

Coping Parents' Strategy with Down Syndrome (DS) Children

Tania Nurmalita^{1*}, Ika Febrian Kristiana²

¹Post-graduate program, Faculty of Psychology, Universitas Airlangga

²Doctoral Program of Psychology, Universitas Airlangga

*Corresponding author: tania.nurmalita-2018@psikologi.unair.ac.id

Abstract

Being part of a family that has special needs such as Down Syndrome (DS) requires special challenges today, unlike most families. The purpose of this literature study is to reveal how parents who have children with DS overcome psychological problems in their daily activities and support their special child development. The journal used for literature study in this study was taken from 4 journal databases, namely ProQuest, SAGE Journal, Science Direct, and ERIC with the 2009-2019 published survey year. The initial search found 179 journals which were then selected using inclusion and exclusion criteria to obtain 12 journals (N = 12) while the quantitative journals were 7 journals and qualitative journals as many as 5 advanced journals. Based on the reviews, all who support DS children coping with different strategies in parenting. Various types of coping strategies found include attribution techniques in accepting conditions that occur at the moment; Asking for a positive attitude to be more religious and get closer to God and choose a lot of outdoor activities with children as an effort to get out. Knowing various coping strategies and considering them for DS children will be the basis for the preparation of effective childcare programs in optimizing the growth of children with DS.

Keywords: Down Syndrome, Parents' cope, review

Abstrak

Menjadi bagian dari sebuah keluarga yang memiliki anak berkebutuhan khusus seperti *Down Syndrome* (DS) memiliki tantangan tersendiri karena harus menghadapi hari-hari tidak seperti keluarga pada umumnya. Tujuan dari studi literatur ini untuk mengungkap bagaimana orang tua yang memiliki anak dengan DS mengatasi permasalahan psikologis dalam menjalani aktivitas sehari-hari dan mendukung tumbuh kembang anak spesialnya. Jurnal yang digunakan untuk studi literatur dalam penelitian kali ini diambil dari 4 database jurnal yaitu ProQuest, SAGE Journals, Science Direct, dan ERIC dengan dibatasi tahun terbit 2009-2019. Pencarian awal ditemukan 179 jurnal yang kemudian diseleksi dengan menerapkan kriteria inklusi dan eksklusi sehingga didapatkan 12 jurnal (N=12) dimana jurnal kuantitatif sebanyak 7 jurnal dan jurnal kualitatif sebanyak 5 jurnal lanjut. Berdasarkan review, semua orangtua anak DS melakukan coping dengan strategi yang berbeda-beda dalam pengasuhan. Macam-macam strategi coping orangtua yang ditemukan antara lain: teknik atribusi dalam

menerima kondisi yang terjadi pada anaknya; menerapkan sikap positif dalam menghadapi kondisi anaknya; menjadi lebih religious dan mendekati diri pada Tuhan, dan memilih banyak beraktivitas di luar ruangan bersama anak sebagai upaya *coming out*. Mengetahui berbagai strategi coping orangtua dan dampaknya terhadap anak DS akan menjadi dasar dalam penyusunan program-program parenting yang efektif dalam optimalisasi tumbuh kembang anak dengan DS.

Kata kunci: Down Syndrome, coping orangtua, review

Introduction

Down Syndrome (hereinafter in this article the author will discuss DS) describes the condition of genetic disorders that not only discuss the child's physical but also mental/psychological such as moderate retardation, IDD, and other medical complications. This condition makes DS children increase difficulties in processing information, the ability to combine and use language, and increase emotional development (Kirk, Gallagher, Coleman, and Anastasiouw, 2009).

For people, finding facts about the diagnosis of DS that experiences children raises initial reactions such as intense emotional stress and dissatisfaction, restlessness, to be pessimistic about the child's future (eg Quine & Pahl, 1987; Graungaard & Skov, 2007) Through the process of acceptance and closeness occur in families (Poehlmann, Clements, Abbeduto, & Farsad, 2005). However, from the results of previous studies, the first time parents receive a diagnosis before or receive an approved child has the same stress level (Staats, Nelson Goff, Springer, & Monk, 2015).

In the nurturing process, in meeting the growth and development of children with DS, problems that then arise include child development problems, health problems, educational problems, social problems, and financial problems to overcome the high medical needs and therapy of DS children. The many problems faced in parenting trigger parental stress reactions (Cless, Nelson Goff, and Durtschi, 2017; Dabrowska, & Pisula, 2010). In parenting, parents with DS children become more easily anxious and very protective of DS children. DS child development is also a bit neglected because parents focus more on excessive concerns and protection (Duranovic, Klasnic, and Opic, 2017; Dabrowska & Pisula, 2010). This condition complicates the development of their DS children. On the one hand, children with this DS must struggle with their limitations, but on the other hand, children with this DS must face the anxiety and protection of their parents who become excessive.

The existence of DS children is also reported to trigger internal and social problems for parents. Some mothers indicated symptoms of depression, decreased mental health (Van Der Veek, Kraaij, & Garnefski, 2009) and complained about the decline in the quality of their marriages (Cless, Nelson Goff, and Durtschi, 2017). Depression and declining quality of parental marriages then cause difficulties in their work and career (Daire, Dominguez, Carlson, and Case-Pease, 2014).

Various descriptions of the problems of parents who have DS children, especially those related to psychological conditions require a solution so that parents can go through a period of difficulty adapting to the condition of their DS child. One strategy to overcome problems faced by parents with DS children is a coping strategy (Cless, Nelson Goff, and Durtschi, 2017). Coping strategies can be defined as cognitive efforts or ongoing behavioral efforts to overcome the problem of feeling disappointed or hopeless because they are unable to meet internal or external demands due to limitations

in each. Alternatively, it can be simplified as a process consisting of cognitive effort and behavior to regulate psychological stress (Lazarus, 1993). Coping is an active effort to control, reduce, or tolerate stress demands (Weiten, 2014), so that coping is always related to decision making about actions to be taken by someone to deal with stress faced (Lazarus & Folkman, in Mattieu & Ivanoff, 2006). So the definition of coping is a business process for managing psychological stress that involves cognitive aspects and individual behavior.

Coping has various functions for individuals, including: reducing dangerous situations from the environment and increasing the motivation of individuals to recover from stress, preparing individuals to face every possibility and adapting to bad situations, maintaining a positive self-image, maintaining emotional stability, and making individuals able survive and build good relationships with the people around him (Cohen & Lazarus in Mitrousi, Travlos, Koukia, & Zyga, 2013; Kong, Zhu, He, Yao, & Yang, 2019).

At the beginning of the paragraph, the results of previous studies have been described which report that parents tend to be anxious, disappointed, angry, and show other negative emotions towards the condition of DS children. This condition shows the pattern of coping strategies with a negative attitude. Coping strategies with negative attitudes increasingly make parents with DS children feel stressed and depressed (Dabrowska & Pisula, 2010). Conversely, coping strategies with positive attitudes that parents adopt are considered effective in increasing well being of parents and children with disabilities (Cless, Nelson Goff, and Durtschi, 2017; Glidden, Billings, & Jobe, 2006).

Coping strategies that are accompanied by a positive attitude are the ability to solve problems and accept responsibility with all their heart, seeing everything from a positive side. Whereas coping strategies accompanied by negative attitudes, for example by escaping or avoiding undesirable conditions, deny what has been done or has already happened (Glidden & Jobe, 2006; Woodman & Hauser-Cram, 2013).) Recent studies illustrate that parents with DS children are indicated using coping strategies with an active, positive attitude in dealing with the child's condition. Even mothers of DS children have higher scores than fathers in using coping strategies with a positive attitude when facing the condition of DS children and overcoming bad conditions around parents with these DS children (Cless, Goff, and Durtschi, 2017; Greer, Gray, & McClean, 2006). However, is the choice of a coping strategy with a positive attitude always successful and always proven effective? Further research is needed.

The coping strategies undertaken by parents in Asia, for example, can be related to the religious level of the individual, community influence or social support, community assessment, involvement of family members, and other factors that can influence the pattern of coping strategies chosen by parents (eg Norizan, & Shamsuddin, 2010). Family factors not only affect parenting coping strategies in Asia, but several studies in westerns such as America and England report the same thing (e.g., Van Riper, 2007; Hassall, Rose, & McDonald, 2005). Some studies present the fact that the factors that most influence the choice of coping strategies by parents are becoming increasingly religious and seeking support from the environment. There is even more in-depth research on how the factors of religiosity and support from the environment can influence coping strategies carried out by parents in facing challenges to the condition of DS children (Sheets, Baty, Vazques, Carey, and Hobson, 2011).

The purpose of this literature study is to identify coping strategies chosen by parents with DS children in dealing with difficult situations related to the presence of DS children and the factors that influence them. In previous studies, the sample is still limited to several regions and not yet comprehensive. So the literature study on coping strategies for DS children from various backgrounds and conditions of parents needs to be done. No literature studies were found with the same theme in 4 journal databases that were used as sources of data search by researchers. More specifically, there have been no studies that have reviewed various research on effective coping strategies for parents of DS children in Indonesia. The practical benefit of this research is to provide information to parents in Indonesia how to find coping strategies to apply in the face of difficult situations when members of their DS children.

Methods

Search strategies and data resources

The researcher conducted a literature search by searching for journals related to the theme that will be examined by researchers through 4 international databases, namely: ProQuest (proquest.com), Science Direct (sciencedirect.com), SAGE (journals.sagepub.com), and ERIC (ERIC .edu.gov). Journal search is carried out for 3 months starting from March 13 - May 20, 2019. The keywords used in the search are "coping with the strategy" AND "parents" AND "children with down syndrome," with the limitation of the last 10 years (2009-2019). Furthermore, the article review process/flow follows the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA).

Screening process

Article screening is done by applying the inclusion and exclusion criteria. Inclusion and exclusion criteria include: 1) articles about coping strategies of parents with Down Syndrome children and their factors, 2) empirical study (quantitative and qualitative), 3) peer-reviewed articles, 4) journals in English, 5) full article can be downloaded. A total of 12 journals will be analyzed after going through the selection process. There are 8 journals from ProQuest, 2 journals from SAGE, and 2 journals from ERIC. No suitable journal found in Science Direct. In the article selection chart shown in [Figure 1](#).

Methodological Quality Review

After carrying out the identification process by selecting the journal according to the expected criteria, the researcher then continued the analysis to evaluate the quality of the article. For a quantitative study of correlational studies screening criteria performed by Cummings and Estabrooks (2003) while for qualitative studies, screening was performed using the criteria from the Critical Skills Appraisal Program (CASAP). Review of methodological quality is done by evaluating study design, sampling techniques (articles or participants), measurement or data collection processes, and analysis techniques (Cowden, Cummings, Profetto-McGrath, 2011; Germain and Cummings, 2010).

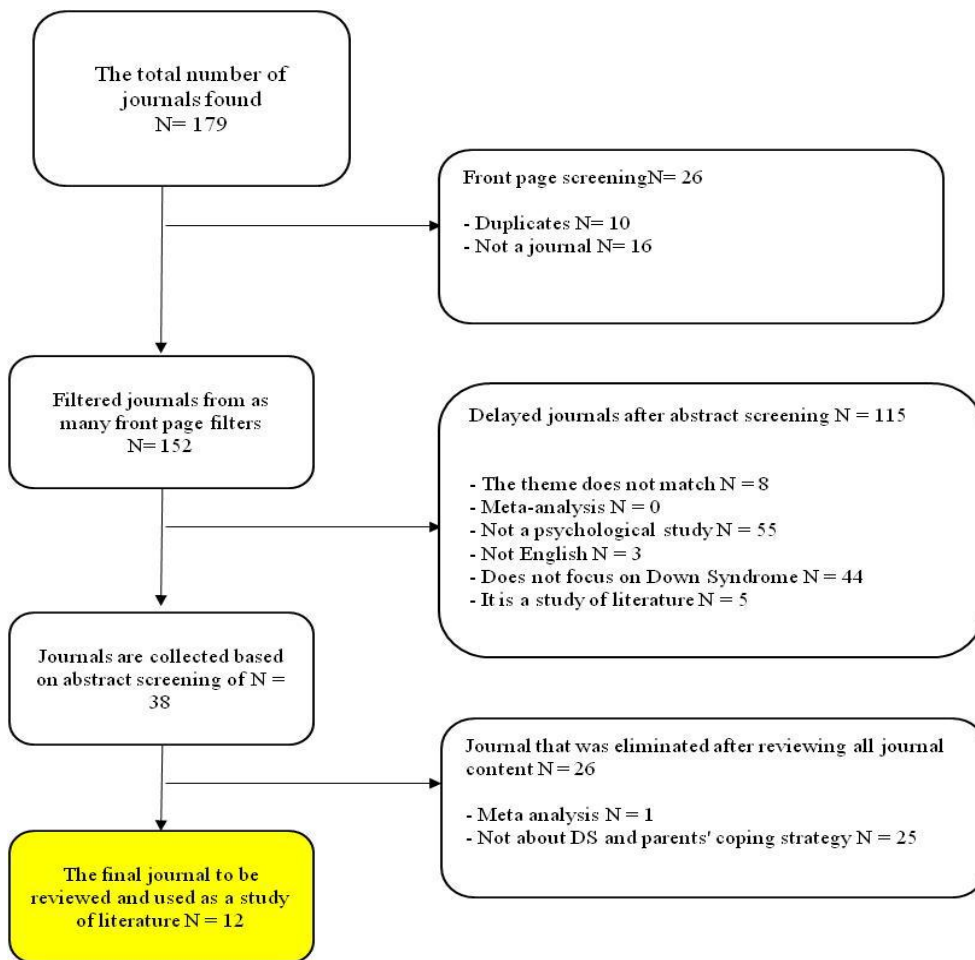


Figure 1 The article selection flow chart

Findings

Based on the research and selection process, 12 articles were chosen and reported, as shown in Table 1.

Table 1. Summary of the contents of selected articles

| Title, Author, Year | Research Location | Sample size (n) | Research Design | Measurement instrument | Main Findings |
|---|----------------------|--|---|---|--|
| Breaking Difficult News in a Cross-cultural Setting: a Qualitative Study about Latina Mothers of Children with Down Syndrome Sheets, Baty, Vazquez, Carey, Hobson, (2012) | Salt Lake City, Utah | 14 mothers of race and origin from Latin America (Mexico) who have children with DS | Qualitative Phenomenology | Interviews use a list of open questions and questions that lead to further explanation. Researchers develop questions from existing literature. | The majority of mothers attribute what has been experienced in their lives (including having DS children) to God's provisions and as a possible reward for the bad things done by mothers in the past. The majority of these mothers feel very optimistic about their children's future and not too worried. Mothers with Latin races expect that medical experts can further improve the methods used to explain the condition of DS children to parents. |
| Comparing Parents of Children With Down A syndrome at Different Life Span Stage Nelson Goff, Monk, Malone, Staats, and Tanner, (2016) | Kansas dan Texas | 445 parents were divided into 4 groups consisting of group 1 (after children <5 years): 216 people, group 2 (children aged 5-11 years): 132 people, group 3 (children aged 12-18 years): 50 people, group 4 (child age > 18 years): 47 people. | Quantitative and qualitative analysis (mix-method analysis) | Coping strategies: The Family Crisis Oriented Personal Evaluation Scales (F-COPES; McCubbin, Olson, & Larsen, 1991) reliability of measuring instruments = 0.81, expectations: The Herth Hope Index (Herth, 1992) measuring instrument reliability = 0.91, life satisfaction. The Satisfaction With Life Scale (SWLS; Diener, | The majority of participants did coping strategies using a positive attitude. Groups 2 and 3 are reported to have higher values in coping strategies compared to the youngest or oldest group (M = 106.56, SD = 16.49, and M = 106.83, SD = 16.79) than the group with the youngest children (M = 104.07, SD = 14.85) and the group with the oldest age (M = 98.82, SD = 16.71). |

| Title, Author, Year | Research Location | Sample size (n) | Research Design | Measurement instrument | Main Findings |
|--|---|--|-----------------------|--|--|
| | | | | Emmons, Larsen, & Griffin, 1985) reliability of measuring instruments = 0.82, relationship adjustment. The Revised Dyadic Adjustment Scale (RDAS; Busby, Christensen, Crane, & Larson, 1995) Reliability of measuring instruments = 0.68, Level of satisfaction with relationships. The Couples Satisfaction Index (CSI; Funk & Rogge, 2007) measuring instrument reliability = 0.84. Through several scales used, researchers used multivariate analysis using the SPSS 21 program; interview | |
| Hope, Coping, And Relationship Quality In Mothers Of Children With Down Syndrome Cless, Nelson Goff, and Durtschi (2017) | Local DS group, National Down Syndrome Congress, Kansas | 351 mothers who have children with DS (including mothers who still have husbands are newly engaged, divorced, or lovers who live together without marriage). | Quantitative analysis | Coping behavior: The Family Crisis Oriented Personal Evaluation Scales (F-COPES; McCubbin, Olson, & Larsen, 1991) reliability of measuring instruments = 0.87, expectations: The Herth Hope Index (Herth, 1992) Cronbach Alpha value = 0.86, Revised Dyadic | Direct effects: the higher the coping through religious activity, was significantly associated with high expectations (b = .09, p < .001, b = .29). the higher internal coping, correlated significantly with higher expectations (b = .14, p < .001, b = .29). Indirect effects: when "hope" is included as a mediator variable, religious coping has a more significant effect on expectations (b = .10, p < .001, b = .13, CI = 0.06, 0.16) |

| Title, Author, Year | Research Location | Sample size (n) | Research Design | Measurement instrument | Main Findings |
|---|-------------------------------|---|-----------------------|---|--|
| | | | | Adjustment Scale (RDAS) (Busby, Christensen, Crane, & Larson, 1995) Cronbach's Alpha = 0.87 and the Couples Satisfaction Index (CSI) (Funk & Rogge, 2007) Cronbach's Alpha = 0.94. The analysis carried out by the researcher is the analysis of relationships using the SPSS 22 program. | |
| Mindful Parenting and Care Involvement of Fathers of Children with Intellectual Disabilities | East and northeastern Ireland | 105 fathers aged 32-65 years who have children with intellectual disabilities (71 boys and 34 girls aged 6-18 years) | Quantitative analysis | The scale of parental attention Present Centered Attention, Father involvement using the Parental Involvement scale in Childcare, Father's activity scale The Child-Related Tasks subscale | Fathers who work at home and have younger children have a higher score in involvement in children's activities with DS ($t(103) = 2.63, p = .01$), ($r(105) = -.25, p = .15$). In this study, it was explained that fathers who have more time with children could apply coping strategies with a positive attitude towards the condition of their children with DS. |
| MacDonald, Hastings (2010) | | | | | |
| Parents of Children with Down Syndrome: A Comparison of Prenatal and Postnatal Diagnosis Groups | NDSC, Kansas | Mothers who knew the diagnosis of their children had DS as many as 258 mothers, mothers who knew their condition had DS after giving birth as many as 159 mothers | Quantitative analysis | Coping strategies: The Family Crisis Oriented Personal Evaluation Scales (F-COPES; McCubbin, Olson, & Larsen, 1991) reliability of measuring instruments = 0.86, expectation: The Herth Hope Index (HHI; Herth, 1992) | There were no significant differences in the scores of coping strategies, expectations, life satisfaction, and adjustment of relations between parents who already knew the condition of their children before birth or after birth. (F-COPES; $F[1,320] = 2.79, p > .05$), hope (HHI; $F[1,318] = 0.01, p > .05$), life satisfaction (SWLS; $F[1,318] = 0.81, p > .05$), |
| Staats, | | | | | |

| Title, Author, Year | Research Location | Sample size (n) | Research Design | Measurement instrument | Main Findings |
|---|-------------------|---|--|--|--|
| Nelson Goff, Springer, Monk (2015) | | | | is a 12-item scale adapted from the Herth Hope Scale (HHS) measuring instrument reliability = 0.91, Life satisfaction: The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) Measuring instrument reliability = 0.82, relationship adjustment: The Revised Dyadic Adjustment Scale (RDAS; Busby, Christensen, Crane, & Larson, 1995) measuring instrument reliability = 0.90. Satisfaction with relationships using the scale of the Couples Satisfaction Index (CSI; Funk & Rogge, 2007) measuring instrument reliability = 0.94. Statistical analysis using ANOVA with the SPSS program | relationship adjustment (RDAS; $F [1,298] = 0.38$ $p > .05$), relationship satisfaction (CSI; $F [1,296] = 0.12$, $p > .05$). |
| Receiving the Initial Down Syndrome Diagnosis: A Comparison of Prenatal and | NDSC Kansas City | 46 parents who know the condition of their child DS before giving birth and 115 parents who know the condition of their | Qualitative Analysis (descriptive study) | Deploy a questionnaire with questions related to the Kansas NDSC community | The initial reaction from parents who know the condition of their child before or after birth is indicated to be the same. Both of these groups used negative coping strategies in the form of blaming the situation and blaming themselves when |

| Title, Author, Year | Research Location | Sample size (n) | Research Design | Measurement instrument | Main Findings |
|---|---|---|-----------------------|--|--|
| Postnatal Parent Group Experiences Nelson Goff, Springer, Foote, Frantz, Peak, and Cross, (2013) | | child DS after giving birth | | | knowing the results of a doctor's diagnosis of their child who has a DS. However, another fact that was found was that groups that knew the condition of their DS children before birth could adjust their emotions more quickly. |
| The impact on the family of four neurogenetic syndromes: A comparative study of parental views Reilly, Murtagh, & Senior (2015) | | 381 parents who have children with 1 or more than 4 types of intellectual limitations studied | Quantitative analysis | Using chi-square and ANOVA | There were no significant differences related to the positive attitude of parents, parents who were challenged by the situation at hand; parents also focused on the future of their DS children. from 4 groups of parents with 4 types of intellectual limitations. |
| The Impact on Family among Down syndrome Children with Early Intervention Nawi, Ismail, Abdullah, (2013) | Participants were recruited from 7 rehabilitation centers | 125 parents who have children with DS aged 4-15 years | Quantitative analysis | Scale for family outcomes are Family Outcomes Scale, Bailey DB FOS, Brother MB, Hebeleler K (2006) measuring instrument reliability = 0.92 | 66 parents (52.8%) had a positive family outcome; 59 parents (47.2%) had a negative family outcome. By having a positive family outcome, parents tend to adopt coping strategies with a positive attitude to deal with their children who have DS. |
| Family Adjustment Measure: Scale Construction and Validation | | 368 parents with DS children. Collected through online data and online surveys. Female participants | Quantitative analysis | Relationship level measurement scale. The Relationship Assessment Scale (RAS; Hendrick, 1988; | Reliability for parental stress levels, social support, family support, and coping strategies with a positive attitude is as big as .92, .90, .90, and .81, |

| Title, Author, Year | Research Location | Sample size (n) | Research Design | Measurement instrument | Main Findings |
|---|-------------------|--|------------------------------------|--|---|
| Daire, Dominguez, Carlson, and Case-Pease, (2014) | | as much as 79.9% (n = 294) also, male participants as much as 20.1% (n = 74) | | Hendrick, Dicke, & Hendrick, 1998) Reliability of measuring instruments = 0.91, Perceived Stress Scale. The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) reliability of measuring instruments = 0.91, | Each. There is no substantial increase in alpha values. Stress from parents who have DS children influences the quality of the relationship between father and mother. |
| Investigating Parental Beliefs Concerning Facilitators and Barriers to the Physical Activity in Down Syndrome and Typical Development | | 35 families were divided into 2 groups. 19 families are families with DS children, and 16 families are families with TDC (Typically Developing children) | Qualitative phenomenology analysis | Interviews, using a semi-structured interview model. The analysis process is carried out by making transcripts and translations according to the theme verbatim. | 3 strengths in families that have children with DS are family support, counseling with psychologists who are experts in their fields, doing physical activities outside the home. Physical activity outside the home can make their DS children stay active, reduce obesity, increase self-confidence, increase self-esteem, and can DS children be actively involved in society. |
| Alesi (2017) | | | | | |
| A Child With Down Syndrome - Challenge For Families, Kindergartens And Schools | School in Croatia | 1 boy and 1 girl | Qualitative analysis | Case study of 2 children with DS | Children with DS or normal children without limitations have similarities. Both have the potential to be developed. As parents and adults, we must ensure that children with this DS develop according to their stages. The potential possessed by DS children also should not be wasted; it must be increased to increase the confidence and involvement of DS children in the social environment. |
| Duranovic, Klasnic, and Opic (2017) | | | | | |
| The Quality of | Research center | 7 children with DS | Descriptive qualitative | Using semi-structured | Mothers prepare their children's needs |

| Title, Author,Year | Research Location | Sample size (n) | Research Design | Measurement instrument | Main Findings |
|---|------------------------------|------------------------|------------------------|--|--|
| Mainstreaming in Preschool: The Views of Parents of Children with Down Syndrome Kayhan, Özaydın (2018) | in Gaziantep | and 7 their mothers | analysis | interview techniques and interpretations carried out by each researcher. | early in the lives of their children. In undergoing the process of accepting the condition of their children, mothers with DS children need social support, need direction to seek help or treatment for their DS children. |

Summary of methodological quality assessment

From the 12 articles obtained 5 articles with qualitative studies, 6 articles with quantitative studies, and 1 study with mix-method design. The methodology quality assessment tool used is from Cummings and Estabrooks (2003) for quantitative studies and the Critical Skills Appraisal Program / CASP (2010) for qualitative studies. Based on a review of the quality of quantitative articles including the mix method, 6 articles (86%) met the criteria listed (including: quality of research design, sampling techniques, measurements, theoretical models / frameworks used, and statistical analysis), while 1 article (14%) did not meet the quantitative article quality criteria where the statistical analysis used was not explained in detail. Of the 7 quantitative articles, it does not explain the management of outliers so that the quantitative quality criteria can be said to be only 90%.

Based on CASP criteria to assess the quality of qualitative articles, 5 qualitative articles can be said to meet 95% of the CASP checklist criteria for qualitative studies (ranging from clear research goals, exact methodology, appropriate data collection, rigorous analysis, the relationship between researchers and participants adequately considered, to expediency). However, the 5% criteria related to ethical issues are not explained in detail from the five articles.

Descriptive-narrative Synthesis of Result

By analyzing and reading in depth the selected articles, several results were obtained for this literature study.

- a. Parent coping patterns / strategies.

| Coping theme | Detail activities and behavior |
|---|---|
| Become more religious and take part in religious activities | Although it is not easy to accept the condition of the child as a whole, the mothers acknowledge that they become stronger when they begin to draw closer to God. Mothers who have children with this DS think that everything that happens in their lives and their families is God's will. Their children who have DS are blessings God has given them. Mothers with DS children also believe that they must love and love their children with all their heart, whatever the conditions (Sheets et al., 2012). In religious activities, there will certainly be many religious leaders. From these religious leaders, parents can ask for advice and the best input for them to be able to face all challenges related to their DS children who have been waiting before their eyes (Cless, Nelson Goff, & Durtschi, 2017). |
| Having a positive attitude | Having a positive attitude here means that parents with DS children can begin to accept the condition of their DS children and begin to get involved in their DS children's activities. Some parents also feel that they are far better people after having children with special needs (DS). By sharing their DS children and learning together, these parents realize that celebrating success is not only because it can achieve great material things but the development of children that gradually shows progress is also something that needs to be celebrated (Nelson Goff, Monk, Malone, Staats, & Tanner, 2016). |
| More and more involved in child care and activities, especially for fathers. | In this case, mothers are involved more in their DS activities. However, sometimes, the same activity every day and do without help from family or other people can make a mother more stressful or worse can trigger depression. Therefore, in this case, the father also had to take a role in helping the mother to take care of and complement the DS child. Spending more time with their DS children can make their DS children |

| Coping theme | Detail activities and behavior |
|--|--|
| | <p>feel valued, loved, and accepted. As for mothers, what a father does can make the mother more relaxed, reduce his stress level, and become happier knowing that her husband is also helping to solve this problem together. The involvement of fathers in their children's activities that have DS is predicted to increase the positive attitude of parents towards their DS children (MacDonald & Hastings, 2010).</p> |
| <p>Gather and join a community of parents who have DS children</p> | <p>Parents become more interested in finding solutions or help with their problems with other parents who have the same problem and can get through it. Another positive thing parents can get with DS children when joining a community that has the same problem is that parents can feel stronger because they know that it is not only those who face DS child problems. Many parents out there experience the same thing and succeed through dark times (Kayhan & Özaydın, 2018). After getting information from fellow parents with DS children, parents will be able to seek treatment or therapy or the most appropriate action easily. Much medical personnel who still cannot explain the condition of DS children to parents are clear and easy to understand. There is still much medical personnel who explain the condition of DS children to parents in medical language that is not soothing to parents but instead makes parents afraid of their children's future (Sheets et al., 2012).</p> |
| <p>Focus more on the future of the child by making high hopes for a better children's future.</p> | <p>The statement that is often expressed by parents when asked about their children who have DS is "I am worried about the future of my child. I am afraid that their children face many obstacles in their lives "(Nelson Goff, Monk, Malone, Staats, & Tanner, 2016). But on the other hand, other parents agree that focusing on the future of their DS children can reduce stress levels and can help them move forward to find the best treatment to help their child. By focusing on the future of their DS children, parents are no longer focused on the stress and depression they feel. Parents will be busier to plan and imagine the future of their DS children (Sheets et al., 2012).</p> |
| <p>Do a physical activity with their DS children outside the home</p> | <p>Physical activity outside this home can also make DS children more confident and feel accepted by their parents. Because their parents are not shy about introducing them to those around them. Another benefit obtained by DS children when playing physical activity outside the home with parents is that DS children can improve coordination of movement between muscles and motor nerves, reduce feelings of inferiority, and increase social interaction with nature and the people around their homes and environments (Alesi, 2017).</p> |
| <p>Have positive family outcomes</p> | <p>To be able to apply a positive coping strategy and be able to equip their DS children well, having positive family outcomes also needs to be done. Positive family outcomes include 1) knowing the advantages, disadvantages, and special needs of DS children owned, 2) knowing children's rights and speaking on behalf of children, 3) supporting children to grow and learn, 4) having a support system that good, and 5) actively involved in the community of parents with DS children. (Nawi, Ismail, & Abdullah, 2013)</p> |
| <p>Develop talent possessed by DS children</p> | <p>Normal and DS children certainly have their uniqueness that needs to be developed. For DS children, the uniqueness of their talents if honed and appropriately facilitated can be an advantage that can increase children's confidence with DS. With the emergence of talent from children with DS that continues to be developed by parents, DS children are expected to be able to compete with other children even though on the other hand (development and intelligence), they have disadvantages. (Duranovic,</p> |

| Coping theme | Detail activities and behavior |
|---|---|
| Mutual cooperation between father and mother | Klasnic, and Opic 2017) Parents with DS children have unique stressors that can affect the quality of their marriage relationship. Communication in the form of discussions about children and also taking a little quality time to improve the quality of relationships also need to be done so that the separation does not occur. Contacting an expert counselor can be an alternative in solving problems regarding this household relationship. With the opening of the mother's father about what is felt about the family's condition, it is hoped that it can improve the quality of the relationship between father and mother. (Daire, Dominguez, Carlson, and Case-Pease, 2014) |

Factors that influence parental coping strategies

In the coping process, several factors can influence parents' decisions in choosing one of the coping strategies, which are explained as follows:

| Factors Affecting the Coping Strategy | Explanation of the Affecting Factors |
|--|--|
| Beliefs held and religious systems in the environment | The level of religiosity in the environment of parents, whether in the family environment, workplace, or home environment can be influential in decisions made by parents when they want to determine the coping strategies that are taken. As is the case with mothers in Mexico and Latina races. With a high level of religiosity, mothers in Mexico who have children with DS prefer to spend their time to get closer to God and seek advice from religious leaders to deal with the problems. Besides, another thing that is influenced by the level of environmental religiosity on parental decisions is attribution techniques. Parents with high levels of religiosity are more comfortable assuming that what has happened to themselves and their families is a destiny of God. The parents with a high level of religiosity are more resilient if they think that what God gives aims to make them better human beings. (Sheets, Baty, Vazquez, Carey, & Hobson, 2012). |
| The education level of parents | In previous studies, the average parent has the same response when faced with research on their children who have DS. However, research is growing, and several studies use a qualitative approach to the interview method, the results of which are found to be several differences. European mothers with higher education levels after receiving a diagnosis from a doctor, they will ask for detailed information from the results of the diagnosis. Specific details regarding the results of this diagnosis are requested by parents with higher education in the form of documents. This is done by parents so that they can learn in detail what happened to their children, what to do, what not to do, and so on. The opposite happened to parents with secondary and low education when getting a diagnosis. They tend to accept the situation, do not like the convoluted medical language, and expect a brief and clear explanation of what should and should not be done (Sheets, Baty, Vazquez, Carey, and Hobson, 2012). |
| The level of knowledge of parents related to DS | When parents know the condition of their child who has DS, various kinds of responses are seen and usually look similar. However, the condition becomes increasingly difficult when parents do not know about DS at all and panic because they think the future of the child will be destroyed. This panic, then makes parents who have children with DS become increasingly stressful and disrupt their daily lives. The choice of |

| Factors Affecting the Coping Strategy | Explanation of the Affecting Factors |
|--|---|
| | <p>coping strategies becomes increasingly difficult because parents still have to try to deal with the stress experienced by themselves first. For parents who already have DS-related knowledge and ways to deal with it, it will be easier to choose what strategy to implement, what information is needed, where to look for help . Therefore the latest research states that it is necessary to provide short education to parents who have children with DS so that they can cope with the stress experienced and can choose coping strategies that are appropriate to be applied in their families (MacDonald & Hastings, 2010).</p> |
| <p>Economic level (income) of parents</p> | <p>It is undeniable that having a child with DS means that there is an additional expenditure in his care. Many parents complain of the high cost of therapy or DS child care that is not comparable to their income. As a result, middle and even low-income parents are even more strict in managing their finances, are less often on vacation, and are reluctant to gather with neighbors in the neighborhood. This turned out to result in fewer coping strategies that parents could choose. The higher the economic level of parents, the more coping strategies that can be chosen. However, the lower the income of parents, the coping strategies are chosen are increasingly limited (Nawi, Ismail, & Abdullah, 2013).</p> |
| <p>Cultural factors</p> | <p>Another factor that influences parents in choosing the right coping strategy to deal with their DS children is culture. In a previous study, it was found that European parents look more open and can explain carefully how their children are. Parents from Europe are more eager to find information from various sources, including the surrounding environment regarding ways to deal with their children who have DS. They do not cover up the situation of their children, making it easy to find solutions to the problems. This is because, in Europe, children with DS are well received. Children with DS are not excluded in Europe but are accepted with open arms. Many institutions are ready to help when there are parents who need guidance. Such conditions do not apply to parents from Latin America (Mexico). They tend to be more closed and accept the situation as it is. Somewhat worried about letting their DS children socialize with the environment. What parents can do from Mexico is ultimately more about how internal families can care for their special children. What is done by parents from Mexico is inseparable from social, environmental influences in Mexico. Where in Mexico, children with DS are considered a disgrace and are under house arrest because they will embarrass the family. Because parents who cannot be open to the condition of their children, make parents less informed about how to handle their DS children. In conclusion, European culture that is open to the condition of DS children makes parents able to obtain more abundant and more varied information about DS, how to handle, and coping strategies that can be applied than parents from Mexico. Social treatments also influence parents' decisions in choosing the right coping strategy for their DS children (Sheets, Baty, Vazquez, Carey, and Hobson, 2012).</p> |

Discussion

As explained earlier, the coping strategy is an attempt made by someone to overcome a situation where an individual cannot meet internal or external demands that make one's emotions disturbed (Mitrousi, Travlos, Koukia, & Zyga, 2013). Coping strategies are certainly very needed by parents when they get news or diagnosis about

their children who have DS. The initial response of parents who get the results of their child's diagnosis of DS is in the form of shock, no hope, and deny the facts faced (Skotko, 2005). Not only that, parents often feel anxious, angry, and guilty (Skotko & Bedia, 2005). Many studies were also conducted to explore how parents reacted to the diagnosis of their children with DS, besides those described above, there were also some expressions that were shown by parents after knowing the results of their child's diagnosis of DS. These expressions are stress, distrust, sadness, anger, and confusion (Nelson Goff, Springer, Foote, Frantz, Peak, Tracy, & Cross, 2013). Various kinds of negative expressions such as anger, stress, sadness, disbelief, are part of the negative coping strategies chosen by parents to express their feelings when they see the results of their child's diagnosis (Glidden, Jobe, 2006; Woodman & Hauser-Cram, 2013). The negative coping strategies applied by parents even make the situation worse and more laborious. Therefore parents must find a coping strategy by applying positive traits to help them recover and immediately focus on their children who have DS and face reality (Sullivan, 2002).

A coping strategy with a positive attitude consists of the efforts of parents when getting the diagnosis of their children who have DS in a positive and positive manner (Glidden, Jobe, 2006; Woodman & Hauser-Cram, 2013). Implementing a coping strategy with a positive attitude can help parents face the condition of their children who are less than perfect. Families who implement coping strategies with positive attitudes in caring for and loving their children who have DS, have a better level of adaptation to stressors that they might experience when treating children with DS (Cunningham, 1996; Joosa & Berthelsen, 2006; King, Baxter, Rosenbaum, Zwagenbaum, & Bates, 2009; Tway, Connolly, & Novak, 2007). The way parents apply positive coping strategies varies greatly in each parent. Like what happened to Latin mothers in Lake City, Utah. 14 mothers aged over 18 years with DS children were collected to become participants in the DS study. 13 of these mothers came from Mexico, and 1 person came from South America. From these mothers, the researchers found that the majority of these mothers chose coping strategies by becoming more religious and getting closer to God. The majority of mothers feel that what they have now is a gift from God. They say that God wants to give them lessons and make them better people, therefore they are given the gift of children who have DS (Sheets, Baty, Vazquez, Carey, & Hobson, 2012).

In another study involving 351 participants who were mothers of DS children with various backgrounds. There were 90.3% (317 people) of participants were European / white Americans, then 78% (320 people) of participants had children with DS at their first marriage. From a social, economic level, around 65.8% (231 people) have a high level of social economy. With the participant background described above, the results obtained are that being more religious and getting closer to God is the most desirable coping strategy. Coping strategies by being religious have the highest score on Cronbach Alpha reliability of 0.87. The second coping strategy chosen is an internal coping strategy that is trusting one's strength in solving problems, using family strength to face difficulties in life, and positively redefining family problems. This result is almost the same as what happened to mothers from Latin who applied coping strategies to be more religious in dealing with problems with their DS children (Cless, Nelson Goff, and Durtschi, 2017).

From the results obtained through research on various types of mothers with a variety of backgrounds, it can be concluded that social, economic, national origin does

not have a significant effect on the differences in the selection of coping strategies undertaken to deal with various problems in treating and caring for children with DS. Mothers from Europe, America, Mexico, the majority chose the same coping strategy in overcoming the problems faced by their DS children. Likewise, with mothers who come from different social and economic levels, the results show the same thing. Becoming more religious is the strategy chosen in dealing with DS-related child problems. (Cless, Nelson Goff, and Durtschi, 2017; Sheets, Baty, Vazquez, Carey, and Hobson, 2012). These mothers stated that by getting closer to God, taking part in a religious program, accepting their child's condition, and accepting that all conditions felt were blessings from God could make them better mothers and personalities (Sheets, Baty, Vazquez, Carey, and Hobson, 2012).

Some studies reveal that the effectiveness of the coping method in reducing stress levels depends on the strategies chosen by parents, the resources available in the family, and the ability of the social environment to provide support (Boyce, Behl, Mortensen, & Akers, 1991; Bristol, 1984). That way, what needs to be explored and examined further is whether the coping strategies that have been found in subsequent research also apply to special conditions such as when parents have to face the reality of having a child with DS? Besides, related to coping strategies that involve aspects of religiosity are also still being researched and analyzed. How far the religious level of an individual can help them deal with the stress experienced (Pargament, 1997).

Another fact found that the way parents deal with the problem is about coherence. Coherence is a general orientation that expresses how an individual has a deep, dynamic, and confident feeling about 1) stimulus from internal and environment can be explained, regulated, and predicted, 2) resources available to meet stimulus needs, 3) this condition is challenging, so that they are worth fighting for and resolving (Antonovsky, 1995). From the literature that has been studied, the form of coherence that parents have with DS children is trying to improve their own (internal) mindset by convincing themselves that this is God's will that entrusts them to special children and considers that this condition is a challenge if can be resolved, parents can believe that they are better than before.

From the literature study reviewed the explanation of the process of finding and applying an appropriate coping strategy is a long process. Beginning with trying to accept the condition of the child when first knowing the results of the diagnosis, adapting to the conditions of different children, starting to manage household affairs more thoroughly and harder because of the increasingly high needs, to try to manage emotions when faced with the fact that in their environment living or activities not all people can accept the condition of children with their DS. However, from the 12 literature reviewed, it was found that the majority of coping strategies chosen by parents were coping strategies with a positive attitude. Parents prefer to consider that the condition of their DS child is a gift from God, have a positive attitude, are more involved in child care and activities, and join a community that has the same condition of having children with DS. With positive coping strategies that have been chosen by parents, they hope to be positive parents and help their children have hopes for a better future and no longer experience prolonged stress which can make things difficult.

Recommendation

The limitations of this study only used 4 databases and used the keyword, namely "coping strategy" and "Parents" and "children with Down Syndrome" without modification or considering the possibility of using different terms from each database used, for example down syndrome might be equated with fragile X or intellectual disability. It would be better if in the next literature study, the researcher use another database with keyword modification. Another limitation found is that there is still a lack of research on DS in the Asian region, especially Southeast Asia. Researchers felt the need to display the results of research on coping strategies of parents with DS children from Asia because the culture and response of Asian people to the DS was not the same as America. So that what is sought by researchers is to optimize the results of existing research, to be used by readers in finding coping strategies that best suit their families by not focusing too much on cultural issues.

References

- Alesi, M. (2017). Investigating Parental Beliefs Concerning Facilitators and Barriers to the Physical Activity in Down Syndrome and Typical Development. *SAGE Open*, 7(1), 215824401668779. <https://doi.org/10.1177/2158244016687799>.
- Antonovsky, A. (1995). *Rozwiklanie tajemnicy zdrowia. Jak sobie radzić ze stresem* [Unraveling the Mystery of Health. How to cope with stress]. Warsaw: Foundation IPN.
- Boyce, G. C., Behl, D., Mortensen, L., & Akers, J. (1991). Child characteristics, family demographics, and family processes: Their effects on the stress experienced by families of children with disabilities. *Counseling Psychology Quarterly*, 4(4), pp. 273-288. doi: 10.1080/09515079108254436.
- Bristol, M. M. (1984). Family resources and successful adaptation to autistic children. In E. Schopler & G. B. Mesibow (Eds.), *The effects of autism on the family* (pp. 289-310). New York: Plenum Press.
- Cless, J. D., Nelson Goff, B. S., & Durtschi, J. A. (2017). Hope, Coping, and Relationship Quality in Mothers of Children With Down Syndrome. *Journal of Marital and Family Therapy*, 44(2), 307–322. <https://doi.org/10.1111/jmft.12249>
- Critical Appraisal Skills Programme (CASP), 2010. 10 Questions to Help You Make Sense of Qualitative Research. Retrieved on April 2018. http://www.caspinternational.org/mod_product/uploads/CASP%20Qualitative%20Research%20Checklist%2031.05.13.pdf.
- Cummings, G., & Estabrooks, C. A. (2003). The effects of hospital restructuring that included layoffs on individual nurses who remained employed: A systematic review of impact. *International Journal of Sociology and Social Policy*, 23(8/9), pp. 8-53. doi: 10.1108/01443330310790633.
- Cunningham, C. (1996). Families of children with Down syndrome. *Down Syndrome Research and Practice*, 4(3), pp. 87–95. doi:10.3104/perspectives.66.
- Dabrowska, A., & Pisula, E. (2010). Parenting stress and coping styles in mothers and fathers of pre-school children with autism and Down syndrome. *Journal of Intellectual Disability Research*, 54(3), pp. 266-280. doi: 10.1111/j.1365-2788.2010.01258.x.

- Daire, A. P., Dominguez, V. N., Carlson, R. G., & Case-Pease, J. (2014). Family Adjustment Measure. *Measurement and Evaluation in Counseling and Development*, 47(2), 91–101. <https://doi.org/10.1177/0748175614522270>
- Duranovic, M., Klasnic, I., & Opic, V. (2017). A child with Down syndrome - Challenge for families, kindergartens, and schools. *New Trends and Issues Proceedings on Humanities and Social Sciences*, (5), 32–41. Retrieved from www.prosoc.eu
- Glidden, L. M., Billings, F. J., & Jobe, B. M. (2006). Personality, coping style, and well-being of parents rearing children with developmental disabilities. *Journal of Intellectual Disability Research*, 50(12), pp. 949–962. doi: 10.1111/j.1365-2788.2006.00929.x.
- Graungaard, A. H., & Skov, L. (2007). Why do we need a diagnosis? A qualitative study of parents' experiences, coping, and needs, when the newborn child is severely disabled. *Child: care, health, and development*, 33(3), pp. 296-307. doi:10.1111/j.1365-2214.2006.00666.x.
- Greer, F. A., Grey, I. M., & McClean, B. (2006). Coping and positive perceptions in Irish mothers of children with intellectual disabilities. *Journal of intellectual disabilities*, 10(3), pp. 231-248. doi: 10.1177/1744629506064017.
- Hassall, R., Rose, J., & McDonald, J. (2005). Parenting stress in mothers of children with an intellectual disability: The effects of parental cognitions in relation to child characteristics and family support. *Journal of intellectual disability research*, 49(6), pp. 405-418. doi: 10.1111/j.1365-2788.2005.00673.x.
- Joosa, E., & Berthelsen, D. (2006). Parenting a child with Down syndrome: A phenomenographic study. *Journal on Developmental Disabilities*, 12(1S2), 45–58. Retrieved from <http://www.oadd.org/index.php?page=142>
- Kayhan, N., & Ozaydin, L. (2017). The Quality of Mainstreaming in Preschool: The Views of Parents of Children with Down Syndrome. *Journal of Education and Learning*, 7(2), 157. <https://doi.org/10.5539/jel.v7n2p157>
- King, G., Baxter, D., Rosenbaum, P., Zwaigenbaum, L., & Bates, A. (2009). Belief systems of families of children with autism spectrum disorders or Down syndrome. *Focus on Autism and Other Developmental Disabilities*, 24(1), pp.50–64. doi:10.1177/1088357608329173.
- Kirk, S., Gallagher, J.,J., Coleman, M.,R., & Anastasiouw, N. (2009). *Educating exceptional children*. New York: Houghton Mifflin Harcourt Publishing Company.
- Kong, L., Zhu, W., He, S., Yao, Y., & Yang, L. (2019). Relationships Among Social Support, Coping Strategy, and Depressive Symptoms in Older Adults With Diabetes. *JOURNAL OF GERONTOLOGICAL NURSING*, 45(4). Retrieved from <http://search.proquest.com.unair.remotexs.co/docview/2197930189/fulltextPDF/479F532472524E63PQ/3?accountid=31533>
- Lazarus, R.,S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine*, 55, 234–247. Retrieved from <http://www.emotionalcompetency.com/papers/coping%20research.pdf>.
- MacDonald, E. E., & Hastings, R. P. (2008). Mindful Parenting and Care Involvement of Fathers of Children with Intellectual Disabilities. *Journal of Child and Family Studies*, 19(2), 236–240. <https://doi.org/10.1007/s10826-008-9243-9>

- Matthieu, M. M., & Ivanoff, A. (2006). Using stress, appraisal, and coping theories in clinical practice: Assessments of coping strategies after disasters. *Brief Treatment and Crisis Intervention*, 6(4), pp. 337–348. doi:10.1093/brief-treatment/mhl009
- Mitrousi, S., Travlos, A., Koukia, E., & Zyga, S. (2013). Theoretical Approaches to Coping. *International Journal of Caring Sciences*, 6(2), 131–137. Retrieved from [http://internationaljournalofcaringsciences.org/docs/2.%20Zyga%20Stress,%20coping%20theoretical%20approaches%20criticism\[1\]x.pdf](http://internationaljournalofcaringsciences.org/docs/2.%20Zyga%20Stress,%20coping%20theoretical%20approaches%20criticism[1]x.pdf)
- Nawi, A. M., Ismail, A., & Abdullah, S. (2013). The Impact on Family among Down syndrome Children with Early Intervention. *Iranian J Publ Health*, 42(9), 996–1006. Retrieved from <http://ijph.tums.ac.ir>
- Nelson Goff, B. S., Springer, N., Foote, L. C., Frantz, C., Peak, M., Tracy, C., Cross, K. A. (2013). Receiving the Initial Down Syndrome Diagnosis: A Comparison of Prenatal and Postnatal Parent Group Experiences. *Intellectual and Developmental Disabilities*, 51(6), 446–457. <https://doi.org/10.1352/1934-9556-51.6.446>
- Nelson Goff, B. S., Monk, J. K., Malone, J., Staats, N., Tanner, A., & Springer, N. P. (2016). Comparing Parents of Children With Down Syndrome at Different Life Span Stages. *Journal of Marriage and Family*, 78(4), 1131–1148. <https://doi.org/10.1111/jomf.12312>
- Norizan, A., & Shamsuddin, K. (2010). Predictors of parenting stress among Malaysian mothers of children with Down syndrome. *Journal of Intellectual Disability Research*, 54(11), pp. 992-1003. doi: 10.1111/j.1365-2788.2010.01324.x.
- Pargament, K. I. (1997). *The psychology of religion and coping*. New York: Guilford Press.
- Poehlmann, J., Clements, M., Abbeduto, L., & Farsad, V. (2005). Family experiences associated with a child's diagnosis of fragile X or Down syndrome: Evidence for disruption and resilience. *Mental retardation*, 43(4), pp. 255-267.
- Quine, L., & Pahl, J. (1987). The first diagnosis of severe handicap: a study of parental reactions. *Developmental Medicine & Child Neurology*, 29(2), pp. 232-242.
- Reilly, C., Murtagh, L., & Senior, J. (2015). The impact on the family of four neurogenetic syndromes: A comparative study of parental views. *Journal of Genetic Counseling*, 24(5), 851–861. <https://doi.org/10.1007/s10897-015-9820-1>
- Samuel-Kirk, J.,J. (2009). *Educating exceptional children*. Boston, New York, United States: Houghton Mifflin Harcourt Publishing.
- Skotko, B.,G. (2005). Communicating the postnatal diagnosis of Down's syndrome: An international call for change. *Italian Journal of Pediatrics*, 31(4), pp. 237.
- Skotko, B., & Bedia, R. C. (2005). Postnatal support for mothers of children with down syndrome. *Mental Retardation*, 43(3), pp. 196 – 212. doi:10.1352/00476765(2005)43[196:PSFMOC]2.0.CO;2
- Sheets, K. M., Baty, B. J., Vázquez, J. C., Carey, J. C., & Hobson, W. L. (2011). Breaking Difficult News in a Cross-cultural Setting: a Qualitative Study about Latina Mothers of Children with Down Syndrome. *Journal of Genetic Counseling*, 21(4), 582–590. <https://doi.org/10.1007/s10897-011-9425-2>
- Staats, N., Nelson Goff, B. S., Springer, N., & Monk, J. K. (2015). Parents of Children with Down Syndrome: A Comparison of Prenatal and Postnatal Diagnosis Groups. *Journal on Developmental Disabilities*, 21(2), 83–94. Retrieved from <http://search.proquest.com.unair.remotexs.co/docview/1760340760/664711FD982D49E3PQ/1?accountid=31533>

- Sullivan, A. (2002). Gender differences in coping strategies of parents of children with Down syndrome. *Down Syndrome Research and Practice*, 8(2), pp. 67–73. doi: 10.3104/reports.132.
- Twoy, R., Connolly, P. M., & Novak, J. M. (2007). Coping strategies used by parents of children with autism. *Journal of the American Academy of Nurse Practitioners*, 19, pp. 251–260. doi:10.1111/j.1745-7599.2007.00222.x.
- Van Der Veeck, S. M., Kraaij, V., & Garnefski, N. (2009). Down or up? Explaining positive and negative emotions in parents of children with Down's syndrome: Goals, cognitive coping, and resources. *Journal of intellectual and Developmental Disability*, 34(3), pp. 216-229.
- Van Riper, M. (2007). Families of children with Down syndrome: responding to “a change in plans” with resilience. *Journal of pediatric nursing*, 22(2), pp. 116-128.
- Weiten, W. (2014). *Psychology: Themes and variations*, Briefer Version, 8th ed. [Instructor's Edition] (8th ed.). US: Cengage.
- Woodman, A. C., & Hauser-Cram, P. (2013). The role of coping strategies in predicting a change in parenting efficacy and depressive symptoms among mothers of adolescents with developmental disabilities. *Journal of Intellectual Disability Research*, 57(6), pp. 513–530. doi: 10.1111/j.1365-2788.2012.01555.x.