

The Role and Involvement of Dads in the Lives and Education of Their Children with Special Educational Needs and/or Disabilities within an Early Intervention Context

KE REN

CONOR MC GUCKIN

Trinity College Dublin, Ireland

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Authors' notes: **Ke Ren** holds a First-Class B.A. (Hons) Degree in Early Childhood Studies and a M.Ed. in Early Intervention. She is a Ph.D. candidate at the School of Education, Trinity College Dublin. Ke's research interests are in the areas of early intervention, father/dad involvement, theoretical approaches (e.g., Bronfenbrenner) applied to early intervention practice, and inclusive education. **Conor Mc Guckin**, Ph.D., is an Associate Professor of Educational Psychology in the School of Education at Trinity College Dublin, Ireland. Conor is a Chartered Psychologist and Associate Fellow of both the British Psychological Society (BPS) and the Psychological Society of Ireland (PSI). ORCID: 0000-0001-5848-2709

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Abstract

This literature review prefaced a research project that explored dads' role and involvement in the lives and education of their children with special educational needs and/or disabilities (SEN/D) within the context of early intervention (EI) (see Ren & Mc Guckin, 2022). We present a comprehensive, critical, and analytical review of the literature regarding the area of dad involvement in EI provided for children with SEN/D and their families. To conduct this review, key terminology was used to search in well-known, widely recognised, and distinguished research databases (e.g., Education Full Text, PsycINFO, Web of Science). The search yielded 112 results, from which 21 final articles were selected for inclusion. To begin, the historical perspective of fatherhood and dad involvement in the childbearing family is reviewed. This provides a necessary context for a deeper understanding of the central issues related to this area. To provide an explanation of the ways in which contemporary dads are influential, the review then explores the role and function of dads and their contributions to their child's developmental outcomes. Such an exploration leads to a necessary critical review of recent research findings related to dads' involvement in the lives of children with SEN/D and EI. This comprehensive review extends our knowledge in understanding the role and involvement of dads' contributions to the outcome of their families and their children with SEN/D, particularly within an EI context.

Keywords

Dad-role, Involvement, Children with disabilities, Early intervention

The holistic development of children can be enhanced by positive contributions from their dads, as demonstrated in decades of research exploring the role of dads and their contribution to children's development and learning (Bretherton et al., 2005; Lamb, 1997; Raikes et al., 2005; Yeung et al., 2001). For example, in terms of parent-child attachment, the interaction style of dads and the way they express their sensitivities can help to form a secure base for the child to explore the outside world (Dumont & Paquette, 2013). Similarly, in terms of a child's development, high-quality interaction with the dad can contribute to children's language, cognitive, and social and emotional development (Bretherton et al., 2005; Lamb, 1997; Paquette, 2004; Youngblade et al., 1993). Whilst the literature that investigates the role and involvement of dads is largely based on the context of families with typically developing children, there is an emerging literature suggesting that a similar shift in role responsibilities is expected in families of children with SEN/D. Research has shown that dads' involvement in these families can have similar positive impacts on the outcomes of the family and the child (Feldman, 2007; Flippin & Crais, 2011; Fox et al., 2015).

Considering the important role that dads play in parenting children with SEN/D, one would expect greater participation of dads in the education of their children with SEN/D, particularly within the context of EI. The EI approach to understanding service provision and support networks has the potential to offer greater opportunities for families of young children with SEN/D. At a child level, EI can improve the child's developmental outcomes concerning language development, cognitive development, functional communication, social interaction, and emotional and physical development (Bailey et al., 2006; Davis & Gavidia-Payne, 2009; Guralnick & Bricker, 1987). At a family level, EI promotes a family's capacity

in parenting, caring, rearing of their children with SEN/D, as well as informed decision making by recognising them as experts on their child's needs, encouraging collaborative partnerships between families and professionals, and emphasising information sharing with families (Dunst et al., 2011; McWilliam et al., 2010; Trivette et al., 2010). Therefore, as Guralnick (2011) reminds us, EI has become an important ecological setting related to the development and education of children with SEN/D and their families. However, even with the development of EI from its traditional "child-centred" approach to a more "family-centred" approach, much of the service delivery in the area continues to focus on mums. Research related to the development and education of young children with SEN/D indicates that mums are often the exclusive participants in EI programmes (Flippin & Crais, 2011). Given that families of children with SEN/D have been found to experience higher levels of stress and face multiple challenges (Scherer et al., 2019), dads' support is even more crucial. Thus, to provide an understanding of dads' contributions to the outcome of their families and their children with SEN/D within an EI context, a review of the literature addressing the topic of dads' role and involvement in EI was conducted.

To set the context for discussing the literature reviewed to inform our research, background information is first provided beginning with the definition and historical perspective of fatherhood, followed by a discussion of dads' unique contributions to the development and learning of typically developing children. The methods employed for conducting our literature search were then presented. Findings from the critical and analytical review of the research are discussed.

Definition and Historical Perspective of Fatherhood

Like many social roles, the role of the dad has been continually evolving. From once being viewed as the "moral authority" to the "primary breadwinner", and advancing into the "sex-role model", our expectations and cultural ideology of fatherhood have mainly relied on a "biological essentialist" view of gender and labour (Lamb, 1987; Pleck & Pleck, 1997; Pleck, 2010a). As such, the definition of "dad" typically focused on the biological perspective of physical resemblance and genetic inheritance. In other words, the term "dad" often referred to the biological parent of the child.

Under the traditional view of the dad role, the early dad-child relationship was described as both emotionally and physically distant, cold, and morally instructive, and the "breadwinning dad" characteristic was seen as rule-driven, emotionally flat, and the authoritarian male in the family interaction and life (Eberly, 1999; Ferry, 2015). Indeed, it was believed that the dad's authority would be challenged if too much affection was given, thereby ruining the spiritual growth of the children (Pleck & Pleck, 1997). Therefore, the relationship and interaction between dads and their children were, not surprisingly, emotionally detached for over a century (Ferry, 2015).

The conceptualisation of a dad's role has transitioned from a view that saw the role as being preoccupied with economic activities outside the home, to a more contemporary understanding that being a dad includes direct involvement in the day-to-day life of the family and the child (Pleck, 2010a). As part of this evolution, various professional literature (e.g., child development, psychology, sociology) flourished in the field of the dad role and involvement, highlighting the significant influence of dads' participation in the day-to-day care, interaction, play, and overall child-rearing on children's learning and development

(Lamb & Stevenson, 1978; Pleck, 1987, 2010b; Venter, 2011). The recognition of fatherhood and the dad role led to a widespread image of the dad as an active, affectionate, sensitive, loving, and playful nurturer. It also resulted in an increased level of dad involvement in children's care and education in two-parent families (McBride & Mills, 1993; Yeung et al., 2001).

Following this evolution in the concept of "dad involvement", a shift equally occurred in the definition of "dad" in the research literature. Scholars (Lamb, 1977, 1987; Lamb et al., 1985; Lamb & Stevenson, 1978; Paquette & Dumont, 2013; Pleck & Pleck, 1997) also argued that the traditional view of "biologically constructed" dads represented only one aspect of the dad-child relationship. The more accurate relationship, they argued, was related to the quality of the adult-child relationship, including direct involvement in activities related to the child's day-to-day care and education. In this case, dads became characterised as "socially constructed", and therefore substitutable. This view was also supported by the legal definition of "dad" in many countries (e.g., United States, Ireland, United Kingdom, Australia), which stipulated that a paternal dad may not have automatic parental rights in relation to his child solely based on a biological relationship, given that stepdads and adoptive dads with an established relationship with the child are typically the ones fulfilling the legal and practical parenting responsibilities (McKeown & Sweeney, 2001).

Therefore, across the literature in these areas, the term "father" and "dad" are quite often used interchangeably. In some instances, authors do not differentiate between what exactly they mean between "father" and "dad". However, much of the literature is quite exact in how these two words are defined and used. For example, the word "father" is generally used to denote the biological relationship with the child, and the term "dad" is often used to extend the biological relationship to an emotional and ongoing relationship. However, it is not necessary for a "dad" to have a biological relationship with the child. For consistency and presentation in the review, we use the term "dad" as it represents a broader understanding and application than the term "father".

Dads' Unique Contribution to the Development and Learning of Typically Developing Children

Decades of research on the dad-child relationship demonstrate the positive influence that dads have on the holistic development, learning, and well-being of their children (Erickson & Upshur, 1989; Lamb et al., 1985; Palm, 2014; Silverstein & Auerbach, 1999). Beginning early in life, infants with dads actively involved in their daily care and play tend to establish a strong and more secure attachment with their dads (Brown et al., 2007). This is critical to a child's development, as research has shown that a strong dad-child attachment can significantly foster cognitive development, social and emotional well-being, and skill acquisition (Bretherton et al., 2005; Dumont & Paquette, 2013). Importantly, such an attachment style lasts well beyond when it is first established during the first few years of life. A host of long-term positive outcomes have also been found in adulthood of children who were securely attached to their dads in early childhood (Brown et al., 2007). Dads with a positive relationship established in the infant years are more likely to have greater involvement in their children's later life. In turn, it has been shown that this also strengthens the marital relationship, which also contributes to optimal family relationships and child developmental outcomes (Cox et al., 1992).

One thing that can make dads unique in their contributions to their children's development is the way in which they can express their sensitivity through the process of play. Studies comparing dad-infant and mum-infant interaction have found that dads tend to excite their children and engage in more physical play, whereas mothers are less physically active and engage in caregiving routines (Parke & O'Leary, 1976; Pedersen, 1980; Robinson et al., 2021; Yogman, 1981). It has also been shown that dads' play with infants tends to be more physically stimulating as they are more likely to encourage the child to explore, take initiative in unfamiliar situations, and overcome obstacles (Kromelow et al., 1990; Sethna et al., 2017). This is also supported by Paquette's (2004) dad-child "activation relationship" theory, which suggests that dads who engage in stimulating, challenging, and directive parenting behaviours are likely to foster children's self-regulation and risk-taking in their physical and social environments as risk and regulation skills are taught and learnt. This development was based on the understanding of attachment (Bowlby, 1969), interactions between dads and their young children (Rowe et al., 2004), gender behaviour (Hewlett, 2000), and human-specific adaptations (MacDonald, 1993). Paquette (2004) describes this dad-child activation relationship as an affective bond that allows dads to incite the child to use initiative in unfamiliar situations and act as catalysts for risk-taking through physical play, so the child is facilitated to explore the environment in a safe but free manner.

The function of dads in terms of opening the child to the world can be mediated through many forms of dad-child play. For instance, dads are believed to be the linguistic bridge to the outside world (Ely et al., 1995). They tend to use more complex forms of language or unfamiliar words related to problem-solving and action demands, while mums tend to verbalise emotion-related content (Ely et al., 1995; Marcos, 1995; Ratner, 1988; Tomasello et al., 1990). As a consequence, children are encouraged to use varied vocabulary with their dads and guided more often by their dads to formulate and reformulate their thoughts so they are understood by social partners other than their mums, which is essential in language, cognitive, and social development (Rowe et al., 2004; Tamis-LeMonda et al., 2013). Other developmental outcomes have also been found to be associated with this dad-child activation relationship. Youngblade et al. (1993) demonstrated that children at age three who frequently interact with their dads through Rough-and-Tumble Play (RTP) have been shown two years later to interact more positively with peers. Similarly, MacDonald and Parke (1984) have also found that dads exhibiting high levels of physical play with both boys and girls at 3–4 years of age lead their children to the highest peer popularity rating. In response to these findings, Parke et al. (2002) suggest that dads play a superior role compared to mums in regulating children's anger and aggression impulses, which is essential to children's emotional well-being and mental health. To further support the argument of dads as playmates, and their unique sensitivity regarding dad-child play, a 16-year longitudinal study (Grossmann et al., 2002) in Germany explored dads' compared to mums' specific contribution to their children's attachment relationship at age 6, 10, and 16 years. Results underscored the finding that dads' sensitive and challenging interactive play behaviour in a toddler–parent play situation is a strong predictor of the child's attachment relationship, as well as the child's emotional security and self-confidence during adolescence.

Considering play as a unique way for dads to express their sensitivity adds to the expansion of dad-child relationships. While mums deliver psychological security through caregiving routines, dads participate in exciting and challenging practices to form a secure

base of exploration. In this regard, both mums and dads play two distinct but equally important roles in a child's development and learning. However, unlike mums, the role that dads play continues to be overlooked in education, developmental psychology, and parenting research. Although a large amount of that research has focused on questions regarding how dads interact with their children, the extent to which dads are involved in childcare, and the effect of dads on children's development, most studies rely heavily on quantitative analysis of dads' role and involvement in their children's development. If the representation of dads with typically developing children in research continues to be limited, a logical extension to this is about the role of dads in relation to their children who have SEN/D, as well as their involvement in EI, given that it is ecologically significant to the development of their children with SEND (Guralnick, 2011). Research questions to guide this area might, for example, focus on aspects of dads' roles in families of children with SEND, the contributions of dads to EI programme outcomes, and the barriers to dads' involvement in EI.

Having provided the background information (i.e., historical perspective of fatherhood, and dads' contribution to typically developing children's development and learning) that underlies the central issue regarding dads' involvement in EI, the remainder of this article reviews the international research findings that explored dads' role and involvement in families of children with SEN/D within an EI context. The following sections present the method employed for conducting our literature search and then the findings of this literature review.

Literature Search Method

In advancing the traditional (and often less than exacting) approach to reviewing a body of published work, this literature review sought to develop a more structured and defensible approach to reviewing the literature in the area under investigation. To achieve this aim, the following generic steps associated with the Systematic Literature Review method, as detailed by O'Brien and McGuckin (2016), were implemented. The databases selected for the search included five pre-eminent databases of published research that were available to us (especially Education Full Text, PsycINFO, and Web of Science). Full access to these was provided by the Trinity College Dublin (TCD) library.

The focus of the review was to provide a comprehensive understanding of knowledge regarding the involvement of dads in the lives and education of their children with SEN/D within an EI context. A set of keywords and search criteria were developed for the database searches. For example, one set of search criteria for databases included the keywords "father* OR dad* OR male caregiver*" AND "involvement OR participation" AND "children OR child" AND "disability OR developmental delay OR special needs". The search for some databases yielded few results, while other databases such as the Education Resource Information Center (ERIC) database, Google Scholar, and the Web of Science yielded the predominant number of relevant publications. The initial search yielded 471 peer-reviewed articles with full-text availability. To refine the search, the keywords "early intervention OR early childhood intervention" were then entered to filter the search results. A total of 112 articles were thus identified. The authors independently removed duplicate records obtained from the search results, then screened the remainder based on their abstracts and/or full-length text with respect to two inclusion criteria, to include articles in relation to (a) in-EI context, and (b) families with children from birth to six years of age. At this stage of the

procedure, the authors reviewed two samples of publications. This resulted in an agreed list of 21 peer-reviewed articles published between 2001 and 2019 selected for literature review inclusion.

Results

Three themes emerged after reviewing the 21 papers related to dads' involvement in the lives and education of their children with SEN/D in an EI context. The first one considers the positive impact of dads' participation in EI on the outcome and efficacy of EI programmes provided for children with SEN/D and their families. The second theme explores the role of dads in families of children with SEN/D and how they contribute to family and child outcomes through different mechanisms. Finally, the third theme identifies those barriers and factors that can affect the involvement of dads in EI.

Outcome and Efficacy of Dads' Involvement in EI

The first theme that emerged from the literature review addressed the positive impact of involving dads directly in EI on the outcome of EI programmes. Significant differences in EI outcome between families with a dad involved in parenting intervention compared with families without a dad involved in parenting intervention were highlighted (Bagner, 2013; Bagner & Eyberg, 2003; Louis & Kumar, 2015; Zin & Nor, 2017). One study, for instance, examined the impact of dads' involvement on parent-child interaction therapy for children with oppositional defiant disorder (Bagner & Eyberg, 2003). A total of 107 families, including 56 dad-involved families, 16 dad-uninvolved families, and 35 dad-absent families participated in the study. While all groups showed positive progress during such an intervention, mums from dad-involved families reported better intervention outcomes than mums from dad-uninvolved families and dad-absent families. Additionally, the participation of dads was also found to be associated with better maintenance of intervention gains. For mums from both dads-uninvolved and dad-absent families, a significant decline was reported at a 4-month follow-up. In contrast, mums from dad-involved families maintained intervention gains.

Similarly, in a quasi-experimental study examining the impact of dads' participation in a parent-training intervention among 44 families of children with developmental delay and externalising behaviour problems, Bagner (2013) found that single-mother/mum families were significantly more likely to drop out of the intervention than two-parent families. For families who completed the training programme, results showed lower levels of behaviour problems among children in dad-involved families compared to families with non-participating dads. Another example is demonstrated in Louis and Kumar's (2015)'s study employing a randomised experimental research design examining the impact of a dad-mediated therapy intervention aimed at improving the play skills, affect, language, social skills, and behaviour among 30 clinically diagnosed children at the age of 3–5 years with autism spectrum disorder (ASD). Comparatively, differences in the play, language acquisition, social engagement, and behaviour between experimental and control group children indicate that dad-mediated therapeutic involvement could foster positive development in children with ASD and EI programme outcomes.

While some of the articles on the current theme revolved around comparing differences in parental intervention outcomes between families with and without a dad involved, others (Chen et al., 2017; Deng et al., 2018; Fox et al., 2015) explored how directly involving dads in EI programmes may, in turn, contribute to the development of dads' role identity and fathering behaviour, and lead to better family and child outcome. Such examples can be seen in a few studies (Chen et al., 2017; Deng et al., 2018; Fox et al., 2015) evaluating the impact of specific dad intervention programmes on fathering within the EI context. From a clinical perspective, in studies examining the effect of dad-infant skin-to-skin contact – an evidence-based intervention that benefits low birth weight/preterm infants –, Chen et al. (2017) and Deng et al. (2018) found that dad engagement in early dad-infant skin-to-skin contact intervention with both moderately pre-term infants and full-term infants could promote dad-infant attachment relationship as well as dads' role identity, and lead to more positive pre-term and full-term infant care behaviour.

To conclude, Fox et al.'s (2015) study, based in the US, drew a sample of 141 self-evaluation questionnaires of dads who were actively involved in or had recently transitioned from The Tennessee Early Intervention System (TEIS) provided for families of infants and toddlers with developmental delays and identifiable disabilities. Based on this sample, they showed that encouraging the involvement and participation of dads in EI programmes have an overall positive effect on dads' role identity variables (dads' role salience, satisfaction, and reflected appraisals), which in turn leads to subsequent fathering activities and optimal child outcome.

The Role of Dads in Families of Children with SEN/D

The role dads play in families of children with SEN/D was one of the most robust themes that emerged from the literature review. This theme provides a practical rationale for involving dads in EI and explains why such involvement could contribute to EI outcomes. Considering that families of children with SEN/D often suffer higher levels of parental stress and experience unique circumstances, a wide list of research addressed this critically important topic in two primary ways: mums' stress as predictors of the lack of efficacy in EI and dads' role in facilitating the well-being of families and their children with SEN/D.

Mums' Stress as a Predictor of the Lack of Efficacy in EI

High levels of parental stress proved to be a strong predictor of the lack of efficacy in EI programmes (Ingber & Most, 2012). Several studies suggest that mums tend to experience higher levels of stress than dads, given their more caregiving-oriented role in families of children with SEN/D (Bujnowska et al., 2019; Ingber & Most, 2012; Olsson & Hwang, 2001). For example, Bujnowska et al.'s (2019) recent study compared 167 parents of children with developmental delay to a group of 103 parents of children with typical development. That study indicated that mums of children with developmental delay had higher stress levels, particularly child-related, and future anxiety than dads of children with and without developmental delay. In another study exploring parental depression in families of children with intellectual disability and/or ASD, mums from 216 families reported higher levels of parental depression scores than dads. Single mums were found to be more vulnerable to severe depression than mums living with a husband or partner (Olsson & Hwang, 2001). Furthermore, in a recent systematic review and meta-analysis of the evidence

related to the mental health of dads compared with mums in families of children with intellectual disabilities, results indicated that mums experienced poorer mental health and well-being compared with dads (Dunn et al., 2019).

On the effect side, high levels of stress among mums were reported to have a direct influence on the mental health of dads of children with SEN/D (Giallo et al., 2015; Hastings et al., 2005). For instance, an Australian study exploring risk factors associated with 315 dads' mental health reported that dads' positive parenting experiences and stress levels were strongly associated with mums' mental health (Giallo et al., 2015). In other words, while mums may be particularly at risk for experiencing higher levels of child-related stress and depression because of the greater role they play in their child's primary care, dads tend to experience a more partner/relationship-related stress due to the mental health challenges of mums in families of children with SEND.

Taken together, the literature appears to suggest that a key to promoting optimal family well-being and patterns of family interaction is to support mums and help reduce their stress, anxiety, and depressive symptoms. In this case, dads – as one member of the immediate family – have been shown to have a particularly significant role to play in facilitating the well-being of families and their children with SEN/D (Cummings et al., 2017; Laxman et al., 2015; Simmerman et al., 2001).

Dads' Role in Facilitating the Well-Being of Families and Their Children with SEN/D.

In terms of addressing dads' contribution to family wellbeing, Laxman et al. (2015) quantitatively studied the association between dads' routine caregiving, literacy, and responsive caregiving involvement at 9 months and maternal depressive symptoms at 4 years in families of children with ASD. Findings indicated that dads' early literacy and responsive caregiving involvement were strongly associated with lower levels of depressive symptoms for mums of children with ASD. In the same vein, another longitudinal study conducted by Simmerman et al., (2001), which quantitatively explored dads' and mums' perceptions of dad involvement in families with young children with intellectual disabilities, also reported that mums' satisfaction with dads' help in the areas of playing, nurturing, discipline, and deciding on services, related more strongly to indicators of family well-being than the actual amount of help dads provided. In addition to the findings from the two quantitative studies, a recent qualitative study (Cummings et al., 2017) exploring parents' perspectives towards parental engagement with their infants and toddlers with SEN/D in rural families also showed positive outcomes regarding dads' involvement in childcare. Ten married mums out of 13 participating in focus group interviews identified the importance of dads' participation in family well-being and learning of their children. Mums with husbands or partners not involved reported it as a constraint to their children's development, parental engagement, and family well-being.

The findings reported in the above studies suggest that the role dads play in facilitating the enduring relationship in families of children with SEN/D is critically significant, given that high levels of parenting stress and negative family relationship have no positive intervention outcomes for children with SEN/D (Neece et al., 2012). Thus, directly involving dads in EI programmes may positively affect the entire family system and in turn may maximise the educational and experiential outcome for families and their children with SEN/D, as well as the effectiveness of EI programmes.

Barriers to Dads' Involvement in EI

Barriers affecting the involvement of dads in EI is the third and final theme that emerged from the literature review, and it is also the most under-researched topic relating to the area of dads' involvement in EI. However, although empirical research findings and existing literature are highly limited, several potential barriers that may affect the participation of dads in EI were highlighted in a few studies. For example, dads' work was identified as the main factor affecting involvement in McBride et al.'s (2017) study. Using a mixed-method approach, these authors examined the perceptions of EI service providers in terms of dad involvement. Results from the qualitative data indicated that the lack of dads' presence in EI services (e.g., meetings, appointments, parental training) was because they were working and thus it was difficult for EI professionals to build partnerships with dads. This finding was reflected in several studies (Ferguson, 2015; Kellar-Guenther et al., 2014; Parish & Cloud, 2006) examining parental engagement in EI services, where the division of labour was reported as a major contributor to the involvement of parents. While work was identified as a barrier to involvement, dads interviewed in Sicouri et al.'s (2018) study explained that this barrier was attributed to traditional gender roles regarding parenting. It was reported that dads perceived mums were "better" parents and felt that being a more actively involved dad conflicted with their belief about gender roles. Such findings fall in line with the literature on traditional gender roles at societal, family, and individual levels, where the dads are providers and mums are caregivers (Demos, 1982; Lamb, 1987; Pleck & Pleck, 1997).

The perceptions of EI professionals toward dad involvement were also indicated as a potential barrier in McBride et al.'s (2017) study, where EI professionals reported that they viewed dads as inappropriate and ineffective targets due to their lack of presence, which led them to provide more mum-focused or gendered services. Other researchers (Flippin & Crais, 2011; Raikes et al., 2005) also point to a slightly more complicated picture and indicate that this may be attributed to the lack of awareness among EI professionals of their perceptions and roles and how it might affect the participation of dads in EI, or indeed, to the lack of training to provide gender-sensitive services. For example, in a UK study exploring the patterns of engagement and non-engagement of young dads in EI and safeguarding work, Ferguson (2015) interviewed twenty-four "at-risk" dads (e.g., teenage dads, dads in prison) about their experiences with a home visitation EI programme in the UK. Striking findings indicated that some partial and non-engaged dads reported their annoyance with the ways professionals communicated with them by asking questions and making them feel embarrassed and vulnerable. For dads who were fully engaged, while positive experiences with professionals and services were reported, it was also indicated that EI professionals sometimes failed to understand their needs and to communicate with them effectively.

In McBride et al.'s (2017) study, EI professionals and service providers suggested that since EI is a female-dominated profession, dads often feel uncomfortable working with female professionals and taking directions and advice. In turn, professionals also reported that they found it difficult to communicate appropriately with dads or men after being involved in such a female working environment for many years.

Conclusion

The current literature review provides insight into the role and involvement of dads, and their contribution to family and child outcomes, particularly within the context of families of children with SEN/D and EI.

While the involvement of dads in EI service may make *a priori* contribution to the developmental outcome of the child and family, mums continue to be the predominant focus in EI research and EI service delivery. More knowledge regarding dads' expressed needs for support and perceived barriers to, and preferences for, EI services, as well as the adequacy of information support systems is needed. Their availability is critical in supporting EI professionals when developing services and initiatives for dads who might be struggling in their family context with children with SEN/D and EI.

With respect specifically to the potential barriers that may affect the participation of dads in EI services, a disconnection in knowledge, perceptions, and practice between dads and EI professionals regarding dads' involvement was highlighted. Thus, more research exploring the variations in stakeholders' perceptions of dads' involvement in EI is needed.

Finally, considering directly involving dads in EI services may ease the overall workload for mums, lead to reduced levels of stress and positive child and family outcome (Bujnowska et al., 2019; Ingber & Most, 2012; Olsson & Hwang, 2001), and further research exploring the views and perceptions of mums towards dads' involvement in EI would also be beneficial.

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