit value range for the Goodness of Fit Index (GFI) value was determined as 0.90–0.95, and the range of values considered appropriate for perfect fit was determined as 0.95–1.00 (Ayyildiz & Cengiz, 2006). According to Tabachnick and Fidell (2001), the limit value determined for the NFI is between 0.90 and 1.00. On the other hand, the Comparative Fit Index (CFI) value, which is used as a goodness of fit index, shows acceptable fit if it is between 0.90–0.95, and excellent fit if it is between 0.95–1.00 (Tabachnick & Fidell, 2001). According to these values, the model is within acceptable limits for GFI, NFI, and CFI.

The model was not found to fit in terms of the mean square root (RMSEA = 0.088) value of the approximate errors of the scale. According to (Brown, 2006), an RMSEA value between 0.00 and 0.05 indicates a perfect fit, and a value between 0.05 and 0.08 indicates an acceptable fit.

Table 2 Correlations Between Mothers' CRS, CSS Scores and Children's SCBA Scores

		Social Competence	Anger-Aggression	Anxiety-Introversion
Empathy	r	0.252	-0.153	-0.165
	p	0.000*	0.002*	0.001*
Listening Skills	r	0.232	-0.038	-0.106
	p	0.000*	0.446	0.031
Focus on Requirements	r	0.296	0.333	-0.334
	p	0.000*	0.000*	0.000*
Social Extroversion	r	0.398	-0.163	-0.218
	p	0.000*	0.001*	0.000*
Anger Management	r	0.185	-0.406	-0.295
	p	0.000*	0.000*	0.000*
Conflict Resolution Scale	r	0.403	-0.289	-0.310
	p	0.000*	0.000*	0.000*
Basic Skills and Self-expression	r	0.372	-0.182	-0.203
	p	0.000*	0.000*	0.000*
Willingness to Communication	r	0.321	-0.215	-0.138
	p	0.000*	0.000*	0.005
Willingness to Establish Relationship	r	0.381	-0.121	-0.100
	p	0.000*	0.014*	0.042*
Effective Listening and Non-Verbal Communication	r	0.402	-0.209	-0.194
	p	0.000*	0.000*	0.000*
Compliance with the Communication Principles	r	0.224	-0.140	-0.141
	p	0.000*	0.005*	0.004*
Communication Skills Scale	r	0.428	-0.220	-0.203
	p	0.000*	0.000*	0.000*

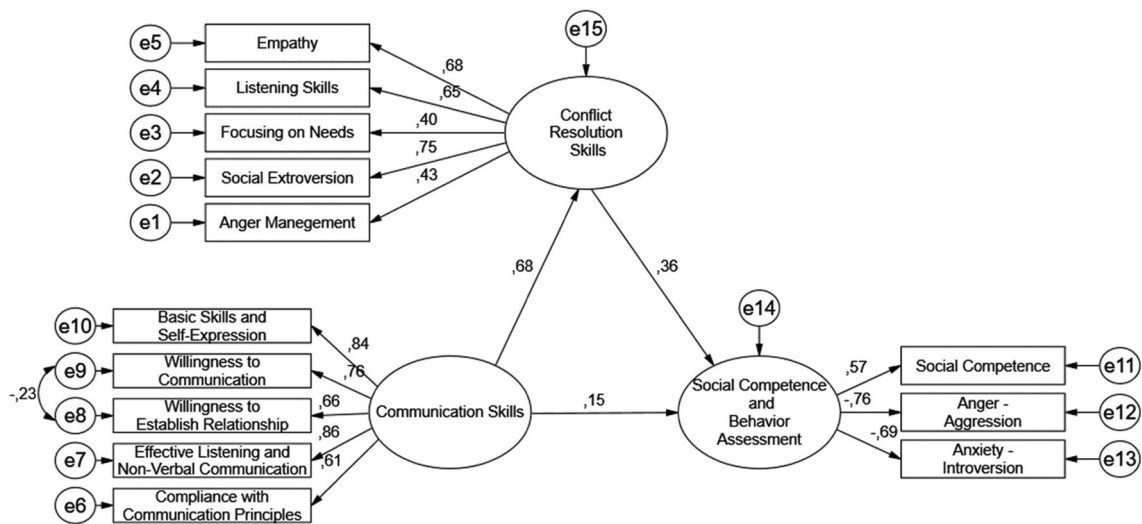


Fig. 2 The Mediating Role of the Mother's CRS Scores in the Relationship Between the Mother's CSS Scores and the Children's SCBA Scores

Table 3 Goodness of Fit Indices of the Model

Index	Value	Limit Value	Fit
χ^2/sd	4.193	3–5	Acceptable
GFI	0.924	0.90–0.95	Excellent
NFI	0.901	0.90–0.95	Acceptable
CFI	0.921	0.90–0.95	Excellent
RMSEA	0.088	*0.5–0.8	No fit

Discussion

The results of the correlation analysis of the model showed a significant and positive relationship between mothers' conflict resolution skills and their scores in the sub-dimensions of empathy towards the conflicted person, empathy, respect for differences and listening skills, focusing on the needs of both sides, social extroversion, and anger management and the children's scores from the SCBA and the social competence sub-dimension. Furthermore, there was a significant and negative relationship between their scores from anger-aggression and anxiety-introversion. Similarly, Matsushima and Shiomi (2003) found a positive relationship between problem-solving skills and social competence expectations in interpersonal relationships. The results of the study conducted by Yarali and Ozka (2016) also support the findings of the present study in that anger-aggression behaviors decreased in children, as problem-solving skills increased. A study conducted by Tollossa and Nelson (2021) emphasized that mothers not using conflict resolution skills and attempting to resolve the situation with a win/lose approach were associated with observed extrinsic behaviors in children. Therefore, conflict resolution skills should be taught from early childhood to reduce the behavioral problems that can be observed in preschool children. Similarly, the study conducted by Akkapulu (2005) found that problem-solving skills in high school adolescents were a key variable in predicting their social competence expectation levels. While Yarali and Ozkan (2016) emphasized that anxiety-introversion status is closely related to social problem-solving skills, Arslan and Demirci (2019) emphasized that gaining conflict resolution skills is crucial in reducing the aggressive behaviors in adolescents. Social acceptance is directly related to social skills and social competence expectations and when the level of acceptance decreases, problem behaviors such as communication, anger, aggression, and alienation occur in individuals (Malecki & Demary, 2002). This shows that it is not enough to focus solely on communication skills to instill social competence skills in children, children must also be provided with conflict resolution skills. This study draws attention to this important point and, considering the importance of the mother–child relationship particularly of mothers taken as role models, can be revised when working

on mother's communication skills in guidance and psychological counseling services for them by taking into account the effect that improving mothers' conflict resolution skills has on children's problem behaviors. In addition, activities that will improve children's skills such as understanding, recognizing and expressing emotions, listening, socializing, and anger control should be included in educational programs for preschoolers.

A meta-analysis study conducted by Candelaria et al. (2012) found that anger management positively affected children's behavior, emotions, and social skills. In another study conducted by Donohue et al. (2022), recurring conflict between parent and child mediated the relationship between parental anger control and adolescent problem-solving behaviors. For this reason, mothers with anger management skills can impart these skills to their children and prevent them from exhibiting behavioral problems, bullying, and similar destructive behaviors (Garner & Hinton, 2010). Furthermore, they can refrain from exhibiting timid behaviors (anxiety/introversion) and are raised as healthy individuals. Children learn to express and interpret their emotions through mother–child interaction (Richaud, 2013). The study conducted by Altindal and Sop (2023) showed a negative relationship between the perspective-taking skills of preschool children and behavioral problems. As children, in particular preschoolers, are able to have other people's perspectives, mothers need to have empathy skills, which are conflict resolution skills, and to empathize with their children so that they can develop empathy skills (Akbas & Temiz, 2015) and care about the needs of the interacted person. Fewer problem behaviors (Oneren Sendil, 2010; Karaoglu, 2011; Gultekin Akduman et al., 2015) and less aggression (Trentacosta & Fine, 2010; Werner et al., 2014) and/or anxiety/introversion were reportedly observed in children with high empathy skills. As the effects of problem behaviors in preschoolers can be long-term (Hughes & Ensor, 2006), improving empathic skill levels plays an important role in preventing communication conflicts and ensures that the relationships established in interpersonal relationships are more positive (Cubukcu & Girmen, 2009). In light of all these cases, when the findings obtained in this study are compared, if mothers possess empathy skills, this will reflect positively on their relationships with their children, particularly in interpersonal relationships. Therefore, it can be emphasized that mothers' possession of conflict resolution skills is an extremely important phenomenon.

One study found that children with empathy skills were able to positively regulate their social relationships because they had developed an awareness of how their reactions could affect the person in interpersonal relationships (Kuyucu & Tepeli, 2013; Taylor et al., 2013). Another study found that being able to use the emotional knowledge of others to predict the intentions of others reduces interpersonal

conflicts by enabling children to be more successful in solving social problems (De Wied et al., 2007). That can be said that the results obtained from those studies are similar to the results obtained from the conflict resolution skills sub-dimensions of the present study. In light of the findings of this study, mothers with conflict resolution skills such as empathy, respect for differences, listening, focusing on both sides' needs social extroversion and anger control can each set a good example for their children. Also, they can take an important step toward raising healthy individuals for society who do not exhibit behaviors that are considered problem behaviors and socially unacceptable.

The results of the correlation analysis of the model showed a significant and positive relationship between the mothers' scores obtained from the communication skills and its sub-dimensions and the children's scores from the SCBA and its social competence sub-dimension. There was a significant and negative relationship between their scores from anger-aggression and anxiety-introversion. Similarly, while improved communication skills in preschool children prevent the formation of aggression (Kim et al., 2011) and problem behaviors, insufficient social skills increase behavior problems (Gulay & Akman, 2009). In another study, Kazan and Sarisoy (2021) emphasized that mothers who do not have effective communication skills also have the potential to harm their children. Furthermore, the study conducted by Koycegiz and Ozbey (2018), supporting the current study, found a negative and significant relationship between children's problem behaviors and parents' communication skills. Ambhore et al. (2022) found that negative communication creates various psychological and social problems not only among parents but also among children. In another study, Kazan and Sarisoy (2021) emphasized that mothers lacking effective communication skills also have the potential to harm their children. However, the study by Tarkocin and Tuzcuoglu (2014) found no relationship between children's behavioral problems and parents' communication skills. The main reason for this can be attributed to the conflict resolution skills not being addressed in the study and therefore no connection could be established. In addition, the study determined that mothers' conflict resolution skill levels mattered in the relationship between their communication skills and behavioral problems in children. These results are also supported by the mentioned studies.

As a result, of a literature review, no previous domestic study was found to reveal a model related to the mediating role of the mother's conflict resolution skills in the relationship between the communication skills of mothers with preschool children and problem behaviors in children. Therefore, to clarify the referred associations, unlike other studies, the present study proposed a model discussing conflict resolution skills as an intermediary role in the relationship between mothers' communication skills and children's

problem behaviors. The model fit indices were analyzed within the scope of the model proposal to test the acceptability of the model fit. The χ^2/sd value for the model indicates that the model fit of this study is acceptable (Kline, 2005). The goodness-of-fit values obtained for the model are within acceptable limits. The GFI, NFI and CFI values above 0.90 indicate that the model is within acceptable limits (Tabachnick & Fidell, 2001). However, the RMSEA value for the model was found to be poor (Brown, 2006). Thus, it has added a new dimension to the literature by analyzing this model with the structural equation model.

In conclusion, based on the data acquired within the scope of the study, as described above, this study used a structural equation model to test the effect of the mediating role of the mother's conflict resolution skills in the relationship between the behavioral problems of children aged 3–6 years and the mother's communication skills.

Conclusion and Suggestions

The finding of this study determined that although communication skills are important in preventing behavioral problems in children, conflict resolution skills feed communication skills and are more effective in preventing problem behaviors that may occur in children. These results highlight the importance of the mediating role of conflict resolution skills and suggest that this study can serve as an example for future research.

The mediating role of conflict resolution skills in the relationship between mothers' communication skills and behavioral problems in children was found to be significant. Moreover, these skills matter and should be acquired to prevent problem behaviors that may arise in children. Given Cyprus' socio-economic structure, the fact that it is a small island, and that it has experienced war in the recent past, mothers need to be more sensitive and share their thoughts more sensitively in interpersonal relationships and they need to have empathy and advanced anger management skills, which are conflict resolution skills, to be a positive role model for their children. In TRNC society just as in every society, mothers try to act in accordance with the societal roles that society assigns to them and expects them to comply with and to be the role models for their children that society expects them to be. This is thought to be one of the most basic and essential reasons why mothers improve their effective conflict resolution skills so as to better manage conflicts in their interpersonal relations while using these skills to improve their effective communication skills. A meta-analysis study conducted by Holt and DeVore (2005) compared collectivist cultures and individualist cultures and revealed that compliance, avoidance, and problem-solving strategies were generally preferred in the resolution of conflicts in collectivist

cultures. However, given the changing expectations in both individual and social contexts after the pandemic, more studies should be conducted to examine the conflict resolution skills and communication skills that are necessary to form and maintain healthy interpersonal relationships in keeping with the times. Parent, child, sibling, peer, and teacher relations can be handled separately or jointly and assessments made to positively develop and improve children's communication skills and conflict resolution skills, particularly during the most critical preschool period.

In light of this study's findings, researchers who want to conduct studies on this subject in the future should examine the effect of variables such as parental attitudes, mother's communication skills, and conflict resolution skills through the eyes of the child and maternal communication. Also, conflict resolution skills training programs or mother–child communication activities should be organized so that children acquire these skills directly or indirectly.

Awareness can be created by focusing on studies that examine family relationships and mother–child and father–child relationships by considering the current conditions and the use of technological items such as smartphones and tablets, making recommendations to prevent the adverse consequences that could occur in these areas. Similarly, this can pave the way for guidance and psychological counselors to take an active role here.

To prevent the behavioral problems in children, studies can be conducted to strengthen parents' relationships and interactions with their children, regardless of age, by including mothers, fathers, or both parents together in psycho-education programs, particularly to show them how to manage any conflicts that may occur in the best possible way.

Future studies to be conducted in this field can obtain more objective and in-depth data by considering both qualitative and quantitative methods. The findings thus obtained can help with drawing up new road maps.

On examination of the literature, there were no studies on the mediating role of conflict resolution skills in the relationship between children's behavioral problems and mother's communication skills in the preschool period in Northern Cyprus and there were few studies examining mother–child communication and/or conflict resolution skills separately. Therefore, this study and future studies in this field can make an important contribution to the Northern Cyprus literature and raise awareness in this regard. The results of this study show that conflict resolution skills feed and improve communication skills, which should be taken into account in future studies in this field or psycho-education programs.

Limitations

Although this study attempts to elucidate the mediating role of maternal conflict resolution skills in the relationship

between the communication skills of mothers and behavioral problems of 3–6-year-old children, it is important to underscore several limitations.

Firstly, all participants in the study consisted of mothers. Future research could benefit from broader populations, including teachers and fathers, to provide a more holistic understanding of the dynamics involved in parent–child interactions. Secondly, the study focuses primarily on variables related to mothers' conflict resolution and communication skills in determining their children's social competence and behaviors. However, this limited scope may not fully capture the multifaceted nature of the relationships under investigation. Future studies could enhance the model by incorporating additional variables including aggression levels, anger expression styles, parental caregiving attitudes, and parental self-efficacy. This approach can provide a more comprehensive and nuanced exploration of the relationships and make a more substantial contribution to the existing literature. Thirdly, the data collection in this study was exclusively questionnaire-based, which may be considered a limitation. A more comprehensive analysis could be achieved by incorporating qualitative research methods, including semi-structured interviews, to provide richer insights into the subject. The final limitation of this study is its concentration on children aged between 3 and 6 years. Future research could consider extending the age range or even exploring these dynamics in adolescents, providing a more comprehensive understanding of how conflict resolution and communication skills affect child development across different developmental stages.

In conclusion, while this study makes a significant contribution to our understanding of mother–child communication, conflict resolution skills, and child behavioral outcomes, these limitations should be regarded as opportunities for future research to delve deeper into this complex area and expand our knowledge base.

Funding Open access funding provided by the Scientific and Technological Research Council of Türkiye (TÜBİTAK).

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Aguilar, B., Sroufe, L. A., Egeland, B., & Carlson, E. (2000). Distinguishing the early-onset/persistent and adolescence-onset antisocial behavior types: From birth to 16 years. *Development and Psychopathology*, *12*(2), 109–132. <https://doi.org/10.1017/s0954579400002017>
- Akbalik, F. F. (2001). Catisma cozme olceginin (universite ogrencileri formu) gecerlilik ve guvenirlilik calismasi [Validity and reliability study of conflict resolution scale (university students form)]. *Turkish Journal of Psychological Counselling and Guidance*, *2*(16), 7–13.
- Akbas, B., & Temiz, G. (2015). 60–66 aylık çocukların empati beceri düzeylerinin anne empati beceri düzeyi açısından incelenmesi [Examining the empathy skill levels of 60–66 month old children in terms of mother's empathy skill level]. *Trakya University Journal of Faculty of Education*, *5*(2), 106–112.
- Akkapulu, E. (2005). *Ergenin sosyal yetkinlik beklentisini yordayan bazı değişkenler [Some variables predicting adolescents' social competence expectancy] [Unpublished master's thesis]*. University of Cukurova.
- Altindal, Z., & Sop, A. (2023). 5–6 yaş çocukların bakış açısı alma becerileri ile davranış problemleri arasındaki ilişkinin incelenmesi [Examining the relationship between perspective-taking skills and behavioral problems of 5–6 year old children]. *Trakya Education Journal*, *13*(3), 1642–1655. <https://doi.org/10.24315/tred.1174360>
- Ambhore, A. M., Ashtaputre, A. A., Puri, P. A., Bhutekar, S. V., Bochar, B. R., Sheikh, M. R., Talware, S. L., & Taur, A. D. (2022). Communication problem and conflicts in parent child relationship. *Indian Journal of Social Sciences and Literature Studies*, *8*(1), 250–253.
- Anselmi, L., Piccinini, C. A., Barros, F. C., & Lopes, R. S. (2004). Psychosocial determinants of behaviour problems in Brazilian preschool children. *Journal of Child Psychology and Psychiatry*, *45*(4), 779–788. <https://doi.org/10.1111/j.1469-7610.2004.00271.x>
- Aunola, K., Stattin, H., & Nurmi, J-E. (2000). Adolescents' achievement strategies, school adjustment and externalizing and internalizing problem behaviors. *Journal of Youth and Adolescence*, *29*(3), 289–306. <https://doi.org/10.1023/A:1005143607919>
- Arslan, C., & Demirci, A. (2019). Ergenlerde saldırganlığın sosyal beceri ve catisma cozme acisindan incelenmesi [Examining aggression in adolescents in terms of social skills and conflict resolution]. *Turkish Journal of Educational Sciences*, *17*(2), 323–342.
- Ayyıldız, H., & Cengiz, E. (2006). A conceptual investigation of structural equation models (SEM) on testing marketing models. *Journal of Suleyman Demirel University Faculty of Economics and Administrative Sciences*, *11*(1), 63–84.
- Babicka-Wirkus, A., Kozłowski, P., Wirkus, Ł., & Stasiak, K. (2023). Internalizing and externalizing disorder levels among adolescents: Data from Poland. *International Journal of Environmental Research and Public Health*, *20*, 2752. <https://doi.org/10.3390/ijerph20032752>
- Bacanli, H. (2003). *Gelisim ve ogrenme [Development and learning]*. Nobel Press.
- Bandura, A., & Walters, R. (1963). *Social Learning and Personality Development*. Holt, Rinehart & Winston.
- Bao, P., Jing, J., Jin, Y., Hu, X., Liu, B., & Hu, M. (2016). Trajectories and the influencing factors of behavior problems in preschool children: A longitudinal study in Guangzhou. *China. BMC Psychiatry*, *16*(1), 1–10.
- Basten, M., Tiemeier, H., Althoff, R. R., Van de Schoot, R., Jaddoe, V. W. V., Hofman, A., Hudziak, J. J., Verhulst, F. C., & Van der Ende, J. (2016). The stability of problem behavior across preschool years: An empirical approach in the general population. *Journal of Abnormal Child Psychology*, *44*, 393–404.
- Bernard, H. R. (2011). *Research methods in anthropology: Qualitative and quantitative approaches* (4th ed.). Altamira Press.
- Birkan, B. (2002). Cocuklarda davranis sorunlari ve basa cikma yollari [Behaviour problems in children and ways of coping]. *Coluk Cocuk- Anne Baba Egitimci Dergisi*, *17*, 18–20.
- Bullo, A., & Schulz, P. J. (2022). Parent-child communication, social norms, and the development of cyber aggression in early adolescence. *Journal of Youth and Adolescence*, *51*, 1774–1786. <https://doi.org/10.1007/s10964-022-01625-1>
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. The Guilford Press.
- Buyukozturk, Ş., Kılıç-Cakmak, E., Akgun, O. E., Karadeniz, S., & Demirel, F. (2011). *Bilimsel araştırma yöntemleri [Scientific research methods]* (10th ed.). Pegem Press.
- Cam, S., & Tunkaya, S. (2008). Psikolojik danisma icin basvuran ve basvurmeyan universite ogrencilerinin kisilerarasi problem cozme becerileri [Interpersonal problem solving skills of university students who applied and did not apply for psychological counseling]. *Dokuz Eylul University Buca Faculty of Education Journal*, *23*, 48–56.
- Candelaria, A. M., Fedewa, A. L., & Ahn, S. (2012). The effects of anger management on children's social and emotional outcomes: A meta-analysis. *School Psychology International*, *33*(6), 596–614. <https://doi.org/10.1177/0143034312454360>
- Chavada, K., & Nisarga, V. (2023). Single parenting: Impact on child's development. *Journal of Indian Association for Child and Adolescent Mental Health*, *19*(1), 14–20. <https://doi.org/10.1177/09731342231179017>
- Corapçı, F., Aksan, N., Arslan-Yalcin, D., & Yagmurlu, B. (2010). Okul oncesi donemde duygusal, davranissal ve sosyal uyum taramasi: Sosyal yetkinlik ve davranis degerlendirme-30 olcegi [Emotional, behavioral and social adaptation screening in preschool period: Social competence and behavior assessment-30 scale]. *Journal of Child and Youth Mental Health*, *17*(2), 63–74.
- Cubukcu, Z., & Girmen, P. (2009). İlkogretim ogrencilerinin empati becerisine sahip olma duzeyleri [Levels of empathy skills of primary school students]. *Journal of Contemporary Education*, *34*(370), 15–21.
- De Wied, M., Branje, S. J. T., & Meeus, W. H. J. (2007). Empathy and conflict resolution in friendship relations among adolescents. *Aggressive Behavior*, *33*, 48–55.
- Donohue, E., Halgunseth, L. C., Chilenski, S. M., & Perkins, D. F. (2022). Recurring parent-child conflict: A mediator between parental anger management and adolescent behavior. *Family and Consumer Science Research Journal*, *51*(1), 6–19. <https://doi.org/10.1111/fcsr.12450>
- Erozkan, A. (2013). İletişim becerileri ve kişilerarası problem çözme becerilerinin sosyal yetkinliğe etkisi [The effect of communication skills and interpersonal problem solving skills on social competence]. *Educational Sciences in Theory and Practice*, *13*(2), 731–745.
- Fergusson, D. M., Horwood, L. J., Ridder, E. M., & Beautrais, A. L. (2005). Subthreshold depression in adolescence and mental health outcomes in adulthood. *Archives of General Psychiatry*, *62*(1), 66–72. <https://doi.org/10.1001/archpsyc.62.1.66>
- Garner, P. W., & Hinton, T. S. (2010). Emotional display rules and emotion self-regulation: Associations with bullying and victimization in community-based after school programs. *Journal of Community & Applied Social Psychology*, *20*(6), 480–496. <https://doi.org/10.1002/casp.1057>
- Gezova, K. C. (2015). Father's and mother's and their particularities in raising children. *Acta Educationis Generalis*, *5*(1), 45–50. <https://doi.org/10.1515/atd-2015-0032>

- Gleason, M. M., Goldson, E., & Yogman, M. W. (2016). Addressing early childhood emotional and behavioral problems. *American Academy of Pediatrics*, 138(6), 1–13. <https://doi.org/10.1542/peds.2016-3025>
- Gozun-Kahraman, O., & Derdiyok, Z. S. (2022). Çocukların korkularına yönelik ebeveyn destekli davranışsal müdahaleler: Gece korkusuna yönelik bir olgu çalışması [Parent-supported behavioral interventions for children's fears: A case study of night]. *Manas Journal of Social Research*, 11(2), 884–895.
- Gulay, H., & Akman, B. (2009). *Okul öncesi dönemde sosyal beceriler [Social skills in preschool period]*. Pegem Press.
- Gultekin –Akdoğan, G., Günindi, Y., & Turkoglu, D. (2015). Okul öncesi dönem çocukların sosyal beceri düzeyleriyle davranış problemleri arasındaki ilişkinin incelenmesi [Examining the relationship between social skill levels and behavioral problems of preschool children]. *International Journal of Social Research*, 37(8), 673–683.
- Gur, C., Kocak, N., Demircan, A., Uslu, B. U., & Sirin, N. (2015). Okulöncesi eğitim kurumlarına devam eden 48-66- ay çocukların sosyal yetkinlik ve davranış değerlendirme durumlarının incelenmesi [Examination of social competence and behavioral assessment status of 48-66-month-old children attending preschool education institutions]. *Education and Science*, 40(180), 13–23. <https://doi.org/10.15390/EB.2015.4563>
- Hill, N. E., & Bush, K. R. (2001). Relationships between parenting environment and children's mental health among African American and European American mothers and children. *Journal of Marriage and Family*, 63(4), 954–966.
- Hol, S. (2017). Annelerin çocuklarına yönelik iletişim becerilerinin 5–6 yaş grubu çocuklarının iletişim becerileri üzerindeki yordayıcı etkisi [The predictive effect of mothers' communication skills towards their children on the communication skills of 5–6 year old children]. *Journal of Academic History and Thought*, 4(13), 351–381.
- Holt, J. L., & DeVore, C. J. (2005). Culture, gender, organizational role, and styles of conflict resolution: A meta-analysis. *International Journal of Intercultural Relations*, 29(2), 165–196. <https://doi.org/10.1016/j.ijintrel.2005.06.002>
- Hortacısu, N. (2003). *Çocuklukta ilişkiler; ana baba kardeş ve arkadaşlar* [Relationships in childhood; parents, siblings and friends] (1st Ed.), Imge Press.
- Hox, J. J., & Bechger, T. M. (1999). An introduction to structural equation modeling. *Family Science Review*, 11, 354–373.
- Hughes, C., & Ensor, R. (2006). Behavioural problems in 2-year-olds: Links with individual differences in theory of mind, executive function and harsh parenting. *Journal of Child Psychology and Psychiatry*, 47(5), 488–497.
- Kandır, A. (2000). Öğretmenlerin bes-altı yaş çocuklarında görülen davranış problemlerine ilişkin bilgi ve tutumları [Teachers' knowledge and attitudes about behavioural problems in five-six year old children]. *Gazi University Journal of Gazi Education Faculty*, 2(1), 42–50.
- Kandır, A., & Alpan, Y. (2008). Okul öncesi dönemde sosyal-duygusal gelişime anne-baba davranışlarının etkisi [The effect of parental behaviours on social-emotional development in preschool period]. *Family and Society*, 10(4), 33–38.
- Kapisiz, O., & Karaca, S. (2018). Erken çocukluk döneminde görülen davranışsal sorunlar ve psikiyatri hemşiresinin rolü [Behavioural problems in early childhood and the role of the psychiatric nurse]. *Journal of Academic Research in Nursing*, 4(2), 112–119. <https://doi.org/10.5222/jaren.2018.112>
- Karaoglu, M. (2011). *Basariya ilk adım erken müdahale programının 5-6 yaş grubu çocuklarının problem davranışlarına, sosyal becerilerine ve akademik etkinliklerle ilgilenme sürelerine olan etkisi [The effect of the first step to success early intervention programme on 5-6 year old children's problem behaviours, social skills and the duration of interest in academic activities]* [Unpublished doctoral dissertation]. University of Marmara.
- Karasar, N. (2013). *Bilimsel araştırma yöntemi [Scientific research method]* (25th ed.). Nobel Press.
- Kazan, H., & Sarısoy, S. (2021). Anne-cocuk ilişkisi bağlamında okul öncesi dönemde iletişim becerileri üzerine bir araştırma [A research on communication skills in the preschool period in the context of mother-child relationship]. *Istanbul Aydın University Journal of Social Sciences*, 13(2), 441–472.
- Kim, M. J., Doh, H. S., Hong, J. S., & Choi, M. K. (2011). Social skills training and parent education programs for aggressive preschoolers and their parents in South Korea. *Children and Youth Services Review*, 33(6), 838–845.
- Kline, R. B. (2005). *Methodology in the social sciences Principles and practice of structural equation modeling (2nd ed)*. Guilford.
- Knauth, D. G. (2000). Predictors of parental sense of competence for the couple during the transition to parenthood. *Research in Nursing and Health*, 23(6), 496–509. [https://doi.org/10.1002/1098240X\(200012\)23:6%3c496::AID-NUR8%3e3.0.CO;2-1](https://doi.org/10.1002/1098240X(200012)23:6%3c496::AID-NUR8%3e3.0.CO;2-1)
- Koc, B., Terzi, Y., & Gul, A. (2015). Üniversite öğrencilerinin iletişim becerileri ile kişilerarası problem çözme becerileri arasındaki ilişki [The relationship between university students' communication skills and interpersonal problem-solving skills]. *International Journal of Turkish Literature Culture Education*, 4(4–1), 369–369. <https://doi.org/10.7884/teke.430>
- Korkut, S. (2012). Lise öğrencilerinde çocukluk orselenme yasantıları ve ofke ifade biçimleri ile benlik saygısı ve yaşam doyumu arasındaki ilişkilerin incelenmesi [Investigation of the relationship between childhood abuse experiences and forms of anger expression, self-esteem and life satisfaction in high school students] [Unpublished master's thesis]. University of Cukurova.
- Korkut Owen, F., & Demirbas Celik, N. (2018). Yetişkinlerin cinsiyetlerine, yaşlarına ve kişilik özelliklerine göre iletişim becerilerinin incelenmesi [Investigation of communication skills of adults according to their gender, age and personality traits]. *Journal of Human Sciences*, 15(4), 2305–2321.
- Koycegiz, M., & Ozbey, S. (2018). Okul öncesi dönem çocuğu olan ebeveynlerin çatışma eğilimleri ile çocuklarının sosyal becerileri ve problem davranışları arasındaki ilişkinin incelenmesi [Investigation of the relationship between conflict tendencies of parents with preschool children and their children's social skills and problem behaviours]. *International Journal of Social Research*, 11(55), 655–669.
- Kuyucu, Y., & Tepeli, K. (2013). 60–72 aylık çocukların akranlarına karşı gösterdikleri duygusal ve davranışsal tepkilerinin duyguları anlama becerileri açısından incelenmesi [Examining the emotional and behavioral reactions of 60–72 month old children towards their peers in terms of their ability to understand emotions]. *Dumlupınar University Journal of Social Sciences*, 36(1), 91–100.
- Laursen, B., & Mooney, K. S. (2008). Relationship network quality: Adolescent adjustment and perceptions of relationships with parents and friends. *Am Journal of Orthopsychiatry*, 78(1), 47–53.
- Liman, B. (2020). 60–72 aylık çocukların sosyal yetkinlik ve davranış durumlarının bazı değişkenlere göre incelenmesi [Examination of social competence and behavioral status of 60–72 month old children according to some variables]. *Dicle University Ziya Gökalp Faculty of Education Journal*, 37, 8–29. <https://doi.org/10.14582/DUZGEF.2020.136>
- Malatesta, C., Grigoryev, P., Lamb, C., Albin, M., & Culver, C. (1986). Emotion socialization and expressive development in preterm and full-term infants. *Child Development*, 57(2), 316–330. <https://doi.org/10.2307/1130587>

- Malecki, C. K., & Demary, M. K. (2002). Measuring perceived social support: Development of the child and adolescent social support scale (CASSS). *Psychology in The Schools, 39*, 1–18.
- Manti, F., Giovannone, F., & Sogos, C. (2019). Parental stress of preschool children with generalized anxiety or oppositional defiant disorder. *Frontiers in Pediatrics, 7*, 415. <https://doi.org/10.3389/fped.2019.00415>
- Mastow, A. J. (2004). *Longitudinal and concurrent prediction of peer acceptance: Direct and indirect effects of emotional, cognitive and behavioral factors [Unpublished doctoral's thesis]*. University of Delaware.
- Matsushima, R., & Shiomi, K. (2003). Social self-efficacy and interpersonal stress in adolescence. *Social Behavior and Personality, 31*(4), 323–332.
- Nelson, J. A., O'Brien, M., Grimm, K. J., & Leerkes, E. M. (2014). Identifying mother-child interaction styles using a person centered approach. *Social Development, 23*(2), 306–324. <https://doi.org/10.1111/sode.12040>
- Njegovan, B. R., Vukadinovic, M., & Grubić Nesić, L. (2011). Characteristics and types of authority: The attitudes of young people. A case study. *Sociologia, 43*(6), 657–673.
- Oneren Sendil, C. (2010). *An investigation of social competence and behavioral problems of 5–6 year-old children through peer preference, temperament and gender [Unpublished master's thesis]*. Middle East Technical University.
- Onwuegbuzie, A. J., & Collins, K. M. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report, 12*(2), 281–316.
- Plummer, D. (2011). *Helping children to improve their communication skills: therapeutic activities for teachers, parents, and therapists* (1st ed.). Jessica Kingsley Publishers.
- Poulou, M. S. (2015). Emotional and behavioural difficulties in preschool. *Journal of Child and Family Studies, 24*(2), 225–236.
- Raykov, T., & Marcoulides, G. A. (2006). *A first course in structural equation modeling* (2nd ed.). Lawrence Erlbaum Associates.
- Richaud, M. C. (2013). Children's perception of parental empathy as a precursor of children's empathy in middle and late childhood. *The Journal of Psychology Interdisciplinary and Applied, 147*(6), 563–576.
- Schneider, M., Falkenberg, L., & Berger, P. (2022). Parent-child play and the emergence of externalizing and internalizing behavior problems in childhood: A systematic review. *Frontiers in Psychology, 13*, 822394. <https://doi.org/10.3389/fpsyg.2022.822394>
- Senemoglu, N., & Subası-Kurc, G. (2005). *Eğitim psikolojisi [Educational psychology]*. B Press.
- Sirin Kaya, S., & Ozyurek, A. (2022). Bahçede uygulanan okul öncesi eğitimin çocukların problem davranışlarına ve sosyal becerilerine etkisi [The effect of preschool education implemented in the garden on children's problem behaviors and social skills]. *Manas Journal of Social Research, 11*(1), 128–142. <https://doi.org/10.33206/mjss.896591>
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (5th ed.). Allyn and Bacon.
- Tarkocin, S., & Tuzcuoglu, N. (2014). Okul öncesi eğitim kurumuna devam eden 48–66 aylık çocukları olan ebeveynlerin çocuklarıyla iletişim kurma düzeyleri ve davranış sorunları arasındaki ilişkinin bazı değişkenler açısından incelenmesi [Examining the relationship between the communication levels of parents with 48–66 month old children attending a preschool education institution and their behavioral problems in terms of some variables]. *Journal of Academic Social Research, 8*(2), 339–354.
- Taylor, Z. E., Eisenberg, N., Spinrad, T. L., Eggum, N. D., & Sulik, M. J. (2013). The relations of ego-resiliency and emotion socialization to the development of empathy and prosocial behavior across early childhood. *Emotion, 13*, 822–831.
- Tekin, H., & Temiz, G. (2023). Anne çocuk iletişimde dinleme engelleri: 60–72 ay cocugu olan annelerin gorusleri [Listening barriers in mother-child communication: 60–72 month old children mothers' views]. *Nevsehir Hacı Bektaş Veli University SBE Journal, 13*(3), 1561–1577. <https://doi.org/10.30783/nevsosbilen.1276729>
- Tollossa, R. M., & Nelson, J. A. (2021). “Because I said so!”: Mothers' conventional conflict justifications related to resolution and child behavior problems and temperamental reactivity. *International Journal of Behavioral Development, 45*(3), 250–255. <https://doi.org/10.1177/0165025421995925>
- Topcu Bilir, T., & Sop, A. (2016). Okul öncesi dönemindeki çocukların aile ilişkileri ile çocuklarda görülen davranış problemleri arasındaki ilişkinin incelenmesi [Examining the relationship between family relationships of preschool children and behavioral problems seen in children]. *MEHmet Akif Ersoy University Journal of Faculty of Education, 40*, 20–43.
- Trentacosta, C. J., & Fine, S. E. (2010). Emotion knowledge, social competence, and behavior problems in childhood and adolescence: A meta-analytic review. *Social Development, 19*(1), 1–29.
- Ural, O., & Ramazan, O. (2007). Türkiye'de okul öncesi eğitiminin durumu bugünü. Türkiye'de okul öncesi eğitim ve ilköğretim sistemi: Temel sorunlar ve çözüm önerileri [Past and present of preschool education in Turkey. Preschool education and primary education system in Turkey: Basic problems and solution suggestions]. TED Press.
- Ural, O., Guven, G., Sezer, T., Efe Azkeskin, K., & Yılmaz, E. (2015). Okul öncesi dönemdeki çocukların bağlanma biçimleri ile sosyal yetkinlik ve duyguların düzenleme becerileri arasındaki ilişkinin incelenmesi [Examining the relationship between preschool children's attachment styles and social competence and emotion regulation skills]. *Hacettepe University Journal of Faculty of Health Science, 1*(2), 589–598.
- Vasileva, M., Graf, R. K., Reinelt, T., Petermann, U., & Petermann, F. (2020). Research review: A meta-analysis of the international prevalence and comorbidity of mental disorders in children between 1 and 7 years. *Journal of Child Psychology and Psychiatry, 62*(4), 372–381. <https://doi.org/10.1111/jcpp.13261>
- Weist, M. D., Eber, L., Horner, R., Splet, J., Putnam, R., Barrett, S., Perales, K., Fairchild, A. J., & Hoover, S. (2018). Improving multitiered systems of support for students with “internalizing” emotional / behavioral problems. *Journal of Positive Behavior Interventions, 20*(3), 172–184. <https://doi.org/10.1177/1098300717753832>
- Werner, N. E., Eaton, A. D., Lyle, K., Tseng, H., & Holst, B. (2014). Maternal social coaching quality interrupts the development of relational aggression during early childhood. *Social Development, 23*(3), 470–486. <https://doi.org/10.1111/sode.12048>
- Yaralı, K. T., & Özkan, H. K. (2016). Çocukların (60–72 aylık) sosyal problem çözme becerileri ile sosyal yetkinlik ve davranış durumları arasındaki ilişkinin incelenmesi [Examining the relationship between children's (60–72 months old) social problem solving skills and their social competence and behavioral status]. *Journal of Turkish Social Research, 20*(2), 345–361.
- Yavuzer, H. (2013). *Ana-baba-cocuk [Mother-father-child]* (24th ed.). Remzi Press.
- Zapf, H., Boettcher, J., Haukeland, Y., Orm, S., Coslar, S., Wiegand-Grefe, S., & Fjermestad, K. (2023). A systematic review of parent-child communication measures: Instruments and their psychometric properties. *Clinical Child and Family Psychology Review, 26*(1), 121–142. <https://doi.org/10.1007/s10567-022-00414-3>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.