

RESEARCH ARTICLE

Evaluating the Impact of Parent-Child Communication on Self-Esteem Among Adolescents with Learning Disabilities

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Abstract:

Parent-child communication plays a crucial role in adolescents' psychological well-being, particularly influencing self-esteem. Adolescents with learning disabilities (LD) often face difficulties in building self-esteem, making effective parental communication vital. This cross-sectional study explored the relationship between parent-child communication and self-esteem in 120 adolescents with LD from the *Program Pendidikan Khas Integrasi (PPKI)* schools in Selangor, Malaysia. Participants were selected using purposive sampling, with inclusion criteria of adolescents aged 13-19, diagnosed with LD, and living with their parents. Adolescents who could not complete the survey or had additional physical disabilities were excluded. Data were gathered using self-administered questionnaires namely the Parent-Adolescent Communication Scale (PACS) and the Malay Version of the Rosenberg Self-Esteem Scale (M-RSES). Parental consent was obtained, and the questionnaires were distributed electronically via WhatsApp, with a one-week submission period. The results showed a statistically significant but weak positive correlation ($r=0.206$, $p=0.024$) between effective parent-child communication and self-esteem in adolescents with LD. This finding underscores the importance of fostering supportive communication within families to enhance the self-esteem of adolescents with learning disabilities.

Keywords: Children, Communication, Learning disabilities, Parent, Self-esteem

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1. INTRODUCTION

Adolescence is a transitional phase from childhood to adulthood. In the Malaysian context, the definition of adolescence lacks consistency, often varying across different studies and institutions. While the World Health Organization (WHO) defines adolescents as those aged 10 to 19 years, Malaysian data collection frequently uses narrower age ranges. For instance, the 2017 National Health and Morbidity Survey included adolescents aged 13 to 17 years for the Health and Mental Health surveys, while the Nutrition Survey focused on those aged 10 to 17 years (UNICEF, 2018). This rapid phase of human development involves not only age but also significant physical, neurodevelopmental, psychological, and social changes. The high energy, rapid changes in interests, physical growth, and limited emotional insight characteristic of adolescence can create challenges and emotional problems, heightening the need for social acceptance. For children with learning disabilities, navigating this transitional phase and achieving social acceptance is even more difficult (Pandy, 2012).

In Malaysia, learning disabilities (LD) are defined in broad generic terms (Dzalani & Shamsuddin, 2014). LD

refers to individuals whose intellectual ability does not align with their chronological age and who exhibit significant difficulties in performing daily activities. Conditions included under this category are global developmental delay, Down syndrome, ADHD, autism, intellectual disability, slow learner, and specific learning disability (Dzalani & Shamsuddin, 2014). According to DSM-5, these disorders have a biological basis and manifest early in development, marked by impairments that disrupt normal developmental processes. This leads to delays in personal, social, academic, and occupational functioning. Individuals with learning disabilities consistently face challenges with fundamental academic skills, including listening, spelling, speaking, reading, comprehension, and mathematical reasoning. These difficulties impede their ability to fully function in school, resulting in lower-than-expected academic performance (Dzulkifli, 2023).

This study refers to learning disabilities (LD) throughout, focusing on specific learning challenges that affect academic performance. According to *Data Pendidikan Khas*, approximately 4,711 secondary school students in Selangor have been identified with learning disorders and are enrolled

in the *Program Pendidikan Khas Integrasi (PPKI)*, a special education integration program designed to provide tailored support for students with diverse learning needs (Kementerian Pendidikan Malaysia, 2019).

Apart from facing academic challenges that can negatively impact their self-esteem and make them more susceptible to experiencing failure, adolescents with LD also struggle with expressing their emotions (Abraham, 2010). They often find it difficult to calm themselves, interpret non-verbal cues, and understand body language, which can lead to difficulties in daily social interactions (Abraham, 2010). A few studies have explained that, in addition to adolescents with learning disabilities (LD) experiencing low self-esteem due to poor academic achievement, the low quality of perceived communication within the family is also a factor that contributes to their low self-esteem (King et al, 2002; Ahmad & Ansari 2022).

Previous studies have shown that during adolescence, a child's self-esteem is significantly influenced by how they are treated by others, particularly by their parents (Orth, 2018). According to Bireda & Pillay (2018), open parent-child communication is one aspect of good parent-child relationships that play crucial roles in sustaining the healthy relation of children's development. This parental transparency of communication is theoretically linked to increased adjustment in children and youth (Heiman, Zinck, & Heath, 2008). Various studies also suggest that an enhancement in the quality of communication between a child and a parent reduces the risk of low self-esteem among children (Bireda & Pillay, 2018; Alesi, Rappo, & Pepi, 2012; Bulanda & Majumdar, 2009; Heiman et al., 2008). Moreover, the quality of communication within adolescents with a learning disability has a positive influence on their self-esteem.

Self-esteem is an attitude towards oneself that has been considered the highest phenomenon in the psychology area (Lachowicz-Tabaczek & Sniecinska, 2011). Self-esteem is composed of two key elements: knowledge and self-awareness (Petkova, 2018). This includes difficulties in differentiating an individual's perceptions of their abilities, attitudes, strengths, and weaknesses (Ahmad & Ansari, 2022). Moreover, as individuals transition from childhood to adolescence, self-esteem plays a crucial role in adolescent development. Self-esteem is also considered as the basis of self-awareness, where it acts as a key in mental health as well as the goal for achieving the quality of life. In the development of the adolescents, the process of developing and formatting the self-esteem can determine the relationship between the adolescents and the world.

Developing a practical approach will help adolescents become more adaptable in life by building adequate self-esteem. This process can begin within the home environment. For example, parents can support their children in overcoming communication difficulties by providing

honest and clear answers to any questions, even on sensitive, moral, or social issues. Parents play a crucial role in helping adolescents build their self-esteem. When parents communicate effectively with their children, it shows that the parents respect them, and the children will feel heard and understood by their parents. Thus, it can help adolescents improve their self-esteem, where an improvement in self-esteem will influence adolescents' performance and their competency in school (Petkova, 2018).

As children go through adolescence, they are exposed to many different opportunities, stressors, and challenges. A crucial factor in handling these challenges is positive and high self-esteem. Sternke (2010) reported that for adolescents to get the chance of happy and satisfying adulthood, they need to develop positive and high self-esteem. One study found a relationship between open communication between parents and adolescents and the development of self-esteem (Ochoa et al., 2007). The study emphasized that the quality of communication, particularly openness and transparency, plays a crucial role in adolescent psychological adjustment. It demonstrated that adolescents who experienced open, supportive communication with their parents reported higher self-esteem and a stronger sense of self-worth. The researchers highlighted that this positive communication reduced emotional distress and contributed to better adjustment during adolescence, particularly in school and social settings (Ochoa et al., 2007). This supports the idea that effective parent-child communication is integral to the development of self-esteem, especially in vulnerable groups like adolescents with learning disabilities. Communication allows us to communicate with people to develop a mutual and good understanding with each other as communication is an essential human language to receive and send information. Besides, a person's perception of themselves and self-esteem can be affected by communication (Gaseesai & Cha, 2012). Non-verbal communication from family or parents plays a massive role in adolescents' self-esteem. Smiling, a soft touch, or voice are examples of positive non-verbal communication that shows acceptance and security to the other party (Pandy, 2012).

A positive relationship between family functioning, parental support, and adolescent self-esteem has been demonstrated in many studies (Marta, 1997). Research shows that parents are the most influential figures in adolescent relationships (Laursen, 2014). Additionally, adolescents tend to be closer to their mothers, often spending more time and sharing their feelings with them (Steinberg & Silk, 2002). Supportive and encouraging parental involvement has a direct influence on an adolescent's self-esteem, regardless of whether they are diagnosed with a learning disability, as effective family communication helps maintain high self-esteem. Thus, many studies reported that the solution to the problem of negative self-esteem is

positive and frequent family involvement (Delp, 2003; Du et al., 2017; Teoh & Afiqah, 2010; Mulyadi et al., 2016; Pandey, 2012; Sharma, 2014).

The emotional and social difficulties of students with learning disabilities (LD) can be long-lasting, with negative impacts extending into adulthood and affecting their psychological well-being (Kauffman et al., 2017; Pullen & Pullen, 2016). However, there are limited studies in Selangor that investigate parent-child communication and the level of self-esteem among adolescents with learning disabilities. Therefore, this research aims to examine the relationship between parent-child communication and self-esteem in adolescents with learning disabilities. It is hypothesized that there is a significant positive relationship between parent-child communication and self-esteem among adolescents with learning disabilities. Additionally, it is expected that there will be no significant difference in parent-child communication between male and female adolescents with learning disabilities, nor a significant difference in self-esteem between male and female adolescents with learning disabilities.

2. MATERIALS AND METHODS

A cross-sectional survey design was implemented in selected schools with the secondary school, Program Pendidikan Khas Integrasi (PPKI) in the Selangor area. Permission to conduct the research was granted by the Ministry of Education [Reference: KPM.600-3/2/3-eras(6687)], Jabatan Pendidikan Negeri Selangor [Reference: JPN.SPD.600-1/1/2.JLD.4(26)], the Research and Ethics Committee (REC) of UiTM Shah Alam [Reference: REC/666/19], and the Faculty of Health Sciences, UiTM Puncak Alam. Parental consent was required for children to participate in this study because the children are under their parents' care and still need assistance and supervision in making decisions. Parents were asked to fill out an informed consent form. The researcher distributed the questionnaire to parents via the WhatsApp application on behalf of their children, who were the actual participants of the study. The children were required to complete the questionnaire and return it to the researcher within one week. Some participants needed assistance, so the researcher provided clarification over the telephone for any questions they found unclear.

The sample size was calculated using Raosoft software, and 120 adolescents with LD were recruited using purposive sampling, following specific inclusion and exclusion criteria. The inclusion criteria for this study were: adolescents with a specific learning disorder, aged 13-19 years, able to understand and complete the survey in Malay and English, living with their parents, and having parental consent. Adolescents who could not read or write in English and Malay or who had other health conditions such as physical disabilities, blindness, or deafness were excluded.

Parent-child communication was measured using the Parent-Adolescent Communication Scale (PACS) developed by Barnes and Olson (2015). This self-rating questionnaire assesses adolescents' perceptions of communication with their parents and consists of two subscales. The first subscale measures open communication, focusing on factual and emotional information, the degree of understanding, and satisfaction within interactions. The second subscale assesses communication problems, such as reluctance to share information, selectivity, and negative interaction styles. Each subscale contains 10 items rated on a 5-point Likert scale (1 = Strongly disagree to 5 = Strongly agree). A higher score indicates better communication in adolescents with learning disabilities. The internal consistency of the subscales is good, with Cronbach's alpha values of .87 for open communication and .78 for communication problems.

Self-esteem was measured using a validated Malay version of the Rosenberg Self-Esteem Scale (RSES) (Abu Bakar & Ismail, 2009), which originated from Rosenberg's study (1979). This 10-item scale measures global self-esteem related to feelings of self-worth and self-acceptance on a 5-point scale (1 = Strongly disagree to 5 = Strongly agree). Higher scores indicate higher self-esteem, while lower scores indicate lower self-esteem. The validated Malay version categorizes self-esteem as low (10-29), moderate (30-39), and high (40-50), with an internal consistency (Cronbach's alpha) of 0.67, compared to 0.77 to 0.88 for the original RSES (Abu Bakar & Ismail, 2009).

Data collected on communication and self-esteem levels among adolescents with LD were analyzed using the Statistical Package for Social Sciences (SPSS) version 25. Descriptive statistics (mean, standard deviation, frequency, and percentage) were used, and bivariate correlation analysis was conducted to identify the significant association between parent-child communication and self-esteem among these adolescents.

3. RESULTS AND DISCUSSION

3.1. Parent-child communication in LD

Two dimensions of the parent-adolescents communication scale (PACS) was measured using two subscales to measure openness in communication and problem in communication. Descriptive statistics for these items are presented in Table 1. Higher scores on the PACS indicate better functioning, openness, and fewer communication problems. The majority of adolescents with a learning disability have an average total score of communication ($M=66.44, SD=5.97$).

Table 1 Numbers, means and standard deviations for parent-child communication variables

Variables	<i>N</i>	<i>M</i>	<i>SD</i>
PACS			
Openness	120	34.43	7.36

Problematic	120	31.98	5.21
Total Score	120	66.44	5.97

This study result indicates that most adolescents are in the category of average communication with their parents. In both subscales, the openness and problems in communication also suggest an average score. The result supported by the claims of Heiman, Zinck, and Heath (2008) that adolescents with LD reported more problematic communication with their parents, specifically maternal. Heiman et al. (2008) found that adolescents with LD or without LD perceived their mother's involvement in their life is a problem. Their negative perceptiveness might be because they interpreted their parents' interest in their life as an intrusion towards their privacy, thus explained the average score despite having a good parent-child relationship.

3.2 Self-esteem in Learning Disability

Table 2 shows the level of self-esteem among adolescents with a learning disability. The interpretation of the score was sub-grouped into three categories for analysis and categorized as 'high': score 40-50, 'moderate': score 30-39, and 'low': score 10-29. Frequencies analysis was carried out to check the frequency level of self-esteem of adolescents, and descriptive analysis data shows that the level of self-esteem of adolescents with LD score ranged from 30-39. The level of self-esteem was non-normally distributed, with skewness of 0.21 (SE = 0.22) and kurtosis of -0.63 (SE = 0.44). The results show a total of 106 (88.3%) adolescents are at a moderate level of self-esteem.

Table 2 Frequencies of three level of self-esteem

	Frequency (n=120)	Percentage %
Level of self-esteem		
Low (10-29)	3	2.5
Moderate (30-39)	106	88.3
High (40-50)	11	9.2

Children with LD are often related to and stigmatized with failure, which lowers their self-esteem (Pandy, 2012). According to this study result, adolescents with a learning disability are composed of more moderate self-esteem, with only 2.5% of them in low self-esteem category. Many research has shown that children with LD experienced a lower level of self-esteem due to various factors (Alesi et al., 2012; Delp, 2003; Fozia Shah & Irshad, 2016; Gaetano Rappo, 2014; McArthur et al., 2016; Mulyadi et al., 2016; Parshurami, 2015; Sharaf et al., 2009). Despite those studies, the adolescents with LD in this study are mostly at a moderate level of self-esteem.

The current study found that individuals with LD exhibited moderate levels of self-esteem, which contrasts with previous research that typically reports lower self-

esteem in this population (Alesi et al., 2012). This difference may be due to participants' reluctance or discomfort in sharing their true emotions. Besides, they also have to give an honest answer directly towards the researcher during the telephone interview; thus, the participants preferred to choose neither agree nor disagree as to their answer choice. Hence, the evidence of bias during the data collection might affect the result itself. However, the contrary level of self-esteem of this study with the previous studies, it is still crucial to cater to the issue as prevention from deterioration in the level of self-esteem among the respondents.

3.3 Significant difference between gender and parent-child communication variables among adolescents with LD

The normal distribution of data was determined using the Kolmogorov-Smirnov test. The *p*-value is 0.0023 (*p* < 0.05) in Kolmogorov-Smirnov test of normality. Based on Table 3, the Mann-Whitney U test indicated that the total score of parent-child communication was greater for males (*Mdn* = 67) than females (*Mdn* = 65). The two median total scores of parent-child communications are not significantly different (*U* = 1279, *p* = 0.229). This test failed to reject null hypothesis 3 since *p*-value > 0.05; thus, there is no significant difference between total score parent-child communication and gender among adolescents with LD.

Table 3 Mann-Whitney U test on the comparison between gender and total score parent-child communication

Variables	Male (n=85) Median (IQR)	Female (n=35) Median (IQR)	<i>U</i>	<i>Z</i> statistic ^a	<i>P</i> value
PACS					
Total Score	67 (6.50)	65 (8.00)	1279	-1.20	0.229

Many studies state that gender does not make a significant difference between parent-child communications. Expectedly, this study result also accepts the null hypothesis of a significant difference between male and female and parent-child communication among adolescents with LD. The analysis confirms the previous study by Barnes and Olson (2015) that no gender differences between perceived communication with the adolescent's parents despite reports that stated male and female differences in how their parents interacted with them. Other studies by Abraham (2010) also mentioned that there is no significant relationship between parents and LD for adolescents' gender.

The lack of significant differences between male and female adolescents in this study may be explained by developmental psychology theory. Both male and female adolescents, with or without learning disabilities (LD), tend to become more secretive and less open with their parents while increasing disclosure with their friends (Parshurami, 2015). Other than that, the possibility that the parents

communicate with both genders, in the same manner, might be the reason for no significant difference between these two variables.

3.4 Significant difference between self-esteem and gender among adolescents with LD

The normal distribution of data was determined using the Kolmogorov-Smirnov test. The *p*-value is .035 (*p* < 0.05) in Kolmogorov-Smirnov test of normality. Based on Table 4, the Mann-Whitney U test indicated that the total score of self-esteem was greater for males (*Mdn* = 35) than females (*Mdn* = 34) and are not statistically significant (*U*= 1380.5, *p* = 0.535). The test failed to reject the null hypothesis since *p*-value > 0.05; thus, there is no significant difference in the self-esteem total score and gender among adolescents with LD.

Table 4 Mann-Whitney U test on the comparison between gender and total self-esteem score

Variable	Male (n=85) Median (IQR)	Female (n=35) Median (IQR)	<i>U</i>	<i>Z</i> statistic ^a	<i>P</i> value
M-RSES					
Total Score	35 (4.00)	34 (5.00)	1380.5	-0.62	0.535

Throughout many studies conducted, self-esteem and differences in gender also widely discussed. This study suggests that there is no significant difference in the self-esteem score and gender among adolescents with LD. Similar to the study by Abraham (2010), the research found that the level of self-esteem and gender in adolescents with LD were not many differences in the score and was equally affected in both groups. The analysis further supported in a study by Fozia Shah and Irshad (2016), that there is also no significant difference in the level of self-esteem faced by both male and female groups of LD adolescents. The findings might be due to the possibilities of both gender groups experiencing similar difficulties as adolescents with LD. Hence, they might experience similar emotions or feelings too. For example, both males and females with LD had experienced poor academic performance or failure pressure from family or teachers. Thus, clarify the findings between gender and level of self-esteem.

3.5 Association between parent-child communication and self-esteem among adolescents with LD

Based on Table 5, the correlation (Spearman's) between parent-child communication and self-esteem is significantly

different from 0 (*P*-value < 0.05) at a 5% level of significance. Thus, this test rejects the null hypothesis. In other words, there is a significant linear correlation between parent-child communication and self-esteem. The observed correlation coefficient (*r_s*) is 0.206, which suggests a positive and weak correlation. To conclude, there is a statistically significant, positive, and weak correlation between the two variables among adolescents with LD.

Table 5 Correlation between two numerical variables (n=120)

Variables	Level of self-esteem
Parent-child communication	0.206 ^a 0.024 ^b

^a Spearman's rho correlation coefficient

^b *P*-value

This study result demonstrates a correlation between parent-child communication and the level of self-esteem in adolescents with LD. The analysis confirms the alternative hypothesis of the study that there is a significant association between these two variables. This finding is supported by Delp (2003), who mentioned that the perceptions of significant others, including parents, siblings, and other family members, affect a child's self-esteem and motivation. The study also reported that acceptance of the child's learning disability, along with parents' perceptions, may influence family harmony. Moreover, adolescents or children with LD are concerned with the reactions displayed or communicated by family members (King, et al., 2002). In addition to concern, negative communication, i.e., scowling, shouting, or having an angry facial expression, can make adolescents with LD feel more worthless, fragile, and unloved (Pandy, 2012; Colwell & O'Connor, 2003). The association between parent-child communication and self-esteem in this study shows that expectations portrayed by parents to this vulnerable community might cause them to perform accordingly in building their self-esteem.

4. CONCLUSION

The study provides evidence suggesting that there is a statistically significant positive correlation between parent-child communication and self-esteem in adolescents with LD, with an average score in communication within a family context and a moderate level of self-esteem. The study further discovered that both genders with learning difficulties are equally affected as there is no significant difference in parent-child communication and self-esteem in learning difficulties faced by both gender groups. It is inferred from the study's findings that the quality of parent-child communication is related to an adolescent's well-being. Hence, positive parents' involvement and interaction in adolescents with LD are more likely to be helpful for their proper development into adulthood.

However, it is crucial to transcribe the current study results with several concerns and methodological limitations. First, this study was conducted in a few schools only, and adolescent's views of communication with parents might differ in other contexts, i.e., socially and culturally contextual. Second, as a pandemic (COVID-19) outbreak, the data collection method had to be changed in the halfway through of conducting the study. From being able to present and guide the adolescents holistically, the study was conducted using the telephone interview method. This adjustment was made due to the Movement Control Order (MCO), which the government enforced from 17th March to 9th June 2020, during which the data collection took place. Hence, there may be biases in the self-reported data. Additionally, the study was limited to a small sample of adolescents from a few selected schools. Hence, biases in the self-reported data may be present. Third, the study was limited to a small sample of adolescents from a few selected schools. Lastly, the current sample included adolescents from a specific area in Malaysia. However, some of these study limitations can be beneficial for future research on the same topic. Further research should reexamine these issues with a larger sample size and focus on factors that may influence parent-child communication and self-esteem, such as internal or external factors that could affect the results.

In a nutshell, the results of this study suggest that parent-child communication could play a crucial role in the development of adolescent's self-esteem. As parent's interaction plays a significant role in developing one's self-esteem, Occupational Therapy could suggest family-based intervention as an approach in treatment. Besides, other researchers can use this study as a guidance or a different literature perception regarding parent-child and self-esteem in learning disability adolescents. This study can also be used to determine the adolescents' parent-child communication and self-esteem score; hence, the treatment can be applied accordingly for better intervention programs.

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REFERENCES

- Abraham, D. (2010). A Study On The Self-Esteem And Social Relations Of Adolescents With Learning Disability. Master's Dissertation, Christ University, Bangalore.
- Abu Bakar, S., & Ismail, C. H. (2009). Designing a Culture, Language and Illness-Specific Self-Esteem Scale in Bahasa Malaysia. *ASEAN Journal of Psychiatry*, *10*(2), 1–15.
- Ahmad, S. M., & Ansari, S. A. (2022). Effect of parent-child relationships on the self-esteem of the children with learning disabilities. *International Journal of Health Sciences*, *6*(S1), 9795–9805.
- Alesi, M., Rappo, G., & Pepi, A. (2012). Self-Esteem at School and Self-Handicapping in Childhood: Comparison of Groups with Learning Disabilities. *Psychological Reports*. <https://doi.org/10.2466/15.10.PR0.111.6.952-962>
- Barnes, H. L., & Olson, D. H. (2015). Parent-Adolescent Circumplex Model Communication and the. *56*(2), 438–447.
- Bireda, A. D., & Pillay, J. (2018). Perceived parent – child communication and well- being among Ethiopian adolescents. *International Journal of Adolescence and Youth*, *3843*, 1–9. <https://doi.org/10.1080/02673843.2017.1299016>
- Bulanda, R. E., & Majumdar, D. (2009). Perceived parent-child relations and adolescent self-esteem. *Journal of Child and Family Studies*, *18*(2), 203–212. <https://doi.org/10.1007/s10826-008-9220-3>
- Colwell, J., & O'Connor, T. (2003). Understanding nurturing practices - a comparison of the use of strategies likely to enhance self-esteem in nurture groups and normal classrooms. *British Journal of Special Education*, *30*(3), 119–124. <https://doi.org/10.1111/1467-8527.00296>
- Delp, K. L. (2003). Self-esteem levels of adolescents with learning disabilities or mental retardation in inclusive or non-inclusive educational mental retardation in inclusive or non-inclusive educational setting.
- Du, H., King, R. B., & Chi, P. (2017). Self-esteem and subjective well-being revisited: The roles of personal, relational, and collective self-esteem. *Vol. 12* (8). <https://doi.org/10.1371/journal.pone.0183958>
- Dzalani, H., & Shamsuddin, K. (2014). A Review of Definitions and Identifications of Specific Learning Disabilities in Malaysia and Challenges in Provision of Services. *Social Sciences & Humanities*, *22*(1), 1–18.
- Dzulkipli, M. A. (2023). Children with Learning Disabilities in Malaysia. *Intellectual and Learning Disabilities - Inclusiveness and Contemporary Teaching Environments receive*, 1–13. <https://doi.org/10.1016/j.colsurfa.2011.12.014>
- Fozia Shah, P., & Irshad, E. (2016). Difference between the Level of Anxiety and Self-esteem in Children With and Without Learning Difficulties in. *Journal of Professional Psychology Vol. 15* (2).
- Gaetano Rappo, M. A. (2014). Depression, Anxiety at School and Self-Esteem in Children with Learning Disabilities. *Journal of Psychological Abnormalities in Children*, *03*(03). <https://doi.org/10.4172/2329-9525.1000125>
- Gaseesai, N., & Cha, J. (2012). Development in instructional model of preschool children's language for communication based on contemplative education. *27*, 391–399.
- Heiman, T., Zinck, L. C., & Heath, N. L. (2008). Parents and youth with learning disabilities: Perceptions of relationships and communication. *Journal of Learning Disabilities*, *41*(6), 524–534. <https://doi.org/10.1177/0022219408317860>
- Kauffman, J. M., Hallahan, D. P., Pullen, P. C., & Lloyd, J. W.

- (2017). Handbook of Special Education Statistics, Data, and Special Educational Decisions Publication details <https://doi.org/10.4324/9781315517698.ch3>
- Kementerian Pendidikan Malaysia. (2019). Data pendidikan khas.
- King, K., Vidourek, R., Davis, B. et al (2002). Increasing Self-Esteem and School Connectedness Through a Multidimensional Mentoring Program. *Journal of school health, Vol 72(7)*, 294-299
- Lachowicz-Tabaczek, K., & Sniecinska, J. (2011). Self-concept and self-esteem: How the content of the self-concept reveals sources and functions of self-esteem. *Polish Psychological Bulletin, 42(1)*, 24–35. <https://doi.org/10.2478/v10059-011-0005-y>
- Laursen, B. (2014). *Parent-child communication during adolescence. May*.
- Marta, E. (1997). Parent-adolescent interactions and psychosocial risk in adolescents: An analysis of communication, support and gender. *Journal of Adolescence, 20(5)*, 473–487. <https://doi.org/10.1006/jado.1997.0103>
- McArthur, G., Castles, A., Kohnen, S., & Banales, E. (2016). Low self-concept in poor readers: prevalence, heterogeneity, and risk. *PeerJ, 4*, e2669. <https://doi.org/10.7717/peerj.2669>
- Mulyadi, S., Rahardjo, W., & Basuki, A. M. H. (2016). The Role of Parent-child Relationship, Self-esteem, Academic Self-efficacy to Academic Stress. *Procedia - Social and Behavioral Sciences, 217*, 603–608. <https://doi.org/10.1016/j.sbspro.2016.02.063>
- Ochoa, G. M., Lopez, E. E., & Emler, N. P. (2007). Adjustment problems in the family and school contexts, attitude towards authority, and violent behavior at school in adolescence. *Adolescence, 42(168)*, 779–794.
- Orth, U(2018). The family environment in early childhood has a long-term effect on self-esteem: A longitudinal study from birth to age 27 years. *Journal of Personality and Social Psychology, Vol 114(4)*, 637-655
- Pandy, R. I. (2012). Learning Disabilities and Self-Esteem. *All Capstone Projects, 133*. <http://opus.govst.edu/capstones/133%0AFor>
- Parshurami, A. (2015). A study on self esteem and adjustment in children with learning disability. In *Indian Journal of Mental Health (Vol. 2, Issue 3)*.
- Petkova, M. P. (2018). *Self-esteem in adolescents. September*. <https://doi.org/10.15547/tjs.2018.02.007>
- Pullen, P. C., & Pullen, P. C. (2016). Historical and Current Perspectives on Learning Disabilities in the United States. *Learning Disabilities: A Contemporary Journal, 14(1)*, 25–37.
- Sharaf, A. Y., Thompson, E. A., & Walsh, E. (2009). Protective effects of self-esteem and family support on suicide risk behaviors among at-risk adolescent. *Journal of Child and Adolescent Psychiatric Nursing, 22(3)*, 160–168. <https://doi.org/10.1111/j.1744-6171.2009.00194.x>
- Sharma, M. A. (2014). *Self-Esteem Is the Sense of Personal Worth and Competence That Persona Associate with Their Self-Concepts (Vol. 3, Issue 6)*. www.iosrjournals.org
- Steinberg, L., & Silk, J. S. (2002). Parenting adolescents. - *Handbook of Parenting: Children and Parenting. Lawrence Erlbaum Associates Publishers*, 103–133.
- Sternke, J. C. (2010). *Self-Concept and Self-Esteem in Adolescents with Learning Disabilities*. 1–33.
- Teoh, H.J. & R, Afiqah, R.N. (2010). Self Esteem Amongst Young Adults : The Effect of Gender, Social Support and Personality. *Malaysian Journal of Psychiatry, 19(2)*, 41–49.