

The Impact of Parenting Style on Preschoolers' Theory of Mind Development: A Cross-cultural Perspective

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ABSTRACT

Parenting styles usually divided into authoritative, authoritarian, and permissive parenting impact children's development. Previous studies showed a correlation between parenting styles and children's theory-of-mind understanding as a key social cognitive ability. What is more, parenting styles reveal a cultural difference. Combining with the cross-cultural perspective of East-West and collectivism and Individualism, western nations tend to be individualistic. In contrast, eastern nations are more likely to be collectivistic, and these different cultures influence parenting styles. With these impacts, children's theory-of-mind understanding in the east and west showed a diverse level of development. In the study, it was found that western children showed a superior understand of the theory of mind than those in the eastern. In addition, the sequence of children's acquisition of theory of mind varies in east and Anglo-West. Additionally, eastern children's mastery of executive function as a key factor relative to children's theory of mind within their parental parenting influence is diverse compared with those in western. Although present studies indicated a correlation between parenting and preschoolers' theory-of-mind development, there are three limitations and relevant future directions: a) the studies focus more on preschoolers' cross-sectional research but fewer on middle-aged children in longitudinal research to discuss whether parenting styles can predict their later development; b) parenting styles was seldom directly connected with theory-of-mind development to assess their relation, and also the measured approach of the theory of mind is more likely to be assessed with children's individual skill instead of general skills; c) parenting styles are evaluated with a unitary way adapted from Baumrind's theory that is incomprehensive and inflexible.

Keywords: Parenting Styles, Theory of Mind, Preschoolers, Cross-Culture.

1. INTRODUCTION

Parenting, including the communicative attitudes of parents on their children and the expression of emotional climate in these attitudes, is assumed to greatly influence their children's development due to children's high dependence on their parents in the early childhood stage [1]. In 1971, Baumrind divided parenting into three styles: authoritative, authoritarian, and permissive parenting [2]. Linking with these concepts, two components are accounting for parenting - parental demandingness and responsiveness [3]. Authoritative parenting can be explained in conjunction with responsiveness and demandingness. Authoritative parents give support to their children under a fair disciplinary and monitoring environment [4]. In contrast, authoritarian parenting involves a high level of demandingness but low responsiveness [5]. These styles of parents tend to set up high standards and guidelines

requiring their children to obey [4]. As for permissive parents reveal an over tolerance on responsiveness and demandingness with their children, giving their children a great extent of freedom and seldom restraining their behaviors [5]. Additionally, different parenting styles have diverse consequences for children's personal development. Previous studies showed that authoritative parenting style had a positive impact on children's development, such as easily leading to higher learning ability and lower aggression. In contrast, children's inappropriate problems such as conduct problems and high aggression were more likely to appear in an authoritarian home environment. Additionally, as an over-relaxing parenting style, permissive parenting was related to children's higher level of anxiety [5]. What is more, past studies also showed that parenting styles were related to children's theory of mind - one of the most important abilities of children's development, defined as a social cognitive ability inferring the mental states of

others such as beliefs, perceptions, intentions, desires, and emotions [6].

Studies on children's theory-of-mind development found that children's acquisition of ToM in their early stage was associated with children's social function and adaptational social level, having consequences for their social behaviors [7]. There are three types of theories explaining the development of children's theory of mind. One is theory theory (TT), and the type of theorists argue that our understanding of the mind is an informal, daily framework or fundamental theory rather than a formal theory within a scientific system, emphasizing that children's experience as an important formative role in the development of children's theory of mind [8]. On the contrary, the modularity theory (MT) assumed that the acquisition of the theory of mind on children was via the maturation of different modular mechanisms of their nervous system. It is inconsistent with the view of theory theory. That is, experience is not the decisive factor of these modular mechanisms, even though it is important [9]. Harris and others propose the third approach in 1992 called simulation theory (ST). It hypothesized that children could acquire theory-of-mind understanding via a role-taking or an imitation process [10]. Consistent with one of the views of modularity theory, simulation theory also underlines children's experience as a formative role in their ToM development – children improve their simulation ability in their imitatively practical experience, which is beneficial for developing their theory of mind.

In sum, theory theory, modularity theory, and simulation theory are three major theories accounting for developing the theory of mind. However, in the present research, the acquisition of theory-of-mind understanding was interpreted with the perspective of module and native and minimized the impact of environmental factors [11]. In addition, family as an environmental factor is overlooked in present studies as well, and little research has assessed this issue of parenting and children's ToM [12,13]. Whenas, parenting style was examined to be associated with the development of children's theory-of-mind understanding. Therefore, it is essential to understand the impact of parenting styles on children's theory of mind, which is lack-of-concern today. It is worth mentioning that different parenting styles were assumed to be one of the results of the cross-cultural differences [14]. Hence, to fill with the gap pf present studies about theory-of-mind development, in the review, the impact of parenting styles on children's ToM was evaluated from the perspective of intercultural differences.

2. THE IMPACT OF CULTURAL DIFFERENCES ON TOM-RELATED PARENTING OUTCOMES

It is almost certain that cultural differences in collectivism and individualism are the most well-studied cultural dimensions in psychology [15]. In a collectivistic culture, people are encouraged to evolve interdependent selves and consider themselves within a mutual connection with close others in important aspects, prioritizing a good relationship instead of their own particular goals [16]. In contrast, the individualistic culture encourages people to develop their independent self-awareness and consider themselves as comparatively different individuals ever from close others, developing their own goals and personalities [17]. What is more, combining with the other dimension oriented by East-West cultural distinctions in explaining cultural differences, collectivism tends to assert in eastern society. At the same time, individualism is more frequent in pronounce of western cultures [18]. Whereas, there are different parents' goals in diverse cultural contexts for their children, being the guidance for parental beliefs [19]. For example, children's socialization goals set by Western parents are more likely to be related to selflessness, tolerance, and respect, while East-Asian parents value determination, hard work, and perseverance [20]. Therefore, parenting styles may be related to diverse cultures - parents in collectivistic culture contexts such as eastern nations tend to use authoritarian parenting strategies. In contrast, parents in individualistic culture contexts such as western nations tend to be authoritative, indirectly influencing children's theory-of-mind development.

Based on the studies of the relation between parenting styles and cultural contexts, a question can be put forward: whether parenting styles influence children's theory-of-mind development under collectivism and individualism society or not. According to Rudy and Grusec, parent's endorsement of collectivism was a predictor of using an authoritarian parenting strategy. Their parenting aims, such as respecting authority and obedience, were more normative, influencing parenting effects and parental behaviors [21]. Similarly, in the study conducted by Li et al. in mainland China, collectivism socialization goals of Chinese mothers and their parenting styles were evaluated in a large sample of mother-child dyads. It was found that there was a positive correlation between Chinese maternal endorsement of collectivism socialization goals and their parenting styles of authoritarian and authoritative and behavioural control [22]. In addition, the research by Shahaeian et al. conducted in Iran showed semblable results [23]. In the research, Iranian mothers' disciplinary strategies were assessed in the sample of 40 Iranian children (Mage=60.5 months) and their mothers at different educational levels (Mage=32 years) from two kindergartens located in a

middle-class area. To measure Iranian mothers' disciplinary strategies, a parenting questionnaire was created by Shahaeian and his colleagues containing six disciplinary scenarios adapted from Ruffman et al. and coded it with three categories of answers: Discuss (describe and interpret the consequences of inappropriate behaviors with their children), Let Child Decide, How to Feel (let children think about other feelings with the scene), Silence (ignore children's misbehaviors), Boss (control, punish their children or decide for them), Social Norms and Parent Emotions [24]. Finally, the study results indicated that two disciplinary strategies -Silence and Social Norms were used only by Iranian mothers but were not used by western parents according to previous literature, which was likely due to the differential cultural reason. Besides, individual mothers in Iran had tendencies of being consisted in the disciplinary strategies in different disciplinary scenarios, and the Boss strategy, which was negatively related to children's theory of mind, was the most commonly used, while How to Feel which was positively related to children's theory of mind development was the least common. These results indicated that under the social background of collectivism in eastern societies such as Asia, parents tend to use authoritarian parenting strategies related to children's delayed development of the theory of mind.

On the contrary, it is also important to understand whether there is any difference in parenting styles under the cultural background of individualism that affects children's theory-of-mind development. Indeed, authoritative parenting encouraged the characteristics attached with importance in individualistic societies, such as self-assertion due to the promotion of autonomy as a significant aspect of authoritative parenting [25]. Additionally, previous studies showed that authoritative parenting was at high prevalence while authoritarian parenting was at low prevalence in individualistic areas and countries, especially western countries [26]. For example, Rudy and Grusec assessed parenting styles at cross-cultural perspective in the sample of two Canada-mother groups with different cultural background – 33 of them were of West-Europe cultural background and the remaining (n=26) were recent immigrants to Canada from India, Iran, and Pakistan, which are collectivistic countries according to Hofstede's classification in 2015 [27]. The result found that compared with mothers in western European cultural backgrounds, mothers from collectivistic countries preferred collectivistic parenting, particularly those from Egypt. Egyptian-Canadian mothers showed higher endorsement of collectivist parenting, tending to favor authoritarian parenting style. Moreover, the study by Chao suggested that compared with the White families, the authoritative parenting was less culturally correlative in Asian-American families [28]. Similarly, parenting styles and individualism were assessed in the sample of parents from several junior high schools in northeastern Texas, and the finding suggested

that individualism was significantly related to authoritative parenting styles [29]. Hence, authoritative parenting style may have a positive correlation with children's theory-of-mind development in individualistic cultural contexts – authoritative parents encourage children to express their opinions and be skeptical with diverse views of the world while negotiating familiar norms together, which is beneficial for developing children's own perspective and also understanding others' mental states.

Combining the view of the authoritative parenting style being more popular in the west under the individualistic cultural influence and eastern parent's preference of using authoritarian parenting style under the collectivistic cultural impact, it is worth discussing a cultural difference between eastern children's theory-of-mind development and western. Past research found that with a contrast with children in North American, theory of mind of children of matching ages in Hong Kong showed a delayed development, even though most of the children living in Hong Kong are under the situation of being bilingual and having siblings: two helpful factors on promoting children's theory of mind [30]. The puzzling problem drew the attention of Hughes and his colleagues. They conducted a study which was the first one linking the parental mind-mindedness (parental awareness and attention of their children's theory-of-mind) and preschoolers' theory of mind at the cross-cultural perspective, giving a new research point - the effect of a family factor in children's theory of mind in different cultures [31]. In their study, the cross-cultural differential impact of parental mind-mindedness on preschoolers' false belief was assessed in a large sample of parent-child dyads, including 120 preschoolers from the United Kingdom (Mage = 3.92 years) and 121 preschoolers from Hong Kong (Mage = 3.99 years). As for the result of the study, after controlling for children's verbal ability, it showed that preschoolers' false belief was significantly different in the cultural background of Hong Kong from the United Kingdom: children living in the U.K. showed better acquisition of theory of mind and U.K parents also presented a higher level of their mind-mindedness. What is more, both of the data collecting from Hong Kong and the U.K showed that there is a significant and similar association between parental mind-mindedness and preschoolers' ToM, and relative to the U.K., parents from Hong Kong were less likely to describe their children's attributes, especially psychological attributes in general. In sum, these outcomes of the finding both implied the importance of familiar environment on children's theory-of-mind development in different cultural backgrounds, that is, western children showed a better acquisition of theory of mind than those in eastern, and also western parents are more likely to pay attention to children's mental states, which was associated with superior development of children's ToM.

In addition to the diverse developmental level of children's theory of mind in east and west previous studies also suggested that there may be a cultural difference in the timing and sequence of children's theory-of-mind development in western and eastern nations. For example, in the study by Wellman et al., the different sequential orderings of children's theory-of-mind development in Anglo-Western nations and China were evaluated by using a ToM Scale consisting of five steps - (DD – Diverse Desire, DB – Diverse Beliefs, KA – Knowledge Access, FB – False Belief, HE – Hidden Emotion). It was found that the sequence of ToM on children living in Australia and America is DD > DB > KA > FB > HE, while Chinese children showed an ordering of DD > KA > DB > FB > HE, which also presented in others Asian nations such as Singapore and Iran [32]. To assess the developmental sequence of children's theory of mind, two differentially parental culture attitudes (individualism versus collectivism) and two parenting styles (authoritarianism versus authoritativeness), Kuntoro et al. conducted an unprecedented study in Indonesia in 48% sample living in Jakarta while 52% living in Bogor, including 122 children in the mean age of 64.8 months and their mothers [33]. The study showed that not only the lower level of development in children's theory of mind was significantly related to their parental endorsement of authoritarian parenting but also the sequencing development of ToM: Jakarta children presented the same ordering as those in China and Iran, while Bogor children presented the same as Anglo-Western children, likely because of the child's ethnicity. Although the finding only focused on Indonesia, it provided a perspective of microcultural difference to discuss the impact of parenting style on preschooler's theory of mind. Therefore, the timing of children's theory-of-mind development varies in diverse cultures, either from the perspective of cross-cultures and microcultures. These results indicated a difference between east and west. Compared with their peers, Anglo-Western children are more likely to develop Diverse Beliefs first, while eastern children are more likely to develop Knowledge Access first.

3. CROSS-CULTURAL DIFFERENCES IN THE DEVELOPMENT OF TOM AND RELEVANT FACTORS

One of the key factors relevant to preschooler's theory-of-mind development is an executive functioning skill, which may be varying under the impact of different parenting goals in east and west, for example, eastern parents tend to more focus their children's socialization goals on hard work than those in western [20]. According to past studies, executive functioning, consisting of four aspects: working memory, inhibitory control, set-shifting, and resistance to interference, is suggested to be a skill of effortfully, consciously controlling the thoughts

and behaviors. That is, it monitors and commands cognitive function and following behavioral outcomes [34]. Moreover, the relationship between preschooler's executive functioning and theory of mind was well-established, which can be explained into several theoretical accounts such as expression account and emergence account [35]. As for expression account, it suggests that preschoolers' scores in executive requirements tasks could simply present the level of their theory-of-mind development. Alternatively, the view of emergence account states that EF skill is a significant condition of acquiring ToM understanding but could not display preschoolers' understanding of ToM with simple test-performances. In other words, both expression account and emergence account emphasize executive functioning as an important factor in preschoolers' acquisition of ToM. In addition, the results of previous research presented East-West cultural differences in the development of executive functioning. For example, in the study conducted by Wang et al., executive function across cultures was assessed in the sample of children from the U.K. and Hong Kong at the average age of 10.81 years old [36]. The finding suggested that children studying in Hong Kong local schools present superior EF skills but a lower understanding of the theory of mind than those in the matching age from the United Kingdom, which displayed a situation of double dissociation and challenges the perspective of expression account. In sum, these studies all implied a cultural impact on children's executive functioning gaining which is an important, relevant factor to the theory of mind, that is, eastern parents tend to pay more attention to their children's acquisition of executive functioning, which is one of the reasons of eastern children with superior EF skills, and it also implies an impact of parenting on not only children's theory-of-mind development but also their gaining of EF skills.

Additionally, cultural impacts on the acquisition of executive functioning may happen in middle childhood and at the preschool stage. An explanation of familiar factors from cultural psychologists is that Chinese children are expected to master the ability of inhibitory control before two years old. In contrast, American children do not expect that until their children's preschool years [37]. Besides, in the preschool setting, inhibitory control is more encouraged and valued in China relative to the United States. Chinese children are more likely to have opportunities to practice EF skills, which may be implied that the development of executive function in Chinese preschoolers is higher than those in America. What is more, a cross-cultural study by Sabbagh and his colleagues gave evidences to the assumption [38]. In the study, preschoolers' theory of mind and the development of executive function in China were evaluated in the sample of 109 Chinese preschoolers (M age= 4.02 years) comparing with 107 American children (M = 3.95 years). The result showed

that Chinese preschoolers performed significantly better on executive function tasks than those in American. Furthermore, the developmental trajectory of preschoolers' theory of mind in mainland China and the United States is similar, consistent with the outcomes of the previous study. Finally, even though preschoolers in China showed an advanced performance in executive-functioning tasks, there is no similar superiority on the tasks of theory of mind. Additionally, the relatively advanced children's theory of mind could be predicted by the advanced executive functioning in western culture but not in eastern cultures. Hence, these findings indicated that the acquisition of eastern children's executive functioning was superior to those in western and eastern parental goals. That was relative to their parental behaviors such as expecting children to gain inhibitory control are more likely to be one of the factors affecting children's EF skills gaining. Additionally, eastern parenting goals such as the expectation of children's gaining executive functioning may lead to a unilateral practice of EF skills, while with the influence of western parenting goals such as the expectation of children's theory-of-mind acquisition, western children are more likely to gain their EF skills via their social behaviors, which also indicates that parenting styles were related to the timing and sequence of their children's theory-of-mind development and acquisition of executive functioning.

4. LIMITATION AND FUTURE DIRECTION

Although past studies revealed the impacts of parenting style on preschoolers' theory-of-mind development, there were several limitations in nowadays studies. Firstly, major studies on theory-of-mind focus on children at the preschool stage using cross-sectional research and fewer follow-up middle childhood studies. Therefore, as for future research, it is significant to put forward on children in middle childhood using the longitudinal approach in order to test whether parenting can predict latter theory-of-mind development or not. Secondly, children's theory-of-mind was basically assessed by testing children's individual skills in labs but not in natural settings. Hence, the measure of children's theory of mind can link with their social skills and directly connect the theory-of-mind testing with parenting rather than taking it as a medium for the future direction. Finally, the measured dimension of parenting styles is simplex – three types of parenting styles (authoritative, authoritarian, and permissive parenting) adapting from Baumrind's theory [2]. Thus, more measurements of parenting styles can be used in the future in order to evaluate the impact of parenting styles on children's theory-of-mind development in a comprehensive approach.

5. CONCLUSION

In sum, parenting styles consisting of parental demandingness and parental responsiveness were related to children's theory-of-mind development, especially at their preschool stage. Combined with East-West and individualism-collectivism's cross-cultural perspective, eastern parents tend to use authoritarian parenting in collectivistic society, which was related to delayed development in children's theory-of-mind. In contrast, authoritative parenting is more likely to be used by western parents under the individualistic cultural background, which was correlated to a high level of development in the theory of mind in western children. Based on these findings, children living in the western showed a superior development of the theory of mind than those in the eastern in the matching ages. Additionally, relative to Anglo-Western children, eastern children (in particular in Asia) are more possibly to develop KA first rather than DB, and the timing and sequence of children's theory-of-mind development in eastern are more likely to be DD > KA > DB > FB > HE while Anglo-Western is DD > DB > KA > FB > HE. The better acquisition of executive functioning, which is a key factor associated with theory of mind, happened on eastern preschoolers compared with those in the west due to eastern parents' higher expectations of their children's gaining inhibitory control. Thus, these evidences showed a relation between parenting styles and preschoolers' theory of mind under diverse cultural backgrounds.

REFERENCES

- [1] Pinquart, M. (2017). Associations of parenting dimensions and styles with externalizing problems of children and adolescents: An updated meta-analysis. *Developmental Psychology*, 53, 873–932.
- [2] Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, 4(1), 1-103.
- [3] Fletcher, A. C., Walls, J. K., Cook, E. C., Madison, K. J., & Bridges, T. H. (2008). Parenting style as a moderator of associations between maternal disciplinary strategies and child well-being. *Journal of Family Issues*, 29, (12), 1724-1744.
- [4] Berg, B. (2011). *The Effects of Parenting Styles on a Preschool Aged Child's Social Emotional Development*. The Graduate School, University of Wisconsin-Stout.
- [5] Farzana B., Abid G.C., Erum A. A.& Bushra T. Contribution of Parenting Style in Life Domain of Children. *Journal Of Humanities And Social Science*, 12(2). 91-95.
- [6] Premack, D., & Woodruff, G. (1978). Does the chimpanzee have a theory of mind. *Behavioral and Brain Sciences*, 1, 515– 526.

- [7] Lalonde, C. E., & Chandler, M. J. (1995). False belief understanding goes to school: On the social-emotional consequences of coming early or late to a first theory of mind. *Cognition and Emotion*, 9, 167–185.
- [8] Gopnik, A., & Wellman, H. M. (1994). The “theory” theory. In L. A. Hirschfeld & S. A. Gelman (Eds.), *Mapping the mind: Domain specificity in cognition and culture* (pp. 257–293). Cambridge, UK: Cambridge University Press.
- [9] BARON-COHEN, S. (1995). *Mindblindness: An essay on autism and theory of mind*. Cambridge, MA: MIT Press.
- [10] HARRIS, P. L. (1992). From simulation to folk psychology: The case for development. *Mind and Language*, 7, 120–144.
- [11] Carruthers, P. (2013). Mindreading in infancy. *Mind & Language*, 28, 141–172.
- [12] Hughes, C., Devine, R. T., & Wang, Z. (2018). Does Parental Mind-Mindedness Account for Cross-Cultural Differences in Preschoolers’ Theory of Mind? *Child Development*, 89(4), 1296–1310. <https://doi.org/10.1111/cdev.12746>
- [13] Pears, K. C., & Moses, L. J., (2003). Demographics, Parenting, and Theory of Mind in Preschool Children. *Social Development* (Oxford, England), 12(1), 1–20. <https://doi.org/10.1111/1467-9507.00219>
- [14] Wellman, H. M., Fang, F., Liu, D., Zhu, L., & Liu, G. (2006). Scaling of theory-of-mind understandings in Chinese children. *Psychological Science*, 17, 1075-1081.
- [15] Cohen, A. B. (2009). Many forms of culture. *American Psychologist*, 64, 194-204.
- [16] Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review*, 98, 224-253.
- [17] Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- [18] Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind. Revised and Expanded* (3rd ed.). New York, Ny: McGraw-Hill.
- [19] Keller, H., Lamm, B., Abels, M., Yovsi, R., Borke, J., Jensen, H., Papaligoura, Z., Holub, C., Lo, W., Tomiyama, A. J., Su, Y., Wang, Y. & Chaudhary, N. (2006). Cultural models, socialization goals, and parenting ethnotheories: A multicultural analysis. *Journal of Cross-Cultural Psychology*, 37, 155–172.
- [20] Park, H., Coello, J. A. & Lau, A. S. (2014). Child Socialization Goals in East Asian versus Western Nations from 1989 to 2010: Evidence for Social Change in Parenting. *Parenting, Science and Practice*, 14(2), 69–91.
- [21] Rudy, D., & Grusec, J. (2001). Correlates of authoritarian parenting in individualist and collectivist cultures and implications for understanding the transmission of values. *Journal of Cross-Cultural Psychology*, 32, 202–212.
- [22] Li, C., Patterson, M. M. & Chen, J. (2019). Relations of Collectivism Socialization Goals and Training Beliefs to Chinese Parenting. *Journal of Cross-Cultural Psychology*, 50(3), 396-418.
- [23] Shahaiean, A., Nielsen, M., Peterson, C. C., & Slaughter, V. (2014). Iranian Mothers’ Disciplinary Strategies and Theory of Mind in Children. *Journal of Cross-Cultural Psychology*, 45(7), 1110–1123.
- [24] Ruffman, T., Perner, J., & Parkin, L. (1999). How parenting style affects false belief understanding. *Social Development*, 8, 395-411.
- [25] White, R. M., Liu, Y., Gonzales, N. A., Knight, G. P., & Tein, J.-Y. (2016). Neighborhood qualification of the association between parenting and problem behavior trajectories among Mexican-origin father– adolescent dyads. *Journal of Research on Adolescence*, 26, 927–946.
- [26] Su, C., & Hynie, M. (2011). Effects of life stress, social support, and cultural norms on parenting styles among Mainland Chinese, European Canadian, and Chinese Canadian immigrant mothers. *Journal of Cross- Cultural Psychology*, 42, 944 –962.
- [27] Rudy, D., & Grusec, J. (2006). Authoritarian parenting in individualist and collectivist groups. *Journal of Family Psychology*, 20, 68-78.
- [28] Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development*, 65, 1111–1119.
- [29] Oliveira, D. & Bomfim, T. L. (2015). *Are Associations Between Parenting Style and Academic Achievement Moderated by Ethnicity and Individualism-Collectivism?* ProQuest Dissertations Publishing.
- [30] O’Reilly, J., & Peterson, C. C. (2014). Theory of mind at home: Linking authoritative and authoritarian parenting styles to children’s social understanding. *Early Child Development and Care*, 184, 1934–1947.

- [31] Hughes, C., Devine, R. T., & Wang, Z. (2018). Does Parental Mind-Mindedness Account for Cross-Cultural Differences in Preschoolers' Theory of Mind? *Child Development*, 89(4), 1296–1310.
- [32] Wellman, H. M., & Liu, D. (2004). Scaling of theory-of-mind tasks. *Child Development*, 75, 523–541.
- [33] Baron-Cohen, S., Leslie, A. M., & Frith, U. (1985). Does the autistic child have a “theory of mind”? *Cognition*, 21, 37–46.
- [34] Zelazo, P. D., Carlson, S. M., & Kesek, A. (2008). Developmental cognitive neuroscience. In C. A. Nelson & M. Luciana (Eds.), *Handbook of developmental cognitive neuroscience* (2nd ed., pp. 553–574). Cambridge, MA: MIT Press.
- [35] Carlson, S. M., & Moses, L. J. (2001). Individual differences in inhibitory control and children's theory of mind. *Child Development*, 72, 1032–1053.
- [36] Wang, Z., Devine, R. T., Wong, K. K. & Hughes, C. (2016). Theory of mind and executive function during middle childhood across cultures. *Journal of Experimental Child Psychology*, 149, 6–22.
- [37] Mariko, F., Tobin, J. J., Wu, D. Y. H., & Davidson, D. H. (1991). Review of Preschool in Three Cultures: Japan, China, and the United States. *Journal of Japanese Studies*, 17(1), 244–249.
- [38] Sabbagh, M. A., Xu, F., Carlson, S. M., Moses, L. J., & Lee, K. (2006). The Development of Executive Functioning and Theory of Mind: A Comparison of Chinese and U.S. Preschoolers. *Psychological Science*, 17(1), 74–81.