

**Family Dynamics:  
Socioemotional development in autistic  
and neuro-typical siblings.**

**Helen Rosenbach  
University of Derby**



**UNIVERSITY OF  
DERBY**

# **Family Dynamics: Socioemotional development in autistic and neuro-typical siblings.**

**Helen Rosenbach – University of Derby**

---

Like all areas of human development, socio-emotional development is not predetermined, fixed, or linear (Osher et al., 2020 p. 23) but is instead, an ongoing, individual process constructed by reciprocal interactions between a child's biological, physical, and social contexts (Ibid). Whilst it is acknowledged that there are numerous demographic characteristics that influence development including, but not limited to, family structure, culture, and socioeconomic status (Repetti et al., 2015), it is widely agreed that early relationships shape a child's social and emotional behaviour and understanding (Hartup, 1989; Mulder, 2008; Nagaoka et al., 2015). These complex, transactional relationships within the microsystem (Perolli-Shehu, 2019) play a vital role in social and emotional development and, considering the family functions as a dynamic whole (Repetti et al., 2015), it is understandable that a special life situation such as disability (Jagla et al., 2017) can impact on these relationships. Although the whole family system (Green, 2013) faces challenges, the generally supportive and mutually beneficial (Kaplan et al., 1991) sibling relationship, can be particularly sensitive to the underlying pervasive impairments of autism spectrum disorder (Petlas et al., 2015). First experiences of sharing, companionship (Turnbull et al., 2006), cooperation and competition (Hartup, 1989) may not provide the same context for prosocial empathetic skills, social understanding, and emotional regulation (Repetti et al., 2015) and consequently, social and emotional development can be disrupted. Notwithstanding and for balance, it should be acknowledged that autism spectrum disorder (ASD) can positively influence nondisabled siblings, and the potential risk factor to their development (Macks and Reeve, 2007) does not mean it is predestined. Furthermore, the impact of caring for an autistic child and how this influences parents' ability to support socio-emotional adjustment requires due attention, and perhaps, in some cases, be considered the determining factor for social and emotional outcomes.

Although each microsystem provides opportunities for social and emotional learning (Osher et al., 2020), each person's developmental history will be unique (Osher et al., 2020), as it depends upon the quality of their early experiences and connectedness. Considering then, that all parts of the family system are influenced by each other (Lask, 2015), the impact ASD has on typically developing siblings (hereafter TD-Sibs) has been widely researched yet has resulted in inconsistent and mixed findings (Benson and Karlof, 2008; Mascha and Boucher, 2006; Meadan et al., 2010). It is acknowledged that ASD presents challenges and disrupts family functioning (Lucero, 2018) but, this does not automatically result in TD-Sibs who are emotionally illiterate and maladjusted. Undeniably, writers report a plethora of negative outcomes for TD-Sibs, including developmental differences in social communication and competence, lower levels of pro-social behaviour and withdrawal (Ferraioli and Harris, 2010; Green, 2013; Kaminsky and Dewey, 2001; Mascha and Boucher 2006). To understand these poorer outcomes, the differences between typical sibling relationships, and one where ASD is involved must be examined. Green (2013) postulated that during childhood, children rely heavily on siblings for a multitude of functions, including the development of theory of mind, socialisation skills and developing a sense of identity and niche within the family. The intense sibling relationship generally shares a world of play, helping to develop valuable social skills such as learning how to appreciate another person's perspective (Dunn, 2007), and to how to resolve conflict (Boyd and Bee, 2014; Sheehan, 2007). The limited verbal communication and social interaction (Meadan et al., 2010) of ASD can however, result in less opportunities for social learning, as siblings spend less time together (Knott et al., 1995), and their relationship is often characterised by less intimacy and nurturance (Kaminsky and Dewey 2001). The atypical behaviour of ASD can be difficult for a TD-Sib to interpret (Ferraioli and Harris, 2010), with rejected or ignored social advances limiting social reinforcement, potentially leading to feelings of fear or frustration (Ibid). Compounded by their sibling's 'mind blindness' (Baron-Cohen, 1995 p.2) the lack of quality interaction during early childhood may contribute to TD-Sibs poor social skills, understanding (Ben-Itzhak et al., 2019) and antisocial behaviour (Green, 2013).

## **Family Dynamics: Socioemotional development in autistic and neuro-typical siblings.**

**Helen Rosenbach – University of Derby**

---

Consequently, their limited ability to accept and understand their peers (Slaughter et al., 2002), precipitates further exclusion from positive interactions (Perolli-Shehu, 2019), increasing the TD-Sibs feelings of alienation (Mandleco and Web, 2015). Moreover, Petalas et al. (2009) postulated that TD-Sibs may feel socially awkward because of experiencing teasing and prejudice (Petalas et al., 2009, 2012). This may be especially true in adolescence when children have a greater social awareness, wherein they are conflicted between their desire to fit in, and loyalty to their sibling (Green, 2013). Whilst ensuing feelings of anxiety, bitterness, and resentment (Mandleco and Webb, 2015) may be true of some TD-Sibs, it would be inaccurate to suggest that ASD is automatically a precursor to developmental 'tragedy' (Ibrahimi et al., 2019).

Although ASD does influence TD-Sibs, it is not necessarily psychologically harmful (Ferraiolo and Harris, 2010). On the contrary, some studies postulate no differences in adjustment (Kaminsky and Dewey, 2002), with others postulating TD-Sibs are, in fact, more well-adjusted and socially competent, than the general population (Macks and Reeve, 2007; Pilowsky et al., 2004). The determining factor here, aside from limited demographic factors (Macks and Reeve, 2007; Tarafder et al., 2004), seems to be growing up in optimal environmental conditions (Quintero and McIntyre, 2010; Verte et al., 2003). Whilst acknowledging that individual coping skills and resilience (Jagla et al., 2017) may be partly responsible for the positive outcomes of some TD-Sibs, there is a wealth of literature that suggests that parent-child relationships and parenting styles can act as a protective factor for social and emotional development and well-being. Because children learn basic social skills from their vertical attachments (Hartup, 1989), parents' play a vital role in helping TD-Sibs develop acceptance, patience, and tolerance (Green, 2013). Through modelling positive appraisals of disability (Ibid) in a developmentally appropriate way (Ferraiolo and Harris, 2010), parents can help TD-Sibs process the emotionally sensitive (Piaget, 1929, cited by Ibid) topic of autism, and learn positive coping strategies. This parental influence over socio-emotional development is especially true in the preoperational stage (Ibid) where children's thinking is based on what they can see and hear.

Despite recognising that it can be difficult to balance the individual needs of their children (Sheehan, 1997), it is important that parents uphold fairness (Ross et al., 1994), to reduce tension (Valsiner and Cairns, 1992) and buffer the effects of adversity (Osher et al., 2020). When this is not achieved and despite parents' best intentions, they run the risk of differential parenting (Sheehan, 1997), which can result in poor social and emotional wellbeing. Howlin's (1988) study highlighted this when it found many TD-Sibs felt they were unfairly treated and did not receive the same amount of parental attention (Mandleco and Webb, 2015; Rodrigue and Geffken, 1993). Commonly, it has been found that TD-Sibs, adolescent girls especially, are expected to take on caring responsibilities and extra household chores (Cridland et al., 2016; Hartup, 1989; Randall and Parker, 1999). Not only does this limit opportunities for respite (Petalas et al., 2015), recreational activities and vocational opportunities (Macks and Reeve, 2007), but some TD-Sibs begin to make comparisons of their own, versus their siblings' treatment by parents' (Shanahan et al, 2008). Feinberg et al. (2000) postulated that comparison processes are particularly strong between siblings, especially in terms of parental treatment. Consequently, perceptions of favoritism (Garrido et al., 2020) may be common amongst TD-Sibs, with Adler (1930, cited by Adler, 2013 p. 84) recognising that feelings of inferiority within the family may be difficult to bear. Based on Festinger's (1954) theory, this constant awareness of inferiority (Jiang, and Wang, 2020) and desire to have the same attention as their sibling may cause TD-Sibs to feel envious. Already a painful emotion (Smith and Kim, 2007), envy evokes feelings of guilt and regret (White et al., 2006), exacerbating their low-self-esteem (Appel et al., 2016). Moreover, chronic upward

# **Family Dynamics: Socioemotional development in autistic and neuro-typical siblings.**

**Helen Rosenbach – University of Derby**

---

social comparison (Smith et al, 1999) is closely linked with depression (Appel et al., 2016) or 'an emotional expression of a state of ego powerlessness' (Bibring, 1953, cited by Jiang, and Wang, 2020 p. 1). Therein, feelings of subordination may leave TD-Sibs prone to learned helplessness (Rotenberg et al., 2005) and can lead to loss of motivation to achieve desired outcomes (Miller and Seligman, 1975).

Notwithstanding the TD-Sibs need for attention, the intensive parenting required (Woodgate et al., 2008) can ultimately lead to stress, fatigue, and preoccupation with the demands of ASD. Understandably, the National Survey of Children's Health (2003) reported a higher incidence of poor mental health amongst ASD parents, however, Siller and Sigman (2002) found there is still evidence of high levels of good parenting. Together with the psychological resources of the parents', Belsky (1984) suggested that positive parental functioning, may be in part, due to ecological factors such as the support system of marital relationships, and the parents' wider social network. Not only can these principal support systems reduce contextual sources of parental stress (Ibid) and lower incidences of maternal depression, in particular (Meadan et al., 2010; Rutgers et al., 2007), but they can also be effective in 'buffering the parent-child relation from stress' (Belsky, 1984, p. 91). In addition, Belsky (1984) considered the attributes of children themselves to be another determinant of parenting, for, as Scholte et al. (2007) proposed, they are not passive recipients of parental treatment. Parenting is, therefore, a bilateral, transactional process (Maccoby, 2007) where each member of the dyad influences the behaviour of the other (Repetti et al., 2015). When the family is ecologically stable, the parents' generally display more positive parenting; when TD-Sibs then respond with cooperation and mutual reciprocity (Cantor et al., 2019; Harrist and Waugh, 2002; Repetti et al., 2015), strain on the parents is reduced and, consequently, their capacity to engage and show affection increases. Not only can this help develop strong parent-child coalitions (Sheehan, 1997), but this can also help support positive sibling interactions (Brody, 1998). This high-level responsiveness from caregivers plays a crucial role in creating and maintaining a secure attachment (Nanu and Nijloveanu, 2015), which is crucial for a child to develop a positive internal working model (Bowlby, 1973, cited by Ben-Itzhak et al., 2019), be socially well adjusted, and emotionally resilient to the challenges of ASD. Such authoritative parenting (Baumrind, 1966) means that, even when parents are pre-occupied with their sibling, TD-Sibs know they remain sensitive to their individual needs (Ferraioli and Harris, 2010), and have their best interests at heart (Grusec and Davidov, 2016). By taking the time to help the TD-Sib understand and accept that any differences in parental treatment or attention is legitimate, equitable, and based on the developmental needs and temperament of their sibling (Sheehan, 1997; Sheehan and Noller 1998), parents can reduce jealousy and the likelihood of their children internalising or externalising problems (Green, 2013; Hartup, 1989; Ross and Cuskelly, 2006). That said, despite the benefits of authoritative parenting, some research suggests that parents of ASD children are more likely to display authoritarian parenting (Gau et al., 2010; Rutgers et al., 2007), owing to their need to maintain structure and order in an otherwise chaotic environment (Mensah and Kuranchie, 2013). This high demanding parenting is perhaps not surprising considering Dillenburger (2010) found that most parents agreed having a child with ASD causes significant restriction on parental activities and opportunities for employment. It is inevitable that, at times, stress may 'spillover' on to the TD-Sib (Repetti, 1989). Not only can this negatively impact TD-Sibs internal working model, but parental bio-synchrony and attunement is disrupted, reducing their sensitivity to their child's social and emotional cues (Kim and Watamura, 2015).

Providing family interventions are implemented to buffer stress, parents are more likely to identify their child's social and emotional cues. Being able to respond to the TD-Sibs mental state can help build shared experiences and emotions (Bornstein, 2015; Siegel, 2012) in a way that may

# **Family Dynamics: Socioemotional development in autistic and neuro-typical siblings.**

**Helen Rosenbach – University of Derby**

---

not have been possible without experiencing the complexities of ASD. Not only can this help develop self-regulation (Main, 1991), but the parental validation of emotions surrounding ASD can provide opportunities for 'emotional coaching' (Repetti et al, 2015 when TD-Sibs display distress (Morris et al., 2007). By labelling and responding to emotions (Ibid), reassuring TD-Sibs that they are common, and that support is available (Bloch and Weinstein, 2010), parents can positively influence socio-emotional development. This greater validation and reciprocation of positive emotion (Lambie and Lindberg, 2006; Repetti et al., 2015) has been reported to increase levels of understanding and empathy, reduce behavioural problems (Repetti et al, 2015) and increase social competence (Harrist and Waugh, 2002). Furthermore, if parents continually educate TD-Sibs about ASD as their developmental lens matures (Piaget, 1929, cited by Ferraioli and Harris, 2010), they can support their understanding, and enhance their compassion (Mandleco and Webb, 2015) and warmth towards their sibling. Whilst parents must be careful not to overestimate their child's understanding and overwhelm them with information (Glasberg, 2000) Piaget (1929, cited by Ferraiolo and Harris, 2010) postulated children's capability for increasingly abstract knowledge as their cognitive skills develop. It could be argued, that having an autistic sibling may result in a more persuasive parenting style, providing empathic-emotional dialogue (Hoffman 1988), increasing the TD-Sibs emotional intelligence (Green, 2013). Not only can TD-Sibs learn compassion (Kaminsky and Dewey, 2001), altruism (Bartholomeu et al., 2016), and kindness (Mandleco and Webb, 2015) towards their sibling, but this is said to be extended to all their interactions. Thereby, in opposition to the earlier suggestion of TD-Sibs being rejected by peers, it has been argued that the positive socio-emotional attributes of TD-Sibs may make them more popular, not less popular with peers (Harrist and Waugh, 2002; Mayeux and Cillissen, 2003).

This social competence and emotional maturity (Gray, 1998) may be owing to their sense of responsibility, as the usually horizontal relationship with their sibling, transforms into a vertical (Hartup, 1989), quasi- parent one (Boyd and Bee, 2014). It has therefore been argued that, rather than be a burden (Gold, 1993), the TD-Sibs caretaker and domestic responsibilities enhances their self-concept (Hartup, 1989; Macks and Reeve, 2007) and instils greater independence (Mandleco and Webb, 2015) in comparison to siblings of nondisabled children. However, whilst writers are increasingly highlighting the positive outcomes for TD-Sibs, Green (2013) speculated the possibility that, rather than no experiencing no ill effects, the TD-Sibs might be simply not reporting them due to empathy for their sibling and desire to assist their parents. Furthermore, despite the many documented positive impacts of ASD, there remains a plethora of evidence to suggest there is still significant differences in groups on family quality of life, between Sibs-TD and Sibs-ASD (Garrido et al., 2020). Acknowledging that to date, many studies have been conducted from the parent or professional perspective (Mandleco and Webb, 2015), Green's (2013) theoretical consideration does indicate the need for further, longitudinal research to evaluate TD-Sibs perspectives against control groups.

Nonetheless, TD-Sibs do generally report less quarrelling and competition (Pilowsky et al., 2004) with their ASD siblings and, in accordance with attachment theory (Bowlby, 1973 cited by Ben-Itzhak et al., 2019), a loving bond between siblings reinforces positive internal working models of self and others. Moreover, ASD seems to reduce the rivalry that is otherwise common amongst siblings, especially between typically developing brothers (Stewart et al., 1995 cited by Boyd and Bee, 2014). Subsequently, the intense, poorly resolved conflicts (Siddiqui and Ross, 2004) that can result in less close relationships (Cicirelli, 1994 p. 11) are minimised, along with the discordant interactions that negatively contribute to a child's emotional competence and social cognition (Repetti et al., 2015). For parity, there is however an argument that the frequent nature of sibling conflict provides important opportunities to learn how to compromise and negotiation (Sheehan, 1997).

# Family Dynamics: Socioemotional development in autistic and neuro-typical siblings.

Helen Rosenbach – University of Derby

---

In conclusion, creating an environment that caters for the complex needs of ASD requires a commitment from the whole family (Green, 2013). Parents are tasked with the challenge of balancing the individual needs and differences of their children, and TD-Sibs often experience additional challenges. Whilst every child, parent and family are unique, and parenting may evolve over time (Lucero, 2018), the consensus is that children growing up in optimal environmental conditions are at a lower risk of maladjustment. Although many studies posit the negative impact ASD has on TD-Sibs social and emotional development, others highlight the 'noteworthy' adjustment and attributes of TD-Sibs, especially considering the characteristics of autism (Pilowsky et al., 2004 p. 855). This suggests that the focal mechanism for poor outcomes may not be the ASD itself but rather on family variables such as love, warmth, and sensitivity (Green, 2013).

---

## References

- Alfred Adler (2013) *The Science of Living (Psychology Revivals)*. Hoboken: New Jersey. Routledge
- Appel, H., Gerlach, A. L., & Crusius, J. (2016). 'The interplay between Facebook use, social comparison, envy, and depression'. *Current Opinion in Psychology*, 9, pp. 44–49. Available at: <https://doi.org/10.1016/j.copsyc.2015.10.006> (Accessed: 7.4.21)
- Bartholomeu, D. et al. (2016) 'Predictive Power of Parenting Styles on Children's Social Skills: A Brazilian Sample'. *Sage Open*, 6(2). doi: 10.1177/2158244016638393 (Accessed 7.4.21)
- Baumrind, D. (1966) 'Effects of Authoritative Parental Control on Child Behavior', *Child Development*, 37(4), pp. 887–907. doi: 10.2307/1126611.
- Belsky, J. (1984) 'The Determinants of Parenting: A Process Model', *Child Development*, 55(1), pp. 83–96. doi: 10.2307/1129836.
- Ben-Itzhak, E., Nachshon, N. & Zachor, D. A. (2019) 'Having siblings is associated with better social functioning in autism spectrum disorder'. *Journal of Abnormal Child Psychology*, 47(5), pp. 921–931. doi: 10.1007/s10802-018-0473-z.
- Benson, P. & Karlof, K. L. (2008). 'Child, parent, and family predictors of latter adjustment in siblings of children with autism'. *Research in Autism Spectrum Disorders*, 2, pp. 583–600. Available at: <https://doi.org/10.1016/j.rasd.2007.12.002> (Accessed:7.4.21)
- Bibring, E. (1953). 'The mechanism of depression'. In Greenacre, P. (Ed.) *Affective disorders: Psychoanalytic contributions to their study*. New York. International Universities Press pp. 13–48.
- Boyd, D. G. & Bee, H. L. (2014) *The Developing Child*. 13edn. Essex. Pearson New International Edition.
- Brody, G. H. (1998) 'Sibling relationship quality: Its causes and consequences', *Annual Review of Psychology*, 49(1), pp. 1. doi: 10.1146/annurev.psych.49.1.1.
- Cantor, P. et al. (2019) 'Malleability, plasticity, and individuality: How children learn and develop in context', *Applied Developmental Science*, 23(4), pp. 307–337. doi: 10.1080/10888691.2017.1398649.
- Cicirelli, V. (1994) 'Sibling Relationships in Cross-Cultural Perspective'. *Journal of Marriage and Family*, 56(1), pp.7-20. doi:10.2307/352697
- Cridland, E.K. et al. (2016) 'A personal constructivist approach for investigating the patterns of dependency of adolescents with autism spectrum disorder: case study of two families'. *Faculty of Social Sciences - Papers*. 2160.
-

# Family Dynamics: Socioemotional development in autistic and neuro-typical siblings.

Helen Rosenbach – University of Derby

---

University of Wollongong Broaden. Available at: Available at: <https://ro.uow.edu.au/sspapers/2160> (Accessed 10.4.21)

Dillenburger, K. et al. (2010) 'Living with children diagnosed with autistic spectrum disorder: parental and professional views'. *British Journal of Special Education*, 37(1), pp. 13–23. doi: 10.1111/j.1467-8578.2010.00455.x

Dunn, J. (2007) 'Siblings and socialization' In: Grusec, J.E., Hastings, P.D. (Eds.), *Handbook of Socialization: Theory and Research*. Guilford Press, New York, pp. 309 – 327.

Ferraioli, S.J & Harris, S.L. (2010) 'The Impact of Autism on Siblings', *Social Work in Mental Health*, 8(1), pp. 41–53. doi: 10.1080/15332980902932409.

Festinger, L. (1954) 'A Theory of Social Comparison Processes'. *Human Relations*, 7, pp. 117–140. doi: 10.1177/00187267540070020

Garrido, D., Carballo, G. & Garcia-Retamero, R. (2020) 'Siblings of children with autism spectrum disorders: social support and family quality of life', *Quality of Life Research*, 29 (5) p. 1193–120 doi: <https://doi-org.ezproxy.derby.ac.uk/10.1007/s11136-020-02429-1> (Accessed: 7.4.21)

Gau, S. S. et al. (2010) 'Behavioral problems and parenting style among Taiwanese children with autism and their siblings', *Psychiatry & Clinical Neurosciences*, 64(1), pp. 70–78. doi: 10.1111/j.1440-1819.2009.02034.x.

Glasberg, B.A. (2000). 'The Development of Siblings: understanding of autism and related disorders'. *Journal of Autism and Developmental Disorders*, 30 pp. 143–156. doi: 10.1023/a:1005411722958

Gold, N. (1993). Depression and social adjustment in siblings of boys with autism. *Journal of Autism and Developmental Disorders*, 23 (1), pp147-163. Doi: 10.1007/BF01066424

Gray, D. E. (1998). *Autism and the family: Problems, prospects, and coping with the disorder*. Illinois. Charles C. Thomas.

Green, L. (2013) 'The Well-Being of Siblings of Individuals with Autism', *ISRN Neurology*, pp. 1–7. doi: 2013/417194 (Accessed: 5.4.21)

Grusec, J. E., & Davidov, M. (2016). 'Socialization in the family: The role of parents' In Grusec, J.E. & Hastings, P.D. (Eds.) *Handbook of socialization: Theory and research (2edn)* New York. Guilford Press. pp. 284–308

Harrist, A.W. and Waugh, R.M. (2002) 'Dyadic synchrony: Its structure and function in children's development'. *Developmental Review*, 22(4) pp. 555-592. doi: 10.1016/S0273-2297(02)00500-2

Hartup, W. W. (1989) 'Social Relationships and Their Developmental Significance', *American Psychologist*, 44(2), pp. 120–126. doi: 10.1037/0003-066X.44.2.120.

Hastings, R.P. (2003) 'Brief Report: Behavioural adjustment of siblings of children with autism'. *Journal of Autism & Developmental Disorders*, 33(1) pp. 99-104. Doi: 10.1023/a:1022290723442

Howlin, P. (1988) 'Living with impairment: The effects on children of having an autistic sibling'. *Child Care, Health, and Development*, 14: pp. 395–408.

Ibrahimi, S., Durmishi, L. and Ibrahimi, E. (2019) 'Relation between Autism Spectrum Disorder and Parenting Styles', *Open Journal for Psychological Research*, 3(2), pp. 47–54. doi: 10.32591/coas.ojpr.0302.02047i.

Jagla, M. et al. (2017) 'Healthy Siblings of Children with Autism Spectrum Disorders: A mixed-methods Pilot Study'. *Praxis der Kinderpsychologie und Kinderpsychiatrie*, 66 (9) pp. 702-718: doi: 10.13109/prkk.2017.66.9.702

Jiang, X. & Wang, J. (2020) 'The causal relationship between envy and depression: A cross-lagged regression analysis', *Social Behavior & Personality: an international journal*, 48(12), pp. 1–9

# Family Dynamics: Socioemotional development in autistic and neuro-typical siblings.

Helen Rosenbach – University of Derby

---

- Kaminsky, L. & Dewey, D. (2001) 'Siblings Relationships of Children with Autism' *Journal of Autism and Developmental Disorders*, 31, pp. 399–410. Available at: <https://doi.org/10.1023/A:1010664603039> (Accessed: 5.4.21)
- Kaminsky, L. & Dewey, D. (2002) 'Psychosocial adjustment in siblings of children with autism'. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 43 (2) pp. 225–232
- Kaplan, L., Ade-Ridder, L. & Hennon, C. (1991), 'Issues of split custody: siblings separated by divorce', in C. Everett (ed.) *The Consequences of Divorce: Economic and Custodial Impact on Children and Adults*. New York. Haworth Press.
- Kim, P. & Watamura, S.E. (2015) *Two Open Windows: Infant and Parent Neurobiologic Change*. The Aspen Institute, Ascend. Available at: <https://ascend.aspeninstitute.org/resources/two-open-windows-infant-and-parent-neurobiologic-change-2/> (Accessed 25/4/21)
- Knott, F., Lewis, C., & Williams, T. (1995) 'Sibling interaction of children with learning disabilities: A comparison of autism and Down's syndrome'. *Journal of Child Psychology and Psychiatry*, 6, 965–976. <https://doi.org/10.1111/j.1469-7610.1995.tb01343.x> (Available at 5.4.21)
- Lambie, J. & Lindberg, A. (2016). 'The Role of Maternal Emotional Validation and Invalidation on Children's Emotional Awareness'. *Merrill-Palmer Quarterly*, 62(2), pp. 129-157. doi:10.13110/merrpalmquar1982.62.2.0129
- Lask, J. (2015) 'Family and Psychiatric Illness: Family Therapy' In *International Encyclopedia of the Social and Behavioral Sciences*, 8. London. Elsevier. pp. 745-750
- Lucero, Jeffrey. (2018). 'Raising Children with Autism Spectrum Disorder: A Study on Parenting Styles and Techniques'. doi: 10.13140/RG.2.2.20018.71368.
- Lucero, Jeffrey. (2018). *Raising Children with Autism Spectrum Disorder: A Study on Parenting Styles and Techniques*. 10.13140/RG.2.2.20018.71368.
- Maccoby, E. E. (2007). 'Historical Overview of Socialization Research and Theory'. In Grusec, J.E. & Hastings, P.D. (Eds.), *Handbook of socialization: Theory and research*, pp. 13–41. New York. The Guilford Press.
- Macks, R.J & Reeve, R.E. (2007) 'The Adjustment of Non-disabled Siblings of Children with Autism'. *Journal of Autism & Developmental Disorders*, 37 (6), pp. 1060-1067. doi: 10.1007/s1083-006-0249-0.
- Mandleco, B. & Webb, A. E. M. (2015) 'Sibling perceptions of living with a young person with Down syndrome or autism spectrum disorder: An integrated review'. *Journal for Specialists in Pediatric Nursing*, 20(3), pp. 138–156. doi: 10.1111/jspn.12117.
- Mascha, K. & Boucher, J. (2006) 'Preliminary investigation of a qualitative method of examining siblings' experiences of living with a child with ASD'. *British Journal of Developmental Disabilities*, 52(1), pp. 19–28. doi: 10.1179/096979506799103659.
- Meadan, H., Stoner, J. B. & Angell, M. E. (2010) 'Review of literature related to the social, emotional, and behavioral adjustment of siblings of individuals with autism spectrum disorder'. *Journal of Developmental and Physical Disabilities*, 22(1), pp. 83–100. doi: 10.1007/s10882-009-9171-7.
- Mensah, M. K. & Kuranchie, A. (2013) 'Influence of Parenting Styles on the Social Development of Children'. *Academic Journal of Interdisciplinary Studies* 2(3) pp. 123. doi:10.5901/ajis.2013.v2n3p123
- Miller, W. R., & Seligman, M. E. (1975). 'Depression and learned helplessness in man'. *Journal of Abnormal Psychology*, 84(3), pp. 228–238.

# **Family Dynamics: Socioemotional development in autistic and neuro-typical siblings.**

**Helen Rosenbach – University of Derby**

---

- Mulder, S. (2008). *The Domains that Influence the Development of Social Competence in Children: A Literature Review*. Master Thesis Dissertation, University of Wisconsin, USA. Available at: <https://core.ac.uk/reader/5067280> (Accessed 5.4.21)
- Nagaoka, J. et al., (2015). *Foundations for young adult success: A developmental framework*. Chicago, IL. The University of Chicago Consortium on School Research.
- Nanu, E.D. & Nijloveanu, D.M. (2015). 'Attachment and Parenting Styles'. *Procedia - Social and Behavioral Sciences* 203, pp. 199-204, Available at: <https://doi.org/10.1016/j.sbspro.2015.08.282>. (Accessed 5.4.21)
- National Survey of Children's Health (2003). *Child and Adolescent Health Measurement Initiative (CAHMI). Child Health & Health Care Measures SPSS Codebook*. Available at: [https://www.childhealthdata.org/docs/nsch-docs/2003nsch\\_spssfinal\\_v1-2-12-29-08\\_508-pdf.pdf?sfvrsn=77069e8c\\_1](https://www.childhealthdata.org/docs/nsch-docs/2003nsch_spssfinal_v1-2-12-29-08_508-pdf.pdf?sfvrsn=77069e8c_1) (Accessed: 25.4.21)
- Osher, D. et al. (2020) 'Drivers of human development: How relationships and context shape learning and development1', *Applied Developmental Science*, 24(1), pp. 6–36. doi: 10.1080/10888691.2017.1398650.
- Perolli-Shehu, B. (2019) 'Peer Acceptance in Early Childhood: Links to Socio-Economic Status and Social Competences', *Journal of Social Studies Education Research*, 10(4), pp. 176–200. Available at: <https://files.eric.ed.gov/fulltext/EJ1241768.pdf> (Accessed: 7.4.21)
- Petalas, M., et al. (2009). "I like that he always shows who he is": 'The perceptions and experiences of siblings with a brother with autism spectrum disorder'. *International Journal of Disability, Development and Education*, 56, pp. 381–399. doi:10.1080/10349120903306715
- Petalas, M. A. et al. (2012) 'Psychological adjustment and sibling relationships in siblings of children with Autism Spectrum Disorders: Environmental stressors and the Broad Autism Phenotype'. *Research in Autism Spectrum Disorders*, 6(1), pp. 546–555. doi: 10.1016/j.rasd.2011.07.015.
- Petalas, M. et al. (2015) 'Typicality and Subtle Difference in Sibling Relationships: Experiences of Adolescents with Autism'. *Journal of Child & Family Studies*, 24(1), pp. 38–49. doi: 10.1007/s10826-013-9811-5.
- Pilowsky, T. et al. (2004) 'Social and Emotional Adjustment of Siblings of children with Autism', *Journal of Child Psychology & Psychiatry*, 45(4), pp. 855–865. doi: 10.1111/j.1469-7610.2004.00277.x.
- Quintero, N. & McIntyre, L. L. (2010) 'Sibling Adjustment and Maternal Well-Being: An Examination of Families with and without a Child with an Autism Spectrum Disorder'. *Focus on Autism and Other Developmental Disabilities*, 25(1), pp. 37–46. doi: 10.1177/1088357609350367.
- Randall, P., & Parker, J. (1999). *Supporting the families of children with autism*. New York, NY: John Wiley & Sons.
- Repetti, R. L. (1989) 'Effects of Daily Workload on Subsequent Behavior During Marital Interaction: The Roles of Social Withdrawal and Spouse Support', *Journal of Personality and Social Psychology*, 57(4), pp. 651–659. doi: 10.1037/0022-3514.57.4.651.
- Repetti, R.L, Sears, M.S & Sunhye, B. (2015) 'Social and Emotional Development in the Context of the Family' In *International Encyclopedia of the Social and Behavioral Sciences*, Vol. 22, London. Elsevier pp. 156-161.
- Rodrigue, J.R.& Geffken, G.R. (1993) 'Perceived competence and behavioral adjustment of siblings of children with autism', *Journal of Autism & Developmental Disorders*, 23(4), pp. 665–674. doi: 10.1007/bf01046108.
- Ross, H. S. et al. (1994). 'Administering justice in the family'. *Journal of Family Psychology*, 8, pp. 254–273.
- Ross, P. & Cuskelly. M. (2006) 'Adjustment, sibling problems and coping strategies of brothers and sisters of children with autistic spectrum disorder.' *Journal of Intellectual & Developmental Disability*, 31(2), pp. 77–86

# **Family Dynamics: Socioemotional development in autistic and neuro-typical siblings.**

**Helen Rosenbach – University of Derby**

---

Rotenberg, K. J., Carte, L., & Speirs, A. (2005). 'The effects of modeling dietary restraint on food consumption: Do restrained models promote restrained eating?'. *Eating Behaviors*, 6(1), pp. 75–84.

<https://doi.org/10.1016/j.eatbeh.2004.04.007>

Rutgers, A.H. et al (2007) 'Autism, Attachment and Parenting: A Comparison of Children with Autism Spectrum Disorder, Mental Retardation, Language Disorder, and Non-clinical Children'. *Journal of Abnormal Child Psychology*, 35, pp. 859–870 <https://doi.org/10.1007/s10802-007-9139-y> (Accessed 18.4.21)

Scholte, R. H. J. et al. (2007) 'Differential Parental Treatment, Sibling Relationships and Delinquency in Adolescence', *Journal of Youth & Adolescence*, 36(5), pp. 661–671. doi: 10.1007/s10964-006-9155-1

Sheehan, G. (1997) 'Adolescent Sibling Conflict', *Family Matters*, no. 46, pp. 37–39. Available <https://aifs.gov.au/sites/default/files/fm46gs.pdf> (Accessed 9.4.21)

Siddiqui, A. and Ross, H. (2004) 'Mediation as a Method of Parent Intervention in Children's Disputes'. *Journal of Family Psychology*, 18(1), pp. 147–159. doi: 10.1037/0893-3200.18.1.14

Siller, M. and Sigman, M. (2002) 'The behaviors of parents of children with autism predict the subsequent development of their children's communication', *Journal of Autism & Developmental Disorders*, 32(2), pp. 77–89. doi: 10.1023/a:1014884404276.

Simon Baron-Cohen (1995) *Mindblindness: An Essay on Autism and Theory of Mind*. Cambridge. A Bradford Book, MIT Press.

Slaughter, V., Dennis, M. J. and Pritchard, M. (2002) 'Theory of mind and peer acceptance in preschool children', *British Journal of Developmental Psychology*, 20(4), p. 545. doi: 10.1348/026151002760390945.

Smith, R. H. et al. (1999) 'Dispositional Envy', *Personality & Social Psychology Bulletin*, 25(8), p. 1007-1020. Available at <https://doi.org/10.1177/01461672992511008> (Accessed 9.4.21)

Smith, R. H., & Kim, S. H. (2007). *Comprehending envy*. *Psychological Bulletin*, 133(1), 46–64. <https://doi.org/10.1037/0033-2909.133.1.46>

Tarafder, S., Mukhopadhyay, P. & Basu, S. (2004) 'Personality profile of siblings of children with autism: a comparative Study'. *SIS Journal of Projective Psychology and Mental Health*, 11 pp. 52–58 Available at: [https://www.academia.edu/546261/Personality\\_Profile\\_of\\_Siblings\\_of\\_Children\\_with\\_Autism\\_A\\_Comparative\\_Study](https://www.academia.edu/546261/Personality_Profile_of_Siblings_of_Children_with_Autism_A_Comparative_Study) (Accessed 9.4.21)

Turnbull, A. et al (2006). *Families, professionals, and exceptionality: positive outcomes through partnerships and trust* (5th ed.). New Jersey. Merrill/Prentice Hall.

Valsiner, J. & Cairns, R. B. (1992). 'Theoretical perspectives on conflict and development'. In C. U. Shantz & W. W. Hartup (Eds.), *Conflict in child and adolescent development* pp. 15–35. Cambridge. Cambridge University Press

Verte, S., Roeyers, H., Buysse, A. (2003). Behavioural problems, social competence and self-concept in siblings of children with autism. 'Child Care, Health & Development', 29 (3) pp. 193- 205. doi: 10.1046/j.1365-2214.2003.00331.x

White, J.B. et al. (2006) 'Frequent Social Comparisons and Destructive Emotions and Behaviors: The Dark Side of Social Comparisons'. *Journal of Adult Development*, 13, pp. 36–44. Available at: <https://doi.org/10.1007/s10804-006-9005-0> (Accessed 5.4.21)

Woodgate, R. L., Ateah, C. & Secco, L. (no date) 'Living in a world of our own: The experience of parents who have a child with autism', *Qualitative Health Research*, 18(8), pp. 1075–1083. doi: 10.1177/1049732308320112.