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Assessment of family relationships by mothers raising children with autism spectrum disorder

Ocena relacji w rodzinie przez matki wychowujące dzieci z zaburzeniami ze spektrum autyzmu

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Abstract

Aim. The aim of the work was to analyse the correlations between the evaluation of family relationships and positive life orientation, negative emotionality and social inhibition, the level of burnout, a sense of social support, as well as mental resilience (referred to as resilience) in mothers raising children diagnosed with autism spectrum disorder.

Methods and materials. The following tools were used in the work: a self-designed questionnaire based on which socio-demographic data and information on the surveyed women's family relationships were gathered, the P Scale by G. Caprara (2009), the DS-14 Scale by N. Ogińskiej-Bulik, Z. Juczyńskiego, and J. Denollet, the Burned-Out Scale by W. Okła and S. Steuden, the Social Support Scale by K. Kmiecik-Baran, the Resiliency Assessment Scale by N. Ogińska-Bulik and Z. Juczyński.

Results and conclusion. Over 91% of the surveyed mothers rated their family relationships as poor. According to the study's findings, there are strong correlations between the surveyed women's negative assessment of family relationships and the increased propensity to experience negative emotions, difficulty perceiving positive aspects of life, resignation from pursuing life goals and aspirations, low life satisfaction, loss of subjective commitment, reduction in the effectiveness of action and emotional control, reduction in interpersonal contacts, and increased physical fatigue. Strong correlations were also found between the negative assessment of relationships within the family by the studied mothers and low mental resilience and its indicators, such as low personal competences, low tolerance for negative emotions and failures, a pessimistic outlook on life, and the inability to mobilize oneself to cope constructively with challenging situations. Conversely, family relationships are positively assessed by the women who feel complete, approach life as a challenge, have high tolerance and mental resilience to failures and negative emotions, formulate life goals and believe in the possibility of achieving them, can see positive aspects of life.

Keywords: social support, burnout, resilience, family relationships, autism spectrum disorder.

Abstrakt

Cel. Celem pracy była analiza zależności między oceną relacji w rodzinie a pozytywną orientacją życiową, negatywną emocjonalnością i zahamowaniem społecznym, poziomem wypalenia się sił, poczuciem wsparcia społecznego oraz odpornością psychiczną matek wychowujących dzieci z zaburzeniami ze spektrum autyzmu (ASD).

Metody i materiały. W pracy zastosowano ankietę, na której podstawie zebrano dane socjodemograficzne oraz informacje dotyczące relacji w rodzinie badanych kobiet, Skalę P, autorstwa Giana Vittorio Caprara, w polskiej adaptacji Marioli Łaguny, Piotra Olesia i Doroty Filipiuk (2011), Skalę DS-14 autorstwa Niny Ogińskiej-Bulik, Zygfryda Juczyńskiego i Johana Denollet, Skalę Wypalenia się Sił, autorstwa Wiesławy Okły i Stanisławy Steuden, Skalę Wsparcia Społecznego autorstwa Krystyny Kmiecik-Baran oraz Skalę Pomiaru Prężności Psychicznej autorstwa Niny Ogińskiej-Bulik i Zygfryda Juczyńskiego.

Wyniki i wnioski. Ponad 91% badanych matek oceniało swoje relacje w rodzinie jako złe. Wyniki informują o występowaniu istotnych zależności między negatywną oceną relacji w rodzinie przez badane kobiety a nasiloną tendencją do doświadczania negatywnych emocji, trudnościami w dostrzeganiu pozytywnych aspektów życia, rezygnacją z realizacji życiowych celów i dążeń, niską satysfakcją z życia, utratą podmiotowego zaangażowania, obniżeniem efektywności działania i kontroli emocjonalnej,

zawężeniem kontaktów interpersonalnych oraz nasilonym zmęczeniem fizycznym. Znaczące zależności ujawniono również między negatywną oceną relacji w rodzinie przez badane matki a niska odpornościa (preżnościa) psychiczna i jej wskaźnikami: niskimi kompetencjami osobistymi, niską tolerancją negatywnych emocji oraz niepowodzeń, pesymistycznym nastawieniem do życia i ograniczoną zdolnościa mobilizowania się do konstruktywnego radzenia sobie w trudnych sytuacjach. Pozytywnie oceniają relacje w rodzinie kobiety, które czuja sie kompletne, traktuja życie jako wyzwanie, mają wysoką tolerancję i odporność psychiczną na niepowodzenia i negatywne emocje, formułuja życiowe cele i wierza w możliwość ich realizacji, potrafia dostrzegać pozytywne aspekty życia.

Słowa kluczowe: wsparcie społeczne, odporność psychiczna, zaburzenia ze spektrum autyzm, relacje w rodzinie, wypalenie sił.

Introduction

Upbringing a child with a disorder belonging to the autism spectrum (ASD) is a stressful factor that affects the daily functioning of the family and the relationships between its members (Kandel, Merrick, 2007). The natural consequence of such a situation is that parents are completely focused on the child with holistic developmental disorders, and the relationship between parents recedes into the background (Orlikowska, Bołtuć, 2018). Parents anxiously observe their child's development, symptoms, and difficulties (Kandel, Merrick, 2007). Research by Rayssa Pinto and team (2016) indicates that both the perception of the child's difficulties and the formation of family relationships are already influenced by the diagnosis process itself. Parents may perceive their child's diagnosis as a loss, questioning their parenting skills and competencies and the sense of investing effort in working with their child (Pisula, Mazur, 2007; Higgins, Bailey, & Pearce, 2005; Pinto et al., 2016). Daryl Higgins, Susan Bailey, and Julian Pearce (2005) note that 41% of caregivers of children with autism spectrum disorders experienced stress and 25% reported relationship problems in the family. An appropriate understanding of the child's difficulties, his/her symptoms related to autism spectrum disorders and acceptance of the child are extremely important for parents to successfully cope with the stress, intense emotions experienced, fear, and anxiety accompanying the observation of the child's emotional, social, cognitive, and physical development process. Sometimes, the situation of bringing up a child with ASD requires parents to change their priorities and confronts them with new challenges, such as the need to change jobs or the need for one of them to give up a career, with a consequent impact on the family's financial situation, an increase in stress levels and difficulties in relationships between family members (Pinto et al., 2016).

Jessica Hobson, Laura Tarver, Nicole Beurkens, and Peter Hobson (2015) as well as Khim Lynn Ooi, Yin Sin Ong, Sabrina Anne Jacob, and Tahir Mehmood Khan (2016) highlight that a child's heightened autism symptoms are associated with lower quality parent-child interactions, low parental engagement in these relationships, and impact on the daily functioning of all family members. A child with ASD's inability to establish social communication, lack of adequate response to other people, lack of interest in the world around them, and avoidance of physical and eye contact with others can cause parents to feel resigned, pessimistic, doubtful, confused, sad, disappointed, guilty, and consequently to feel that their need for emotional contact with their child is not being met (Pisula, Mazur, 2007; Higgins, Bailey, Pearce, 2005; Pinto et al., 2016; Pawłowska, Świerczyńska, 2021). R. Pinto and others (2016) highlight that some family members distance themselves from a child with autism due to negative prejudice. Proper relationships between children with ASD and their parents are associated with greater parental sensitivity to the child's needs and ensure that the child gains greater developmental achievements (Stuart, McGrew, 2009).

Bringing up a child with an autism spectrum disorder affects relationships between all family members, including the marital relationship between parents. Research conducted by Susan Gau et al. (2012) and Jennifer Brobst, James Clopton, and Susan Hendrick (2008) report that parents raising children with autism spectrum disorders experience lower levels of marital relationship satisfaction compared to parents of children without developmental disorders. According to Michael Saini and team (2015), the quality of the relationship between the parents is influenced by the tension experienced by the spouses as a result of – among other things – social withdrawal, the adoption of different parenting strategies and methods, different coping styles, a sense of reduced social support, and financial strain. The aforementioned situations may cause parents to feel emotionally burdened, develop conflictual relationships between family members and contribute to negative perceptions of the spouse (Hoffman, Sweeney, Hodge, Lopez-Wagner, & Looney, 2009; Stuart & McGrew, 2009; Seltzer et al., 2010). Caisa Lindström, Jan Åman, and Annika Norberg (2011) believe that satisfaction with the marital relationship and agreement on parenting rules, care of the child with autism and organisation of responsibilities in the family reduce the risk of burnout in parents.

Issues related to family adaptation to the situation of bringing up a child with a holistic developmental disorder, factors facilitating satisfaction with family relationships and marital harmony have been explored by Isack Kandel and Joav Merrick (2007), Jijhene Ben Thabet et al. (2013) and Bonnie Lashewicz, Nick Boettcher, Amanda Lo, Leah Shipton, and Beth Parrott (2018). These authors argue that identifying the needs of individual family members raising a child with ASD and identifying strategies to meet these needs determines the design and implementation of

effective rehabilitation for children with holistic developmental disorders and their integration into society. Factors enhancing parents' adaptability were the social support provided (Cristine Roberts, Jennifer Hunter, & An-Lin Cheng, 2017). Milica Pejovic-Milovancevic and others (2018) highlight that more than 90 % of parents of children with autism talked about the importance of the support received from school, doctors, therapists and, above all, from family members. Meanwhile, Huey-Ling Chiang et al. (2018) indicate that mothers of children with disorders belonging to the autism spectrum report experiencing – compared to mothers of children developing normally – less support from the family, and more problems regarding the functioning of the family system.

Long-term care of children with autism is often connected with a sense of fatigue, not only physical but also psychological, exhaustion of strength, feelings of isolation, loneliness or pointlessness of the parents' efforts (Dabrowska, 2005). Isabelle Roskam, Marie-Emilie Raes, and Moïra Mikolajczak (2017) and M. Mikolajczak and I. Roskam (2018) as well as M. Mikolajczak, Marie-Emilie Raes, Hervé Avalosse, and I. Roskam (2018), revealed that burnout occurs in 8 to 36% of parents. These authors describe that 3.5 million American parents currently suffer from burnout. In contrast, in Europe, burnout may have been experienced by 2 to 12% of parents (Roskam, Raes, & Mikolajczak, 2017; Mikolajczak, Roskam, 2018). Edyta Bujak (2013) draws attention to the risk of burnout syndrome in mothers raising a child with developmental dysfunctions. An important factor generating burnout syndrome is a lack of rest and stress relief, causing parents to feel permanently overtired and frustrated (Pisula, 1999). Parents presenting an increased level of perfectionism (akin to scrupulosity), difficulties in expressing emotions, reduced stress management skills and a desire to achieve perfect results with their child (without respecting their child's abilities and limitations) are most at risk of burnout (Lindström, Åman, & Norberg, 2011; Kawamoto, Furutani, & Alimardani, 2018).

According to Małgorzata Karwowska (2007), symptoms of burnout syndrome in parents have a negative impact on various aspects of family members' lives, both on marital relationships and on parent-child relationships as well as on parenting attitudes presented by parents. Ewa Pisula (1993, 1999) and Małgorzata Karwowska (2007) agree that the greatest risk of burnout occurs in people who experience difficult environmental conditions and have certain personality predispositions. These difficulties may intensify if the factors persist over a long time, in the absence of adequate social support. Meanwhile, Małgorzata Dąbrowska (2005) included among the most relevant indicators of burnout syndrome:

- a sense of parental incompetence,
- difficulties in dealing with problems independently,
- lowered mood,

- emotional tension,
- increased stress levels,
- decreased sense of responsibility,
- neglect of duties,
- reluctance to make an effort,
- emotional distance from the child,
- loss of bonds with relatives.

Ewa Pisula (1994) identified psychological factors influencing the emergence of burnout syndrome in parents of children with autism and Down's syndrome, which included: a sense of exhaustion due to the constant care of the child, a sense of isolation and lack of help, a lack of knowledge and competence in raising the child, a sense of lack of adequate support from public institutions for the situation as well as a sense of being disregarded, of indeterminacy concerning the child's condition and capabilities, and of total responsibility for the child's fate. In addition, parents experience frustration, physical exhaustion and an unfavourable home atmosphere (Pisula, 1994). The results of a study conducted by Wojciech Otrębski, Grzegorz Wiącek, and Anna Targońska (2011), which focused on burnout in mothers of children with autism, report that the loss of mothers' personal involvement is associated with an increase in behavioural difficulties in the child, and physical fatigue of the parent co-occurs with communication disorders (Otrebski, Wiacek, & Targońska, 2011). According to Małgorzata Sekułowicz, Piotr Kwiatkowski, Iris Manor-Binyamini, Krystyna Boroń-Krupińska, and Błażej Cieślik (2022), a high-level of emotional instability and conscientiousness in the mother may exacerbate communication problems in the family, lead to imbalance in the family system, mother's dissatisfaction with family life, and consequently will increase her risk of developing burnout syndrome. In the opinion of M. Sekułowicz, P. Kwiatkowski, I. Manor-Binyamini, K. Boroń-Krupińska, and B. Cieślik (2022), the mother's personality traits have a stronger impact on the occurrence of burnout in parents and family functioning than childcare difficulties.

Part of the parents of children with disorders belonging to the autism spectrum – despite adversity and unfavourable living conditions – cope with difficulties in a task-oriented manner, thanks to their competencies, which increases their resilience to difficult situations (Bekhet, Johnson, & Zauszniewski, 2012). Better adaptability of parents of children with disorders belonging to the autism spectrum and greater psychological resilience significantly contribute to better quality of their marital life, better well-being, less loneliness, greater life satisfaction, and better family functioning (Ekas, Whitman, 2010; Siman-Tov, Kaniel, 2011; Kuhn, Carter, 2006).

Aim of the study

The study aimed to analyse the relationship between family relationship assessment and positive life orientation, negative emotionality and social inhibition, levels of burnout, feelings of social support, and psychological resilience of mothers raising children with a diagnosis of a disorder belonging to the autism spectrum.

Responses were sought to the following research questions:

- Whether and what relationships exist between family relationship assessment and positive life orientation in women raising children with ASD?
- Whether and what relationships exist between family relationship assessment and negative emotionality and social inhibition in women raising children with ASD?
- Whether and what relationships exist between family relationship assessment and burnout in women raising children with ASD?
- Whether and what relationships exist between family relationship assessment and feelings of social support in women raising children with ASD?
- Whether and what relationships exist between family relationship assessment and psychological resilience in women raising children with ASD?

Methods

The following research methods were used in this study:

- A self-administered questionnaire was used to collect socio-demographic data of mothers of children with ASD and information on relationships in the family (based on the question "How do you assess relationships in your family?"), the child's medical diagnosis, the course of the child's development and the forms of therapy the child received. Relationships in the family were rated by the respondents on a four-point scale, where 1 denoted "very good," 2 "good," 3 "bad," and 4 "very bad" relationships.
- P scale (the positive orientation) by G. Caprara (2009) in the Polish adaptation by M. Łaguna, P. Oleś, and D. Filipiuk (2011). The scale consists of eight diagnostic statements. The respondent answers on a five-point scale where 1 means "strongly disagree" and 5 means "strongly agree." One of the statements is reversed. The score is the sum of the points. The higher the score, the higher the level of positive orientation. The range of raw scores is from 8 to 40. Positive orientation is the basic tendency to notice and attach importance to positive aspects of life, experiences and oneself. It is largely responsible for adaptive functioning, as it signifies a natural tendency towards positive self-appraisal, high life satisfaction

- and a positive assessment of the chances of achieving goals. This, in turn, results in a commitment to the pursuit of goals and a high quality of life (Caprara, 2009; Caprara et al., 2012; Łaguna, Oleś, & Filipiuk, 2011).
- DS-14 scale (the scale to measure the type D personality) by N. Ogińska-Bulik, Z. Juczyński, and J. Denollet, consisting of 14 statements. Responses are given on a five-point scale, where 0 means "definitely no" and 4 means "definitely yes." This scale contains two subscales. The first relates to negative emotionality and refers to the tendency to experience negative emotions such as lowered mood, anxiety, anger or hostility. The second subscale social inhibition refers to the avoidance of potential risks associated with social relationships. Individuals with high scores on this scale often experience "inhibition," emotional tension, embarrassment, and insecurity in their relationships with others. Both of these traits together negative emotionality and social inhibition are associated with perceiving the environment as not providing social support (Juczyński, Ogińska-Bulik, 2009).
- Strength Burnout Scale by W. Okła and S. Steuden (Steuden, Okła, 1998a; Steuden, Okła, 1998b). The scale consists of 66 questions comprising 5 scales:
 - 1. reduced emotional control,
 - 2. restricted interpersonal contacts,
 - 3. reduced self-efficacy,
 - 4. loss of subjective commitment,
 - 5. physical fatigue.

The total score is the sum of the scores from all five scales. The α -Cronbach coefficient for the entire scale was 0.95 (Steuden, Okla, 1998b).

- Social Support Scale by K. Kmiecik-Baran (1995). The scale consists of 24 statements and allows the identification of 4 categories of support. Each type of support is described by 6 statements. Statements from 1 to 6 characterise informational support, from 7 to 12 instrumental support, from 13 to 18 valuational support, from 19 to 24 emotional support. Respondents rate the support they receive on a five-point scale (Kmiecik-Baran, 1995).
- Resilience Measurement Scale by N. Ogińska-Bulik and Z. Juczyński. The scale (SPP-25) is constructed from 25 statements concerning various personality traits that make up mental resilience, otherwise known as psychological resilience, which is important in the process of coping effectively with both traumatic events and everyday stress. The scale allows the measurement of the overall level of resilience, considered as a personality trait, and the five factors comprising it, such as:
 - 1. perseverance and determination in action,
 - 2. openness to new experiences and a sense of humour,

- 3. personal competence to cope and tolerance of negative emotions,
- 4. tolerance of setbacks and treating life as a challenge,
- 5. optimistic attitude to life and ability to mobilise oneself in difficult situations (Ogińska-Bulik, Juczyński, 2008).

Participants respond to the statements by marking a response on a five-point Likert-type scale with scores ranging from 0 ("definitely no") to 4 ("definitely yes"). The higher the score, the higher the statement of resilience. An overall score is calculated by summing the scores from the five scales. Reliability measured by the α -Cronbach coefficient is 0.89. The absolute stability of the scale measured by the retest method after four weeks was 0.85 (Ogińska-Bulik, Juczyński, 2008).

Study group

The study included a group of 70 women bringing up children with autism spectrum disorders (ASD), according to DSM-5 and ICD-11 criteria. Children with the listed disorders belonging to the autism spectrum (according to DSM-V) are between 5 and 16 years old. The mean age of the mothers surveyed was 38.77. There are 31 (44.29%) mothers living in rural areas and 39 (55.71%) in urban areas. Vocational education was obtained by 11 (15.71%) women, secondary education by 28 (40.00%), and 31 (44.29%) higher education. There are 34 (48.57%) mothers who are economically active, 2 (2.86%) are on a pension and 34 (48.57%) are not working by choice. There are 10 (14.29%) mothers bringing up a child alone and 60 (85.71%) mothers bringing up a child together with their husband. For 34 (48.57) of the women surveyed, a child with an autism spectrum disorder is an only child.

Study procedure

The study was approved by the Bioethics Committee at the Medical University of Lublin (no. KE-0254/3/2020). People who agreed to the study were given a set of questionnaires. In addition, participants were informed that they could seek clarification from a psychologist at any time about questions concerning the study. The female respondents completed the questionnaires individually at the counselling centre but also had the option of completing them at their place of residence. Each participant received material including instructions, a demographic questionnaire and a set of questionnaires described above. The research was

a voluntary activity. Respondents had the opportunity to ask for psychological help if the need arose.

Statistical methods

The relations between family relationships and positive orientation, negative emotionality and social inhibition, sense of power burnout, sense of social support, and psychological resilience in the study mothers were determined using Kendall's non-parametric tau-c test. However, this test was used because the correlated variables are ordinal. In addition, only six women rated relationships in the family as good, while 32 rated them as bad and 32 as very bad.

Results

To respond to the research problems formulated in the study, correlations between family relationship assessment and positive orientation, negative emotionality and social inhibition, sense of power burnout, sense of social support, and psychological resilience in the mothers surveyed were analysed sequentially.

Correlations coefficients of Kendall's tau-c calculated between the assessment of relationships in the family and scores on the P Scale by G. Caprar in the Polish adaptation by M. Laguna, P. Oleś, and D. Filipiuk are presented in Table 1.

Table 1

Correlation coefficients between family relationship assessment and P Scale scores

P Scale	Relationships in the family
positive orientation	0.18

Note: p < 0.05 *p < 0.01 **p < 0.001.

Source: Author's own study.

The results report a lack of statistically significant correlations between the assessment of relationships in the family and positive orientation in the respondents.

Kendall's tau-c correlation coefficients obtained between the assessment of relationships in the family and scores on the DS-14 Scale by N. Ogińska-Bulik, Z. Juczyński and J. Denollet are presented in Table 2.

Table 2 Correlation coefficients between assessments of relationships in the family and DS-14 Scale scores

Skala DS 14	Relacje w rodzinie
Negative emotionality	-0.30**
Social inhibition	-0.13

Note: p < 0.05 **p < 0.01 ***p < 0.001.

Source: Author's own study.

Significant correlations were revealed between the negative assessment of relationships in the family by the mothers surveyed and a tendency to experience strong negative emotions (anxiety, anger, hostility), a tendency to worry, and a catastrophic assessment of reality and most events as threatening.

Next, Kendall's tau-c correlation coefficients were calculated between the study women's assessment of relationships in the family and scores on the Strength Burnout Scale by W. Okła and S. Steuden (Table 3).

Table 3 Correlation coefficients between assessments of relationships in the family and Strength Burnout Scale scores

Strength Burnout Scale	Relationships in the family
Reduction in emotional control	-0.28**
Loss of subjective (personal) commitment	-0.37***
Reduction in commitment	-0.31***
Narrowing of interpersonal contacts	-0.31***
Physical fatigue	-0.23**
Overall outcome	-0.33***

Note: p < 0.05 **p < 0.01 ***p < 0.001.

Source: Author's own study.

The results obtained report the presence of significant correlations between the negative assessment of relationships in the family by the women surveyed and loss of subjective (personal) commitment, reduced self-efficacy and emotional control, narrowing of interpersonal contacts, and increased physical fatigue.

Kendall's tau-c correlation coefficients between family relationship assessment and scores on the Social Support Scale by K. Kmiecik-Baran are included in Table 4.

Table 4

Correlation coefficients between assessment of relationships in the family and the Social Support Scale

Social Support Scale	Relationships in the family
Emotional support	0.09
Valuing support	0.06
Instrumental support	0.18*
Informational support	0.17
Overall result	0.17

Note: *p < 0.05 **p < 0.01 ***p < 0.001.

Source: Author's own study.

Statistically significant correlations are found between the surveyed women's negative assessment of relationships in the family and the feeling of receiving insufficient instrumental support, in the form of concrete help, for example at work, financial support, or a favour provided directly.

Kendall's tau-c correlation coefficients between the assessment of relationships in the family and scores on the Resilience Measurement Scale by N. Ogińska-Bulik and Z. Juczyński are presented in Table 5.

Table 5
Correlation coefficients calculated between assessment of relationships in the family and adaptive capacity measured by the Resilience Measurement Scale

Resilience Measurement Scale	Relationships in the family
Perseverance and determination	0.20*
Openness to new experiences and a sense of humour	0.21*
Personal competence and tolerance of negative emotions	0.27***
Tolerance for failure and treating life as a challenge	0.28***
Optimistic attitude to life and ability to mobilise in difficult situations	0.28***
Overall score	0.29***

Note: *p < 0.05 **p < 0.01 ***p < 0.001.

Source: Author's own study.

The correlation results report statistically significant correlations between the negative assessment of relationships in the family by the mothers surveyed and low psychological resilience and its indicators:

- low personal competence,
- low tolerance for negative emotions and failures,
- pessimistic attitude to life,
- lack of ability to mobilise themselves to deal constructively with difficult situations

Negative perceptions of relationships in the family in the respondents are furthermore associated with low persistence and determination in action and a low appreciation of life as a challenge. Significant correlations were obtained between the surveyed women's positive assessment of relationships in the family and a sense of competence, treating life as a challenge, high tolerance for failure and negative emotions, optimism as well as good adaptability.

Discussion

The statistical analyses conducted allowed the authors of this paper to answer the research problems formulated in the study. At the same time, it revealed that 91.43% of the surveyed women assessed the relationships in their family as "bad or very bad," and only 8.57% thought that these relationships were "good." The results obtained testify to the existence of significant correlations between a negative assessment of relationships in the family – as included in the perception of the mothers surveyed – and a high level of negative emotionality understood as a tendency to react with lowered mood, anxiety, hostility, an increased sense of burnout, a low sense of instrumental support and a low level of psychological resilience. Mothers who feel they receive insufficient help and support, have difficulty controlling their emotions and coping constructively with stress, have a low tolerance for failure, feel incompetent, reduce their interpersonal contacts and experience increased physical fatigue – they negatively assess their relationships within the family. The respondents' negative assessment of family relationships is also connected with adaptation difficulties to the life situation, pessimism, a tendency to worry and the interpretation of most events as threatening. It should be emphasised that adaptation difficulties, low tolerance for failure and negative emotions, feelings of burnout, threat, anxiety, and lack of social support in the mothers surveyed may intensify their negative assessment of relationships in the family. At the same time, it can be expected that the dissatisfaction of the surveyed women with their relationships in the family will contribute to feelings of burnout, experiencing negative emotions, lack of competence, and difficulties in adaptive coping with everyday life problems.

These findings are consistent with data reported by other authors (Chiang et al., 2018), who indicate that mothers of children with disorders belonging to the autism spectrum experience less support from the family, and more problems in the functioning of the family system, than mothers of children developing typically. Stacey Grebe, Sarah Mire, Hanjoe Kim, and Milena Keller-Margulis (2022) believe that the reason for dissatisfaction in relationships between parents of children with ASD may be because of differences regarding their perceptions of their child's disability. I. Kandel and J. Merrick (2007) and D. Higgins, S. Bailey, and J. Pearce (2005) highlight that a child's developmental disorder is a stressor that affects the day-to-day functioning and relationships of family members and relationship difficulties between parents. How parents cope with these stressful, difficult situations and problems of daily life depends on their personality traits and the social support experienced, factors that were explored in this paper.

A sense of burnout can also harm the relationships and well-being of parents of children with autism. Feelings of burnout can lead to a decrease in the commitment and attention a parent gives to a child with autism, the occurrence of conflict and tension in the marital relationship, and a decrease in the quality of the relationship with the child. Parents who experience strength burnout may be stricter, and less understanding towards the behaviours and needs of the child with autism (Pawłowska, Świerczyńska, 2021; Gau et al., 2012; Brobst, Clopton, & Hendrick, 2008). Parents' intensified sense of burnout can affect the neglect of their needs, and contribute to their well-being and their relationship with both their child and life partner (Hoffman, Sweeney, Hodge, Lopez-Wagner, & Looney, 2009; Stuart, McGrew, 2009; Seltzer et al., 2010). Charles Hoffman, Dwight Sweeney, Danelle Hodge, Muriel Lopez-Wagner, and Lisa Looney (2009) indicate a significant connection between autism in children and negative perceptions of the spouse as well as the degree of closeness and level of attachment between mother and child. The severity of the child's difficulties is associated with higher levels of strain on parents and the family system.

The results described in this paper, indicate significant correlations between negative assessment of relationships in the family and increased feelings of burnout, expressed through loss of subjective commitment, reduced emotional control, self-efficacy, narrowing of social contacts, and physical fatigue, correspond with the opinions of Małgorzata Dąbrowska (2005) and Małgorzata Sekułowicz and Piotr Kwiatkowski (2013). Difficulties in communication in

children with autism may foster an increased sense of lack of emotional contact with the child, affecting the deterioration of the parent-child relationship. Mothers who do not receive sufficient instrumental support in the form of concrete help, and who experience burnout syndrome, may accuse members of their immediate family, blaming them for their negative emotional states (Pisula, 1999; Dabrowska, 2005; Maciarz, 2009). The sense of frustration caused by these factors may negatively affect the relationship with the child, and provide grounds for building emotional distance towards the child, conflicts between family members, loss of intra-family bonds as well as extra-family relations, lack of interest beyond the child's illness, intensify the sense of resignation, loneliness, dissatisfaction with their life situation (Pisula, 1999; Bujak, 2013; Dąbrowska, 2005). The lack of social support adequate to the situation and the perception of an unfavourable atmosphere at home are, according to Ewa Pisula (1994), the reasons for the development of burnout syndrome in parents of children with autism. M. Mikolajczak and I. Roskam (2018), Sarah Le Vigouroux, Celine Scola, Marie- Emilie Raes, M. Mikolajczak, and I. Roskam (2017) as well as Sarah Le Vigouroux and Celine Scola (2018) consider that special attention should be drawn to the emotional instability (that is, neuroticism) of mothers, which is one of the most important risk factors for burnout in parents. The authors emphasise that emotionally unstable parents, due to reduced emotion and impulse control, will react more intensely to life events. The specific characteristics of the child, meanwhile, require parents to be more emotionally controlled, and involved, which may also increase the risk of burnout. In addition, the parents' personality traits, especially emotional stability, conscientiousness, and agreeableness, determine the parenting strategies that they use, which influence the children's personality development and the quality of the parent-child relationship (Denissen, van Aken, Dubas, 2009; Schofield, Conger, Donnellan, Jochem, & Conger, 2012)

It is worth noting that not all parents of children with autism experience burnout. There are also protective factors, such as social support, access to medical services and specialist support, and coping skills, which can help parents to strengthen their resilience and adapt to the challenges of bringing up their child. The results obtained in this study highlight the need to extend therapy, and psychological support not only to children with autism spectrum disorders but also to their parents. Often the whole attention of both parents, psychologists and doctors is focused on helping the child with the discussed disorders. It should be noted that the parents' perception of the child's problems affects the therapy process and many aspects of the family members' lives (Hebert, Koulouglioti, 2010; Mire, Gealy, Kubiszyn, Burridge, & Goin-Kochel, 2017).

The results presented in this paper indicate the psychological problems that mothers bringing up children with ASD have to confront. Help provided to parents, psychological support can strengthen their sense of competence, psychological resilience, and control of emotions, facilitate adaptation to a difficult situation, prevent the emergence of a sense of resignation, pessimism, lack of perspectives, burnout, and, consequently, prevent the emergence of negative relationships both with the child with ASD diagnosis, with the partner and with other family members. The ability of parents of children with ASD to adapt well to difficult situations, their psychological resilience significantly improves the quality of their marital relationships (Siman-Tov, Kaniel, 2011), well-being (Kuhn, Carter, 2006) increases life satisfaction (Ekas, Whitman, 2010), reduces feelings of loneliness and improves family functioning (Halsteada, Ekas, Hastings, & Griffith, 2018). The results of the statistical analyses reported in this paper indicate that helping a child with any disorder, illness, or disability should be tantamount to psychological support provided at the same time to his/ her parents, as the success of both the treatment and the rehabilitation process of the child depends on them. It should be noted that the surveyed mothers who felt competent, mobilised themselves in difficult situations, had a high tolerance for setbacks and negative emotions, a sense of social support, were optimistic about life, resistant to difficult situations and – as a consequence – had a positive view of relationships in the family. It is therefore important to pay attention to the assessment of relationships in the family by those bringing up children with disorders belonging to the autism spectrum. It is on these relationships that the sense of social support received will depend, which helps to cope with difficult situations, to mobilise for action, to overcome difficulties, to become resilient and not to react with a sense of burnout.

Conclusion

The results presented in this paper provide information on the existence of significant relationships between the negative assessment of relationships in the family by the women studied and an increased tendency to experience negative emotions, mainly anxiety, a sense of lack of social support, strength burnout, and low psychological resilience. The negative assessment of relationships within the family in mothers of children with ASD is significantly influenced by low emotional control, feelings of lack of competence, self-efficacy, threat, increased physical fatigue, reduced social relationships, pessimistic attitudes towards life, and difficulties in mobilising themselves to deal constructively

with the problems that life brings. The commitment, sense of self-efficacy, competence, good emotional control, psychological resilience, treating life as a challenge, high tolerance for failure and negative emotions, optimism, and sufficient level of instrumental support felt by mothers bringing up a child with ASD have a positive impact on their relationships both with their child and with other family members.

References

- Barroso, N. E., Mendez, L., Graziano, P. A., & Bagner, D. M. (2018). Parenting stress through the lens of different clinical groups: A systematic review & meta-analysis. *Journal of Abnormal Child Psychology*, 46(3), 449–61.
- Bekhet, A. K., Johnson, N. L., & Zauszniewski, J. A. (2012). Resilience in family members of persons with autism spectrum disorder: A Review of the Literature. *Issues in Mental Health Nursing*, 33(10), 650–656. DOI: 10.3109/01612840.2012.671441.
- Ben Thabet, J., Sallemi, R., Hasïri, I., Zouari, L., Kamoun, F., Zouari, N., Triki, C., & Maâlej, M., (2013). Répercussions psycho-affectives du handicap de l'enfant sur les parents = Psycho-emotional impact of a child's disability on parents. *Archives de Pédiatrie*, 20(1), 9–16. DOI: 10.1016/j.arcped.2012.10.024.
- Brobst, J. B., Clopton, J. R., & Hendrick, S. S. (2008). Parenting children with autism spectrum disorders: The couple's relationship. *Focus on Autism and Other Developmental Disabilities*, *24*, 38–49. DOI: 10.1177/1088357608323699.
- Caprara, G. V. (2009). Positive orientation: Turning potentials into optimal functioning. *The Bulletin of the European Health Psychologist*, *11(3)*, 46–48.
- Caprara, G. V., Alessandri, G., Trommsdorff, G., Heikamp, T., Yamaguchi, S., & Suzuki, F. (2012). Positive orientation across three cultures. *Journal of Cross-Cultural Psychology*, 43(1), 77–83. DOI: 10.1177/0022022111422257.
- Chiang, H. L., Kao, W. C., Chou, M. C., Chou, W. J., Chiu, Y. N., Wu, Y. Y., & Gau, S. S. F. (2018). School dysfunction in youth with autistic spectrum disorder in Taiwan: The effect of subtype and ADHD. *Autism Research*, 11(6), 857–869. DOI: 10.1002/aur.1923.
- Craig, F., Operto, F. F., De Giacomo, A., Margari, L., Frolli, A., Conson, M., Ivagnes, S., Monaco, M., & Margari, F., (2016). Parenting stress among parents of children with neurodevelopmental disorders. *Psychiatry Research*, *242*, 121–29. DOI: 10.1016/j.psychres.2016.05.016.

- Dąbrowska, M. (2005). Zjawisko wypalenia wśród matek dzieci niepełnosprawnych [Burnout among mothers of children with disabilities]. Kraków: Oficyna Wydawnicza Impuls.
- Denissen, J. J. A., van Aken, M. A. G., & Dubas, J. S. (2009). It takes two to tango: How parents' and adolescents' personalities link to the quality of their mutual relationship. *Developmental Psychology*, 45(4), 928–941. DOI: 10.1037/a0016230.
- Ekas, N., Whitman, T. L. (2010). Autism symptom topography and maternal socioemotional functioning. *American Journal on Intellectual and Developmental Disabilities*, 115(3), 234–249. DOI: 10.1352/1944-7558-115.3.234.
- Gau, S. S., Chou, M., Chiang, H., Lee, J., Wong, C., Chou, W., & Wu, Y. (2012). Parental adjustment, marital relationship, and family function in families of children with autism. *Research in Autism Spectrum Disorders*, 6(1), 263–270. DOI: 10.1016/j.rasd.2011.05.007.
- Giovagnoli, G., Postorino, V., Fatta, L. M., Sanges, V., De Peppo, L., Vassena, L., De Rose, P., Vicari, S., & Mazzone, L. (2015). Behavioural and emotional profile and parental stress in preschool children with Autism Spectrum Disorder. *Research in Developmental Disabilities*, 45–46, 411–421. DOI: 10.1016/j. ridd.2015.08.006.
- Gray, D. E. (2003). Gender and coping: The parents of children with high functioning autism. *Social Science & Medicine*, 56(3), 631–642. DOI: 10.1016/S0277-9536(02)00059-X.
- Grebe, S. C., Mire, S. S., Kim, H., & Keller-Margulis, M. A. (2022). Comparing fathers' and mothers' perspectives about their child's Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, *52*, 1841–1854. DOI: 10.1007/s10803-021-05077-7.
- Halstead, E., Ekas, N., Hastings, R. P., & Griffith, G. M. (2018). Associations between resilience and the well-being of mothers of children with Autism Spectrum Disorder and other developmental disabilities. *Journal of Autism and Developmental Disorders*, 48(4), 1108–1121. DOI: 10.1007/s10803-017-3447-z.
- Hebert, E. B., Koulouglioti, C. (2010). Parental beliefs about cause and course of their child's autism and outcomes of their beliefs: A review of the literature. *Issues in Comprehensive Pediatric Nursing*, 33(3), 149–163. DOI: 10.3109/01460862.2010.498331.
- Higgins, D. J., Bailey, S. R., & Pearce, J. C. (2005). Factors associated with functioning style and coping strategies of families with a child with an autism spectrum disorder. *Autism*, *9*, 125–137. DOI: 10.1177/1362361305051403.

- Hobson, J. A., Tarver, L., Beurkens, N., & Hobson, P. R. (2015). The relation between severity of autism and caregiver-child interaction: A study in the context of relationship development intervention. *Journal of Abnormal Child Psychology*, 44(4), 745–755. DOI: 10.1007/s10802-015-0067-y.
- Hoffman, C. D., Sweeney, D. P., Hodge, D., Lopez-Wagner, M. C., & Looney, L. (2009). Parenting stress and closeness: Mothers of typically developing children and mothers of children with autism. *Focus on Autism and Other Developmental Disabilities*, 24(3), 178–187. DOI: 10.1177/1088357609338715.
- Juczyński, Z., Ogińska-Bulik, N. (2009). *Narzędzia do pomiaru stresu i radzenia sobie ze stresem* [Stress measurement and coping tools]. Warszawa: Polskie Towarzystwo Psychologiczne. Pracownia Testów Psychologicznych.
- Kandel, I., Merrick, J. (2007). The child with a disability: Parental acceptance, management and coping. *The Scientific World Journal*, 7, 1799–1809. DOI: 10.1100/tsw.2007.265.
- Karwowska, M. (2007). *Macierzyństwo wobec dziecka niepełnosprawnego intelektualnie* [Motherhood towards a child with intellectual disabilities]. Bydgoszcz: Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Kawamoto, T., Furutani, K., & Alimardani, M. (2018). Preliminary validation of Japanese version of the parental burnout inventory and its relationship with perfectionism. *Frontiers in Psychology*, 9, 970. DOI: 10.3389/fpsyg.2018.00970.
- Kiami, S. R., Goodgold, S. (2017). Support needs and coping strategies as predictors of stress level among mothers of children with autism spectrum disorder. *Autism Research and Treatment*, *2*, 1–10. DOI: 10.1155/2017/8685950._
- Kmiecik-Baran, K. (1995). Skala Wsparcia Społecznego: Teoria i właściwości psychometryczne [The Social Support Scale: Theory and psychometric properties]. *Przegląd Psychologiczny*, *38*(1/2), 201–214.
- Kuhn, J. C., Carter, A. S. (2006). Maternal self-efficacy and associated parenting cognitions among mothers of children with autism. *American Journal of Orthop*sychiatry, 76(4), 564–575. DOI: 10.1037/0002-9432.76.4.564.
- Le Vigouroux, S., Scola, C., Raes, M.-E., Mikolajczak, M., & Roskam, I. (2017). The big five personality traits and parental burnout: Protective and risk factors. *Personality and Individual Differences, 119*, 216–219. DOI: 10.1016/j. paid.2017.07.023.
- Le Vigouroux, S., Scola, C. (2018). Differences in parental burnout: Influence of demographic factors and personality of parents and children. *Frontiers in Psychology*, *9*, 887. DOI: 10.3389/fpsyg.2018.00887.

- Leshewicz, B., Boettcher, N., Lo, A., Shipton, L., & Parrott, B. (2018). Fathers raising children with Autism Spectrum Disorder: Stories of marital stability as key to parenting success. *Issues in Mental Health Nursing*, *39*(9), 786–794. DOI: 10.1080/01612840.2018.1466943.
- Lindström, C., Åman, J., & Norberg, A. L. (2011). Parental burnout in relation to sociodemographic, psychosocial and personality factors as well as disease duration and glycaemic control in children with Type 1 diabetes mellitus. *Acta Paediatrica*, 100(7), 1011–1017. DOI: 10.1111/j.1651-2227.2011.02198.x.
- Łaguna, M., Oleś, P., Filipiuk, D. (2011). Orientacja pozytywna i jej pomiar: Polska adaptacja skali orientacji pozytywnej [Positive orientation and its measure: Polish adaptaion of the positivity scale]. *Psychological Studies*, 49(4), 47–54.
- May, C., Fletcher, R., Dempsey, I., & Newman, L. (2015). Modeling relations among coparenting quality, autism-specific parenting self-efficacy, and parenting stress in mothers and fathers of children with ASD. *Parenting: Science & Practice*, 15(2), 119–133. DOI: 10.1080/15295192.2015.1020145.
- Mikolajczak, M., Raes, M.-E., Avalosse, H., & Roskam, I. (2018). Exhausted parents: Sociodemographic, child-related, parent-related, parenting and family-functioning correlates of parental burnout. *Journal of Child and Family Studies*, *27(3)*, 602–614. DOI: 10.1007/s10826-017-0892-4.
- Mikolajczak, M., Roskam, I. (2018). A theoretical and clinical framework for parental burnout: The balance between risks and resources (BR²). *Frontiers in Psychology*, *9*, 886. DOI: 10.3389/fpsyg.2018.00886.
- Mire, S. S., Gealy, W., Kubiszyn, T., Burridge, A. B., & Goin-Kochel, R. P. (2017). Parent perceptions about autism spectrum disorder influence treatment choices. *Focus on Autism and Other Developmental Disabilities*, *32(4)*, 305–318. DOI: 10.1177/1088357615610547.
- Ogińska-Bulik, N., Juczyński, Z. (2008). Skala pomiaru prężności SPP-25 [Pressure measurement scale SPP-25]. *Nowiny Psychologiczne*, *3*, 39–56.
- Ooi, K. L., Ong, Y. S., Jacob, S. A., & Khan, T. M. (2016). A meta-synthesis on parenting a child with autism. *Neuropsychiatric Disease and Treatment*, 12, 745–762. DOI: 10.2147/NDT.S100634.
- Orlikowska, M., Bołtuć, I. (2018). Rodzicielstwo w rodzinie z dzieckiem z niepełnosprawnością intelektualną [Parenting in a family with a disabled intellectually child]. *Acta Scientifica Academiae Ostroviensis: Sectio A, Nauki Humanistyczne, Społeczne i Techniczne, 12(2)*, 327–340.
- Otrębski, W., Wiącek, G., & Targońska, A. (2011). Zespół wypalenia się sił, jego korelaty i sposoby radzenia sobie z nim u rodziców dzieci z autyzmem [Burnout

- syndrome, its correlates and ways of coping in parents of children with autism]. In: A. Bartoszek (Ed.), *Osoby niepełnosprawne a życie rodzinne* (pp. 97–112). Katowice: Wydział Teologiczny Uniwersytetu Śląskiego, Księgarnia św. Jacka.
- Pawłowska, B., Świerczyńska, J. (2021) Correlation between the assessment of family relations and psychological factors in mothers of children diagnosed with autism and Asperger's syndrome. *Current Problems of Psychiatry*, 22(4), 270–283. DOI: 10.2478/cpp-2021-0019.
- Pejovic-Milovancevic, M., Stankovic, M., Mitkovic-Voncina, M., Rudic, N., Grujicic, R., Herrera, A.S., Stojanovic, A., Nedovic, B., Shih, A., Mandic-Maravic, V., & Daniels, A. (2018). Perceptions on support, challenges and needs among parents of children with autism: The Serbian experience. *Psychiatria Danubina*, 30(6), 354–364.
- Pinto, R. N. M., Torquato, I. M. B., Collet, N., Reichert, A. P. da Souza, Neto V. L de, & Saraiva A. M. (2016). Autismo infantil: Impacto do diagnóstico e repercussões nas relações familiars [Childhood autism: Impact of diagnosis and repercussions on family relationships]. Revista Gaúcha de Enfermagem, 37(3), e61572. DOI: 10.1590/1983-1447.2016.03.61572.
- Pisula, E. (1993). Stres rodzicielski związany z wychowywaniem dzieci autystycznych i z zespołem Downa [Parental stress related to raising children with autism and Down syndrome]. *Psychologia Wychowawcza*, *36*(1), 44–52.
- Pisula, E. (1994). Wiek dziecka a stres rodzicielski u osób wychowujących dzieci autystyczne [Child age and parental stress in parenting autistic children]. *Roczniki Pedagogiki Specjalnej*, *5*, 118–127.
- Pisula, E. (1999). Dzieci autystyczne [Autistic children]. In: I. Obuchowska (Ed.), *Dziecko niepełnosprawne w rodzinie: Praca zbiorowa* (pp. 294–315). Warszawa: Wydawnictwa Szkolne i Pedagogiczne.
- Pisula, E., Mazur, A. (2007). Jak matki postrzegają swoje dzieci z autyzmem? Jakościowa analiza wypowiedzi matek [How do mothers perceive their children with autism? A qualitative analysis of mothers' statements]. In: E. Pisula, D. Danielewicz (Eds.), *Rodzina z dzieckiem z niepełnosprawnością* (pp. 47–72). Gdańsk: Wydawnictwo Harmonia.
- Roberts, C. A., Hunter, J., & Cheng, A. L. (2017). Resilience in families of children with autism and sleep problems using mixed methods. *Journal of Pediatric Nursing*, *37*, e2–e9. DOI: 10.1016/j.pedn.2017.08.030.
- Roskam, I., Raes, M.-E., & Mikolajczak, M. (2017). Exhausted parents: Development and preliminary validation of the parental burnout inventory. *Frontiers in Psychology*, *8*, 163. DOI: 10.3389/fpsyg.2017.00163.

- Saini, M., Stoddart, K. P., Gibson, M., Morris, R., Barrett, D., Muskat, B., Nicholas, D., Rampton, G., & Zwaigenbaum, L. (2015). Couple relationships among parents of children and adolescents with Autism Spectrum Disorder: Findings from a scoping review of the literature. *Research in Autism Spectrum Disorders*, 17, 142–157. DOI: 10.1016/j.rasd.2015.06.014.
- Schofield, T. J., Conger, R. D., Donnellan, M. B., Jochem, R., & Conger, K. J. (2012). Parent personality and positive parenting as predictors of positive adolescent personality development over time. *Merrill-Palmer Quarterly*, *58(2)*, 255–283. DOI: 10.1353/mpq.2012.0008
- Sekułowicz, M., Kwiatkowski, P. (2013). Wypalanie się sił u rodziców dzieci z niepełnosprawnością konstrukcja nowego narzędzia badawczego [Burnout in parents of children with disabilities the design of a new research tool]. *Studia Edukacyjne*, *25*, 29–50.
- Sekułowicz, M., Kwiatkowski, P., Manor-Binyamini, I., Boroń-Krupińska, K., & Cieślik, B. (2022). The effect of personality, disability, and family functioning on burnout among mothers of children with autism: A path analysis. *International Journal of Environmental Research and Public Health*, *19(3)*, 1187. DOI: 10.3390/ijerph19031187.
- Seltzer, M. M., Greenberg, J. S., Hong, J., Smith, L. E., Almeida, D. M., Coe, C., & Stawski, R. S. (2010). Maternal cortisol levels and behaviour problems in adolescents and adults with ASD. *Journal of Autism and Developmental Disorders*, 40(4), 457–469. DOI: 10.1007/s10803-009-0887-0.
- Sęk, H. (2000). Wypalenie zawodowe: Przyczyny, mechanizmy, zapobieganie [Professional burnout: Causes, mechanisms, and prevention]. Warszawa: Wydawnictwo Naukowe PWN.
- Siman-Tov, A., Kaniel, S. (2011). Stress and personal resource as predictors of the adjustment of parents to autistic children: A multivariate model. *Journal of Autism and Developmental Disorders*, 41(7), 879–890. DOI: 10.1007/s10803-010-1112-x._
- Steuden, S., Okła, W. (1998a). Psychologiczne aspekty zespołu wypalenia [Psychological aspects of burnout syndrome]. *Roczniki Psychologiczne*, *1*, 119–130.
- Steuden, S., Okła, W. (1998b). *Tymczasowy podręcznik do Skali Wypalenia Sił SWS: Wydanie eksperymentalne* [Temporary handbook for the Strengths Burnout Scale SWS: Experimental Edition]. Lublin: Zakład Psychologii Klinicznej Katolickiego Uniwersytetu Lubelskiego.

- Stuart, M., McGrew, J. H. (2009). Caregiver burden after receiving diagnosis of an autism spectrum disorder. Research in Autism Spectrum Disorders, 3(1), 86–97. DOI: 10.1016/j.rasd.2008.04.006.
- Watson, S. L., Coons, K. D., & Hayes, S. A. (2013). Autism spectrum disorder and fetal alcohol spectrum disorder: Part I: A comparison of parenting stress. Journal of Intellectual and Developmental Disability, 38(2), 95–104. DOI: 10.3109/13668250.2013.788136._