



Emotional intelligence of 3- to 6-year-olds and parenting style: Peer communication ability as a mediator

Yanfeng Wang¹, Zhuo Li², Liqi Zhu³

¹College of Education Science, Hunan Normal University, and CAS Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, People's Republic of China

²College of Education Science, Hunan Normal University, People's Republic of China

³CAS Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, People's Republic of China

How to cite: Wang, Y., Li, Z., & Zhu, L. (2019). Emotional intelligence of 3- to 6-year-olds and parenting style: Peer communication ability as a mediator. *Social Behavior and Personality: An international journal*, 47(12), e8636

We examined the associations of parenting style and children's emotional intelligence with the children's peer communication ability, focusing especially on the mediating role of peer communication ability in the relationship between parenting style and children's emotional intelligence. We recruited 306 parents in the cities of Hangzhou, Changchun, and Lanzhou in China to participate in the study. Participants reported on their parenting style and the emotional intelligence and peer communication ability of their 3- to 6-year-old children. We used structural equation modeling to explore the mechanism of how parenting style influenced the emotional intelligence of the children. The results showed that (a) there were significant positive correlations between parenting style and the emotional intelligence and peer communication ability of their children, (b) parenting style had a significant influence on children's emotional intelligence, and (c) children's peer communication ability played a partial mediating role in the influence of parenting style on children's emotional intelligence.

Keywords

parenting style;
parent-child relationship;
young children; emotional
intelligence; peer
communication ability;
social relations

Literature Review

Emotional Intelligence and Its Value

The concept of emotional intelligence was proposed by Salovey and Mayer (1990) as one of the most important human thinking abilities, and has since become a prevalent topic for research. Saarni (1999) defined *emotional intelligence* as personal consciousness, understanding the emotions of oneself and others based on appropriate emotional expressions, that is, the ability to identify and understand one's own and other people's emotional states, and use this information to solve problems and regulate behaviors (Ciarrochi, Deane, & Anderson, 2002; Mayer, Caruso, & Salovey, 1999). As an adaptive emotional response, emotional intelligence can help one cope with challenges, achieve goals, and participate effectively in social interactions. According to Lu (2005), emotional intelligence is the ability of individuals to perceive, experience, express, evaluate, regulate, and control self-emotions, interpersonal emotions, and ecological emotions. In many aspects of life, high-level emotional intelligence has always been associated with positive outcomes. For example, it has been found that people with high-level emotional intelligence tend to have a positive health condition (Costa, Petrides, & Tillmann, 2014), use appropriate parenting methods

(Gugliandolo, Costa, Cuzzocrea, Larcan, & Petrides, 2015), achieve good academic performance (Nikooyeh, Zarani, & Fathabadi, 2017), and form strong social relationships (Lopes et al., 2004). Conversely, low-level emotional intelligence increases the risk of problems in children's relationships and learning (Nikooyeh et al., 2017; Petrides, Gómez, & Pérez-González, 2017). Therefore, emotional intelligence has a pivotal role in interpersonal communication and social relations.

Parenting Style and Emotional Intelligence

The most widespread model of the concept of *parenting style* currently cited by researchers is a combination of parents' communication with and attitude toward their children, and the emotional atmosphere conveyed by the parents' behaviors (Darling & Steinberg, 1993). A good parenting style will improve the development and quality of life of their children (Masud, 2016). Parents are children's first teachers and parenting style has a direct impact on their development. Parents may take a positive or negative approach to child-rearing: Positive parents take the initiative to care for and help their children and are willing to take responsibility for raising their children. Negative parents do not consider themselves as responsible for shaping their offspring's behavior and tend to yield uncritically to their child's demands or avoid responsibility for the child's development. Different styles of parenting are defined as follows:

Authoritative parenting style: parents are full of love and warmth for their children, and encourage them to have their own opinions but also give them some restrictions and constraints, and avoid taking them to extremes.

Authoritarian parenting style: parents emphasize control and unconditional obedience, are always closed to children for communication, and never explain the rationale of their orders or decisions (Barnett, Deng, Mills-Koonce, Willoughby, & Cox, 2008; Shelton & Harold, 2008). This parenting style usually results in children's lower emotional well-being, personality disorders, lower prosocial behavior, and cognitive anxiety (Knafo & Plomin, 2006).

Democratic parenting style: parents are more likely to help and encourage their children in the process of growing up or learning, and reasonably assume the responsibility of guardians so that children can gain knowledge and understand things from their parents' behavior and education.

Tolerant parenting style: parents are loving and affectionate but have few requirements and restrictions; they allow their children to do whatever they want.

The difference between an authoritarian and an authoritative style is that an authoritative parent exerts firm control but in a supportive manner, by enhancing verbal interaction, whereas authoritarian parents exert control but discourage verbal interaction (e.g., "give and take") and value obedience. Researchers have shown that an authoritarian parenting style is significantly correlated with negative emotional intelligence in young children (Argyriou, Bakoyannis, & Tantaros, 2016; Gugliandolo et al., 2015). Moreover, it has been found that a positive parenting style can promote college students' emotional intelligence, whereas a negative parenting style is not conducive to their emotional intelligence (Wu, Gao, Shi, Kang, & Zhao, 2009). In the field of early childhood research, Yu (2016) found a significant correlation between parenting style and children's emotional intelligence, noting that different parenting styles give rise to different levels of emotional intelligence. Altay and Gure (2012) found that children whose parents use an authoritative parenting style show more negative peer interactions (e.g., hostile behaviors) than do children whose parents use a tolerant parenting style. Han (2015) suggested that when parents engage in bringing up their children using an understanding and democratic style, they will give their children full emotional warmth, understanding, and encouragement, which makes it easy for the children to form prosocial behaviors, so that they will have a high social status in peer interaction, be more popular with their peers because can communicate well, have good leadership and organizational skills, and be able to consider problems from the standpoint of others.

Peer Communication and Emotional Intelligence

Peer communication ability refers to the sum total of an individual's ability to feel, adapt, coordinate, and address peer relationships in the process of communicating with others (Jaccard, Blanton, & Dodge, 2005). Young children's peer communication ability is related to their popularity, peer influence, and peer communication sensitivity (Howes, 1987). Researchers have shown that young children's peer communication ability can predict their self-confidence (Park & Ahn, 2015). Good peer interaction has a positive effect on young children's abilities for self-regulation and leadership (Park & Ahn, 2015). In China, children aged between 3 and 6 years leave their parents and attend kindergarten, which is their first small social environment outside the family circle. There, young children often communicate and cooperate with their peers; therefore, peer communication ability is essential for young children to address interpersonal relationships at kindergarten. Eisenberg et al. (2003) found that children's ability to understand other people's emotions accurately is positively correlated with their ability to interact with their peers. Some scholars believe that *emotional comprehension*, which enables children to identify and better understand others' expressions, plays an important role in children's peer acceptance levels and provides a good basis for children to communicate with their peers (Alegre, 2011; Tani, Pascuzzi, & Raffagnino, 2018).

Hypotheses

Researchers have found that parenting style and children's peer communication ability have an effect on children's emotional intelligence, which is in line with the conditions for a mediating variable (Masud, Thurasamy, & Ahmad, 2015; Stright & Yeo, 2014). Therefore, we speculated that children's peer communication ability would play a mediating role in the influence of parenting style on the emotional intelligence of 3- to 6-year-old children. We took the parents of 3- to 6-year-old children as our object, parenting style as the independent variable, children's emotional intelligence as the subject variable, and children's peer communication ability as the mediating variable to determine the function of the mechanism of how parenting style influences the emotional intelligence of 3- to 6-year-old children. On the basis of the above arguments, we formed the following hypotheses:

Hypothesis 1: Parenting style will be positively related to the peer communication ability of 3- to 6-year-old children.

Hypothesis 2: Peer communication ability will be positively related to emotional intelligence of 3- to 6-year-old children.

Hypothesis 3: Peer communication ability will play a mediating role in the influence of parenting style on the emotional intelligence of children.

The research model is shown in Figure 1.

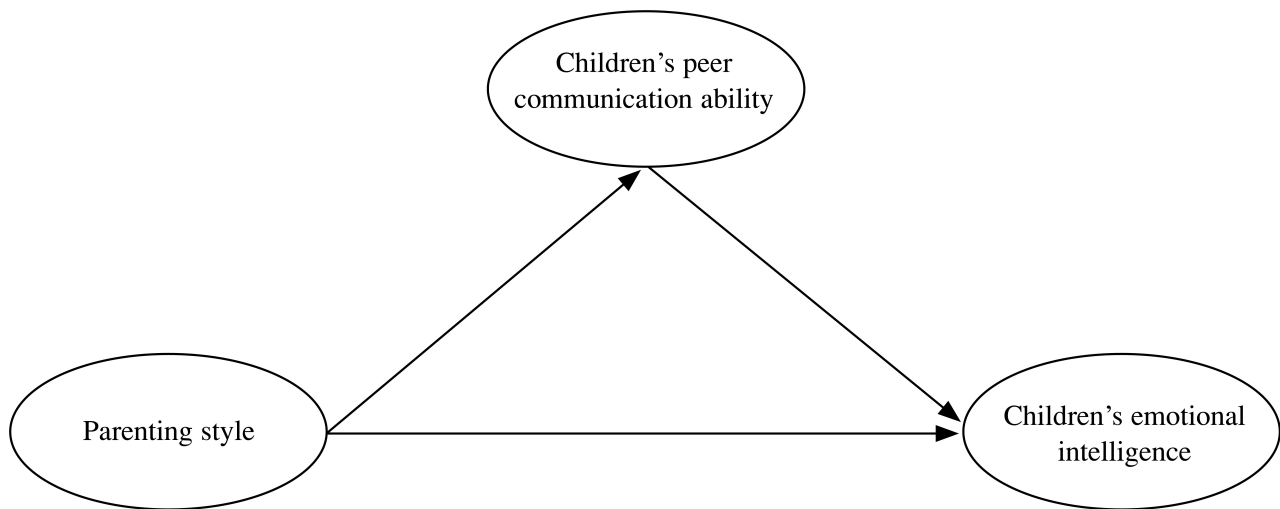


Figure 1. The relationships between parenting style and children's emotional intelligence and peer communication ability.

Method

Participants and Procedure

We recruited 374 parents of children who attended a kindergarten in the cities of Hangzhou, Changchun, and Lanzhou in China. We received 306 valid responses from 53 fathers and 253 mothers (response rate = 82%). There were 139 (45.42%) girls and 167 (54.58%) boys; 228 children belonged to one-child families (74.51%) and 78 children had siblings (25.49%); 99 children were aged from 3 to 4 years (32.35%), 90 children were aged from 4 to 5 years (29.41%), and 117 were aged from 5 to 6 years (38.24%).

The study protocol was approved by the institutional review board of Hunan Normal University. All participants knew that they had individual rights to decide whether to join this survey. Initially, we distributed a consent form to each parent and if they agreed to participate, they received a gift (e.g., toys, doll, car) worth about US\$5.00. A self-report paper-and-pencil survey was used in this study. Prior to completing the survey, participants read an explanation of the research purpose, instructions on how to fill in the form, and the anonymity and confidentiality principle of the research. There was no evidence that participants had any difficulties in understanding the procedure or the scale items.

Measures

Emotional intelligence. We measured emotional intelligence with a 25-item scale (e.g., "If your child makes a mistake, they are ready to accept criticism and try to correct the mistake"), which was developed by Li (2012). It consists of four subscales: regulate and control one's own emotions, regulate and control others' emotions, express and evaluate one's own emotions, express and evaluate others' emotions. Items are rated on a 6-point Likert scale ranging from 1 (*never*) to 6 (*always*). In this study, the Cronbach's alpha of the regulate and control one's own emotions, regulate and control others' emotions, express and evaluate one's own emotions, express and evaluate others' emotions subscales were .69, .79, .78, and .82, respectively, and the alpha of the total scale was .91.

Parenting style. We measured parenting style with a 40-item scale (e.g., "Don't care what the child is doing"), which was developed by Yang and Yang (1998). It consists of four subscales: doting type, democratic type, authoritarian type, and inconsistent type. Items are rated on a 5-point Likert scale ranging

from 1 (*never*) to 5 (*always*). In this study the Cronbach's alpha of the doting type, democratic type, authoritarian type, and inconsistent type subscales were .63, .78, .75, and .60, respectively, and the alpha of the total scale was .89.

Peer communication ability. We measured peer communication ability with a 24-item scale (e.g., "Your child can take the initiative to introduce him/herself to new partners"), which was developed by Zhang (2002). It consists of four subscales: social initiative, language and nonlanguage communication skills, social barriers, and prosocial behavior. Items are rated on a 4-point Likert scale ranging from 1 (*full compliance*) to 4 (*full noncompliance*). In this study the Cronbach's alpha of the social initiative, language and nonlanguage communication skills, social barriers, and prosocial behavior subscales were .67, .89, .81, and .73, respectively, and the alpha of the total scale was .88.

Results

Control of Common Method Biases

The use of three combined self-report scales may result in common method bias in the data. To control for common method bias, two methods are usually used: program control and statistical control (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In terms of program control, the following measures were taken in this study: (a) all scales were filled in by anonymous means; (b) each scale showed high reliability and errors in measurement were reduced or avoided as much as possible; and (c) the children were at different kindergartens in three different cities of China, geographically increasing the difference between the tested areas. In terms of statistical control, we used Harman's single-factor model method to test the degree of biases of the common method of data collection. The eigenvalues of eight factors were greater than 1 in the absence of rotation and the variance explained by the first factor was 26.41%, which is less than the critical criterion of 40%. This finding indicates that common method bias was not an obvious problem in this study.

Correlation Analysis

We ran a multicollinearity test on the study variables to examine if the independent variables were highly correlated with one another in predicting the dependent variable (Allen, 1997). The results show that variance inflation factors and tolerance values accorded with standard criteria, indicating there was no multicollinearity issue for our focal variables (Hair, Anderson, Tatham, & Black, 1995).

Table 1. *The Results of Correlation Analysis*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
v1	2.61	3.63	1											
v2	3.23	5.85	.54**	1										
v3	3.18	5.26	.49**	.77**	1									
v4	2.49	3.22	.52**	.50**	.47**	1								
v5	3.09	3.66	.27**	.53**	.54**	.19**	1							
v6	3.22	4.74	.22**	.45**	.46**	.11*	.56**	1						
v7	3.62	2.59	.36**	.64**	.64**	.26**	.65**	.60**	1					
v8	3.49	2.88	.29**	.56**	.56**	.19**	.64**	.70**	.69**	1				
v9	2.52	2.97	.18**	.41**	.41**	.20**	.52**	.48**	.49**	.51**	1			
v10	3.01	3.76	.25**	.57**	.58**	.22**	.56**	.53**	.66**	.60**	.62**	1		
v11	3.22	2.90	-.13*	-.02	.02	-.21**	.17**	.16**	.21**	.27**	.07	.14*	1	
v12	2.75	3.00	.27**	.54**	.55**	.24**	.50**	.49**	.59**	.63**	.63**	.79**	.06	1

Note. v1 = dotting type, v2 = democratic type, v3 = authoritarian type, v4 = inconsistent type, v5 = regulate and control one’s own emotions, v6 = regulate and control others’ emotions, v7 = express and evaluate one’s own emotions, v8 = express and evaluate other’ emotions, v9 = social initiative, v10 = language and nonlanguage communication skills, v11 = social barriers, v12 = prosocial behavior.

* $p < .05$, ** $p < .01$.

Structural Equation Modeling Analysis

We used the intermediate analysis program based on structural equation modeling, proposed by Wen and Ye (2014), to test the mediating effect of peer communication ability. First, we tested the direct effect of parental rearing style on the emotional intelligence of children aged 3 to 6 years. The path coefficient was significant, $\gamma = .76, p < .01$, and the model fit was good (see Model 1, Table 2). Peer communication ability (mediator variable) was then added to the model to test its role. The results (Model 2) show that parental rearing style had a significant influence on the peer communication ability of children aged 3 to 6 years, $\gamma = .65, p < .01$. The influence of peer communication ability on the emotional intelligence of 3- to -6-year-olds was significant, $\gamma = .86, p < .01$, and the model fit was good (see Table 2). Therefore, Hypotheses 1, 2, and 3 were supported (see Table 2 and Figure 2).

Table 2. *Comparison of Model 1 and Model 2*

Model	χ^2	χ^2/df	RMSEA	NFI	GFI	IFI	CFI
Model 1	87.74	4.62	.11	.94	.93	.95	.95
Model 2	198.04	3.88	.10	.91	.90	.93	.93

Note. RMSEA = root mean square error of approximation, NFI = normed fit index, GFI = goodness- of-fit index, IFI = incremental fit index, CFI = comparative fit index.

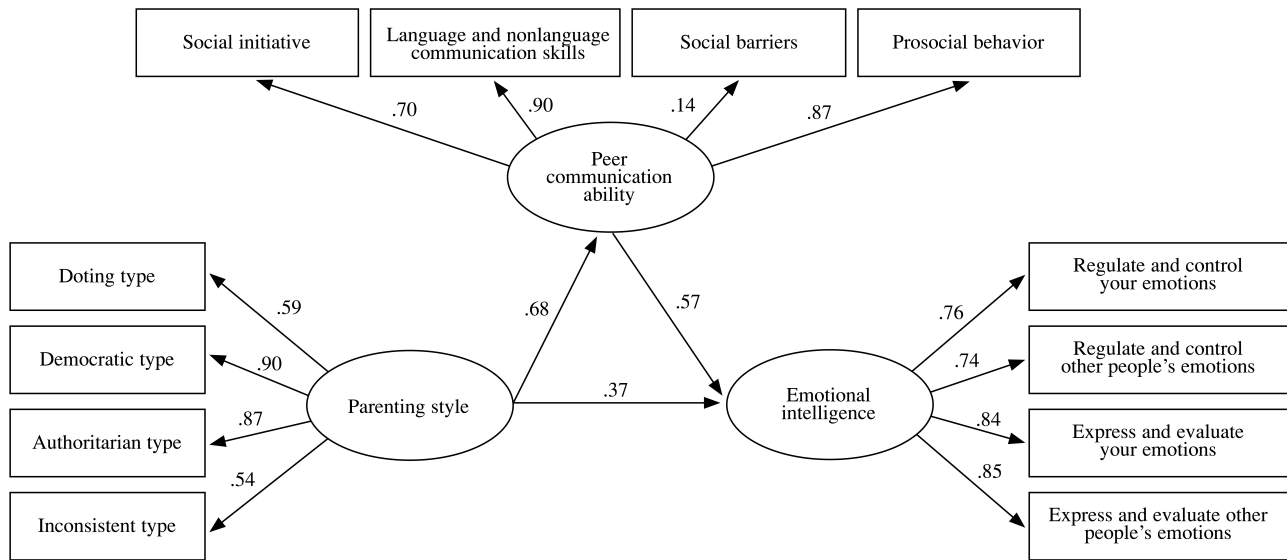


Figure 2. Structural equation modeling results for Model 2.

The data in Table 2 shows that the fit index in Model 2 was largely in line with the standard; therefore, we further analyzed Model 2. The effect analysis of Model 2 was performed using bias-corrected bootstrapping and all path coefficients reached statistical significance ($p < .001$). Thus, the children's peer communication ability played a part in mediating the influence of parental rearing style on the emotional intelligence of children aged 3 to 6 years (see Figure 2).

Impact Effects Analysis

As the distribution of mediating effect estimates is usually not normally distributed, bias-corrected bootstrapping is used to test the significance of the mediating effect. We set 2,000 bootstrapping resamples in Amos 21.0. If the 95% confidence interval (CI) of the bootstrapping analysis does not contain zero, the parameter estimates reaches significance (Hayes & Preacher, 2010; Preacher & Hayes, 2008). In Model 2, the mediating effect of peer communication ability was $.68 \times .57 = .38$, 95% CI [.23, .60], which does not include zero (see Table 3 for details). Therefore, Hypotheses 1, 2, and 3 were supported.

Table 3. Results of Impact Effects

Affecting path	Affecting size	95% Confidence interval	
		Lower limit	Upper limit
PS → EI	.37	.21	.56
PS → PCA → EI	.40	.23	.60
Total effect	$.37 + .40 = .77$.63	.94

Note. PS = parenting style, EI = emotional intelligence, PCA = peer communication ability.

Discussion

In this study we found a significant positive correlation between parenting style and the emotional intelligence of children. We further found that there were significant positive correlations between the four factors of parenting style and the four factors of children's emotional intelligence, among which the effect of democratic parenting style was more significant than those of the doting, authoritarian, or inconsistent types (Acar, Uçuş, & Yildiz, 2019). Researchers have shown that use of a democratic parenting style can promote the development of emotional intelligence in their children, and these children often have a high motivation for achievement (Jaccard et al., 2005; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Lee, Daniels, & Kissinger, 2006). Among the four forms of upbringing that we tested, the correlation between a doting parenting style and children's emotional intelligence was much lower than that for the other three parenting styles. Therefore, parents can directly improve the emotional intelligence level of young children by adopting a democratic way of upbringing, respecting their children, speaking with children on an equal footing, taking educational opportunities in their daily life, improving children's ability to reasonably regulate their own and others' emotions, and expressing their own emotions respectfully and appropriately. Use of a democratic parenting style will allow young children to grow up in a healthy family atmosphere and improve their emotional intelligence level, such that they may participate more actively in their social life. Such an environment has been found to foster children's developing sense of autonomy and afford the individual opportunities to develop mastery, self-competence, self-reliance, and self-confidence in both social and academic domains (Chong & Chan, 2002).

In this study we found that there was a significant correlation between the level of children's emotional intelligence and their peer communication ability, which also illustrates that the stronger is the children's peer communication ability, the higher will be their emotional intelligence. Scholars have shown that high school students who get along well with their peers can more accurately identify the emotions of others, and can more effectively control their own emotions (Cassidy, Werner, Rourke, Zubernis, & Balaraman, 2003; Eisenberg et al., 2003). In China, children aged between 3 to 6 years, most of whom attend kindergarten, have many opportunities to interact with their peers, and their ability to do so increases with age. In the process of communicating with people, young children can master some communication skills from playmates who cooperate with them, because their daily upbringing has an imperceptible impact on young children. In addition, to get along better with their peers, children revise their incorrect communication strategies (e.g., being self-centered and not sharing), so they can gain appropriate experiences and skills. Therefore, the stronger is the peer communication ability of young children, the higher is their emotional intelligence level. Our findings in this study show that children's peer communication ability plays a partial mediating role in the influence of parenting style on children's emotional intelligence. In peer interaction, young children who can handle peer conflict and master communication skills will increase the number of their playmates and will be more willing to integrate into collective activities. Such children are also able to express their emotions, and often say things that surprise and impress parents and teachers, thus making others more willing to be close to them.

Some scholars have studied the influence of parenting style on the emotional intelligence of children, and others have discussed the relationship between children's peer communication and emotional intelligence. However, few have explored the influence of parenting style on the emotional intelligence of children aged between 3 and 6 years, with consideration given to peer communication as a mediating variable. We investigated in depth the influence of parenting style on the emotional intelligence of children aged 3 to 6 years, and constructed a model of parenting style, emotional intelligence, and peer communication ability. This model enriches research on the mechanism by which parenting style affects the emotional intelligence of children, and has important significance for practical usage, that is, through advising parents to adopt an authoritative or democratic upbringing style and cultivate their children's peer communication ability, which can indirectly promote the development of children's emotional intelligence through respecting children's individual differences and personality (Acar et al., 2019).

However, there are some limitations in our study. First, in terms of research design, we used self-report

measures to examine the relationships between parenting style and the emotional intelligence and peer communication ability of children. However, self-report measurements may over- or underestimate true physical activity, and have the potential for response bias (Prince et al., 2008; Shephard, 2003). In future studies, researchers could objectively measure parents' physical activity with heart rate monitors, accelerometers, and pedometers, which could help to reduce measurement errors by making the results more objective (Barnett, van der Pols, & Dobson, 2005). Second, all our data were cross-sectional and correlational, so the information revealed is not comprehensive and hinders our ability to firmly establish the mediating processes. Future researchers should use longitudinal research to obtain a more accurate measure of the development and change process of parenting style, and children's emotional intelligence and peer communication ability. There is also the limitation that only the parent's opinion on the child's emotional intelligence and peer communication ability were tested. Teachers could be another source of information, or the children themselves could be directly tested.

In this study we explored the influence of parenting styles on the emotional intelligence of children aged 3 to 6 years using structural equation modeling and drew the following conclusions: (a) children's emotional intelligence can be improved by adopting authoritative or democratic parenting styles; (b) teachers and parents can promote children's emotional intelligence by cultivating children's peer communication ability; and (c) the emotional intelligence of children aged 3 to 6 years can be improved not only through the parenting style, but also through improving their peer communication ability.

References

- Acar, I. H., Uçuş, S., & Yildiz, S. (2019). Parenting and Turkish children's behaviour problems: The moderating role of qualities of parent-child relationship. *Early Child Development and Care*, 189, 1072–1085. <https://doi.org/10.1080/03004430.2017.1365362>
- Alegre, A. (2011). Parenting styles and children's emotional intelligence: What do we know? *The Family Journal*, 19, 56–62. <https://doi.org/10.1177/1066480710387486>
- Allen, M. P. (1997). *Understanding regression analysis*. New York, NY: Plenum Press.
- Altay, F. B., & Gure, A. (2012). Relationship among the parenting styles and the social competence and prosocial behaviors of the children who are attending to state and private preschools. *Educational Sciences Theory & Practice*, 12, 2712–2718. Retrieved from <https://bit.ly/2oRQBkD>
- Argyriou, E., Bakoyannis, G., & Tantaros, S. (2016). Parenting styles and trait emotional intelligence in adolescence. *Scandinavian Journal of Psychology*, 57, 42–49. <https://doi.org/10.1111/sjop.12266>
- Barnett, A. G., van der Pols, J. C., & Dobson, A. J. (2005). Regression to the mean: What it is and how to deal with it. *International Journal of Epidemiology*, 34, 215–220. <https://doi.org/10.1093/ije/dyh299>
- Barnett, M. A., Deng, M., Mills-Koonce, W. R., Willoughby, M., & Cox, M. (2008). Interdependence of parenting of mothers and fathers of infants. *Journal of Family Psychology*, 22, 561–573. <https://doi.org/10.1037/0893-3200.22.3.561>
- Cassidy, K. W., Werner, R. S., Rourke, M., Zubernis, L. S., & Balaraman, G. (2003). The relationship between psychological understanding and positive social behaviors. *Social Development*, 12, 198–221. <https://doi.org/10.1111/1467-9507.00229>
- Chong, W. H., & Chan, C. S. Y. (2002). The mediating role of self-talk between parenting styles and emotional intelligence: An Asian perspective with Singaporean adolescents. *International Perspectives in Psychology: Research, Practice, Consultation*, 4, 195–208. <https://doi.org/10.1037/ipp0000034>
- Ciarrochi, J., Deane, F. P., & Anderson, S. (2002). Emotional intelligence moderates the relationship between stress and mental health. *Personality and Individual Differences*, 32, 197–209. [https://doi.org/10.1016/S0191-8869\(01\)00012-5](https://doi.org/10.1016/S0191-8869(01)00012-5)

- Costa, S., Petrides, K. V., & Tillmann, T. (2014). Trait emotional intelligence and inflammatory diseases. *Psychology, Health & Medicine, 19*, 180–189. <https://doi.org/10.1080/13548506.2013.802356>
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*, 487–496. <https://doi.org/10.1037/0033-2909.113.3.487>
- Eisenberg, N., Valiente, C., Morris, A. S., Fabes, R. A., Cumberland, A., Reiser, M., ... Losoya, S. (2003). Longitudinal relations among parental emotional expressivity, children's regulation, and quality of socioemotional functioning. *Developmental Psychology, 39*, 3–19. <https://doi.org/10.1037/0012-1649.39.1.3>
- Gardner, F. E. M. (1989). Inconsistent parenting: Is there evidence for a link with children's conduct problems? *Journal of Abnormal Child Psychology, 17*, 223–233. <https://doi.org/10.1007/BF00913796>
- Gugliandolo, M. C., Costa, S., Cuzzocrea, F., Larcán, R., & Petrides, K. V. (2015). Trait emotional intelligence and behavioral problems among adolescents: A cross-informant design. *Personality and Individual Differences, 74*, 16–21. <https://doi.org/10.1016/j.paid.2014.09.032>
- Hair, J. F., Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis* (3rd ed.). New York, NY: Macmillan.
- Han, Y. L. (2015). *Study on the relationship between parenting style and children's popularity in peer interaction* [In Chinese]. (Unpublished master's thesis). Central China Normal University Learning, Wuhan, China. Retrieved from <https://bit.ly/34dZ8oq>
- Hayes, A. F., & Preacher, K. J. (2010). Quantifying and testing indirect effects in simple mediation models when the constituent paths are nonlinear. *Multivariate Behavioral Research, 45*, 627–660. <https://doi.org/10.1080/00273171.2010.498290>
- Howes, C. (1987). Social competence with peers in young children: Developmental sequences. *Developmental Review, 7*, 252–272. [https://doi.org/10.1016/0273-2297\(87\)90014-1](https://doi.org/10.1016/0273-2297(87)90014-1)
- Jaccard, J., Blanton, H., & Dodge, T. (2005). Peer influences on risk behavior: An analysis of the effects of a close friend. *Developmental Psychology, 41*, 135–147. <https://doi.org/10.1037/0012-1649.41.1.135>
- Knafo, A., & Plomin, R. (2006). Parental discipline and affection and children's prosocial behavior: Genetic and environmental links. *Journal of Personality and Social Psychology, 90*, 147–164. <https://dx.doi.org/10.1037/0022-3514.90.1.147>
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 62*, 1049–1065. <https://doi.org/10.2307/1131151>
- Lee, S. M., Daniels, M. H., & Kissinger, D. B. (2006). Parental influences on adolescent adjustment: Parenting styles versus parenting practices. *The Family Journal, 14*, 253–259. <https://doi.org/10.1177/1066480706287654>
- Li, R. R. (2012). *Exploring the emotional intelligence of children aged 3-7 years* [In Chinese]. (Unpublished master's thesis). Xinyang Normal University, Xinyang, China. Retrieved from <https://bit.ly/2ommH7I>
- Lopes, P. N., Brackett, M. A., Nezlek, J., Schütz, A., Sellin, I., & Salovey, P. (2004). Emotional intelligence and social interaction. *Personality and Social Psychology Bulletin, 30*, 1018–1034. <https://doi.org/10.1177/0146167204264762>
- Lu, J. M. (2005). Discussion of the basic conception of emotional intelligence [In Chinese]. *Journal of Psychological Science, 28*, 1246–1249. <https://doi.org/10.3969/j.issn.1671-6981.2005.05.060>
- Masud, H. (2016). Relationship between parenting styles and academic performance of adolescents:

Mediating role of self-efficacy. *Asia Pacific Education Review*, 17, 121–131.
<https://doi.org/10.1007/s12564-015-9413-6>

Masud, H., Thurasamy, R., & Ahmad, M. S. (2015). Parenting styles and academic achievement of young adolescents: A systematic literature review. *Quality & Quantity*, 49, 2411–2433.
<https://doi.org/10.1007/s11135-014-0120-x>

Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27, 267–298. [https://doi.org/10.1016/S0160-2896\(99\)00016-1](https://doi.org/10.1016/S0160-2896(99)00016-1)

Nikooyeh, E., Zarani, F., & Fathabadi, J. (2017). The mediating role of social skills and sensation seeking in the relationship between trait emotional intelligence and school adjustment in adolescents. *Journal of Adolescence*, 59, 45–50. <https://doi.org/10.1016/j.adolescence.2017.05.012>

Park, M. S., & Ahn, H. J. (2015). Relationship between peer interaction, self-regulation, and leadership in young children: An analysis of the mediating effect of self-regulation [In Korean]. *Korean Journal of Childcare and Education*, 11, 1–17. <https://doi.org/10.14698/jkcce.2015.11.4.001>

Patterson, G. R. (2002). The early development of coercive family process. In J. B. Reid, G. R. Patterson, & J. Snyder (Eds.), *Antisocial behavior in children and adolescents: A developmental analysis and model for intervention* (pp. 25–44). Washington, DC: American Psychological Association.
<https://dx.doi.org/10.1037/10468-002>

Petrides, K. V., Gómez, M. G., & Pérez-González, J. C. (2017). Pathways into psychopathology: Modeling the effects of trait emotional intelligence, mindfulness, and irrational beliefs in a clinical sample. *Clinical Psychology & Psychotherapy*, 24, 1130–1141. <https://doi.org/10.1002/cpp.2079>

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
<https://doi.org/10.3758/BRM.40.3.879>

Prince, S. A., Adamo, K. B., Hamel, M. E., Hardt, J., Connor Gorber, S., & Tremblay, M. (2008). A comparison of direct versus self-report measures for assessing physical activity in adults: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 5, 56.
<https://doi.org/10.1186/1479-5868-5-56>

Saarni, C. (1999). *The Guilford series on social and emotional development: The development of emotional competence*. New York, NY: Guilford Press.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9, 185–211. <https://doi.org/10.2190/DUGG-P24E-52WK-6CDG>

Shelton, K. H., & Harold, G. T. (2008). Interparental conflict, negative parenting, and children's adjustment: Bridging links between parents' depression and children's psychological distress. *Journal of Family Psychology*, 22, 712–724. <https://doi.org/10.1037/a0013515>

Shephard, R. J. (2003). Limits to the measurement of habitual physical activity by questionnaires. *British Journal of Sports Medicine*, 37, 197–206. <https://doi.org/10.1136/bjism.37.3.197>

Stright, A. D., & Yeo, K. I. (2014). Maternal parenting styles, school involvement, and children's school achievement and conduct in Singapore. *Journal of Educational Psychology*, 106, 301–314.
<https://doi.org/10.1037/a0033821>

Tani, F., Pascuzzi, D., & Raffagnino, R. (2018). The relationship between perceived parenting style and emotion regulation abilities in adulthood. *Journal of Adult Development*, 25, 1–12.

<https://doi.org/10.1007/s10804-017-9269-6>

Wen, Z. L., & Ye, B. J. (2014). Analysis of mediating effects: Development of methods and models [In Chinese]. *Advances in Psychological Science*, 22, 731–745.

<https://doi.org/10.3724/SP.J.1042.2014.00731>

Wu, B., Gao, J., Shi, K., Kang, T. J., & Zhao, J. L. (2009). Relationship between emotional intelligence and interpersonal skills of college students and parenting styles [In Chinese]. *China Education Innovation Herald*, 23, 228–229. <https://doi.org/10.3969/j.issn.1673-9795.2009.23.186>

Yang, L. Z., & Yang, C. Q. (1998). Infant temperament and the choice of mother's rearing style [In Chinese]. *Journal of Psychological Science*, 21, 43–46. <https://doi.org/10.7666/d.Y276696>

Yu, Y. (2016). *The relationship between parental rearing style, emotional intelligence and prosocial behavior of large children in Anshan* [In Chinese] (Unpublished master's thesis). Anshan Normal University, Anshan, China. Retrieved from <https://bit.ly/2qSNIAJ>

Zhang, Y. (2002). Development of a peer interaction ability scale for children aged 4-6 years [In Chinese]. *Journal of Jiangsu Institute of Education*, 25, 51–54. Retrieved from <https://bit.ly/36dU4uM>

Copyright of Social Behavior & Personality: an international journal is the property of Society for Personality Research and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.