

CHAPTER IV

RESULTS AND DISCUSSION

Parents, as the primary caregivers, play an important role in their autistic child's life. The demand on parents of a child with ASD does not reduce as the child grows older, but rather increases. This is because parents must work towards helping their child become stable and independent. Hence, an effort has been made by the investigator in the present study to assess the knowledge, attitude, and practices of the parents on pre-requisite skills of children with autism and their influence on parents' mental health and self-efficacy. The findings of the study are presented and discussed under the following headings:

- 1) Socio-demographic profile of the parents of children with autism
- 2) Levels of parents' Knowledge, Attitude, and Practices (KAP) on pre-requisite skills
- 3) Levels of parents' Mental Health (MH) and Self-efficacy (SE)
- 4) Predictive capacity of socio-demographic markers on knowledge, attitude, and practices, mental health, and self-efficacy
- 5) Influence of knowledge, attitude, and practices towards pre-requisite skills on mental health and self-efficacy of parents of children with autism
- 6) Effectiveness of the sensitization programme on parents' knowledge, attitude, practices on pre-requisite skills, mental health, and self-efficacy.
 - a. The effect of the sensitization programme - analysis of significant differences in KAP on pre-requisite skills among the experimental and control group parents in the pre and post sensitization assessment
 - b. Significant effect of sensitization on knowledge, attitude, and practices on pre-requisite skills among the parents in the pre-, post- data and follow-up phases.
 - c. The effect of the sensitization programme - analysis of significant differences in mental health and self-efficacy among the experimental and control group parents in the pre and post-sensitization assessment.
 - d. Significant effect of sensitization on mental health and self-efficacy among the parents in the pre, post- data and follow-up phases.

1) Socio-demographic Profile of the parents

For the present study, socio-demographic markers such as gender, educational qualification, occupation, and family income, number of siblings, family type, and area of residence were identified and studied.

Table V: Socio-demographic profile of the parents of Children with Autism

Variables	Details	N=143	%
Gender of Parents	Father	35	24.5
	Mother	108	75.5
Educational Qualification	High School	3	2.1
	Graduate	55	38.5
	Post-Graduate	83	58.0
	Ph. D	2	1.4
Occupation	Govt. employed	16	11.2
	Private Sector	31	21.7
	Self Employed	4	2.8
	Home Maker	92	64.3
Family Income	Under2-5 Lakhs	29	20.3
	Under 5-10 Lakhs	102	71.3
	10 lakhs & above	12	8.4
Number of Siblings	Single child	117	81.8
	1 Siblings	26	18.2
Types of Family	Nuclear	108	75.5
	Joint	35	24.5
Area of living	Urban	122	85.3
	Semi-Urban	21	14.7

According to Cidav, Marcus, and Mandell et.al (2012), mothers are the full-time primary caregivers of their autistic children. Mothers are mostly accompanying their child to school, therapies, and treatments. In this present study, it can be seen that the majority who responded (75.5%) were mothers, and 24.5% of them were fathers. Although fewer in numbers, fathers also play a significant role in their child's life. Their involvement, though

often limited due to work or societal roles, is increasingly recognised as important for positive family functioning and better outcomes for the child.

Educational qualification plays an important role; educated parents make an attempt to understand their child's diagnosis and the remedial procedures suggested for the improvement of their child. In the present study, 58% of the parents were post-graduates, while 38.5% of the parents had pursued their graduation. The rest (2.1%) had studied up to high school, and a very few numbers (1.4%) had completed their Ph.D.

Autism has an immense impact on the family. Most frequently, parents are required to provide full-time care for their children with autism. According to Cidav, Marcus, and Mandell (2012), parents may choose to split their time for caring for the child, try to reduce working hours, or shift from a full-time job to a part-time position only to take care of the child. In the present study, a higher percentage of parents, 21.7% were working in the private Sector and 11.2% were government employees, and 2.8% were self-employed. With regards to mothers, the majority (64.3%) of them were homemakers. Parents' decision to reduce hours of work or leave the labor force to spend time with their autistic child may impose a burden on the family in the form of foregone earnings (Mandell, *et al.*, 2018). In this study, 71.3% families' annual income was under 5-10 lakhs and 20.3% families' income was under 2-5 lakhs, and 8.4% families' income was above 10 lakhs, indicating the majority were middle and lower middle-class families as per the Indian context. As it is evident from Table V that the majority (81.8%) of the autistic children were single children, and a few of them had one sibling (18.2%).

Coming to the type of family, the majority (75.5%) of the families were nuclear families, and 24.5 % belonged to joint families. Many parents preferred staying in nuclear families as they could decide independently about their child's treatment. Tracing the area of living of the selected parents, the majority of them hailed from urban areas (85.3%), and the remaining 14.7% were residents of rural regions.

2) Levels of Parents' Knowledge, Attitude, and Practices (KAP) on Pre-requisite Skills

a. Levels of parents' knowledge on pre-requisite skills

Table VI: Levels of parents' knowledge on pre-requisite skills

Dimension of Knowledge	Levels of Knowledge		
	Low	Average	High
Scheduling	35(24.5%)	15(10.5%)	93(65.0%)
Attention	42 (29.4%)	15(10.5%)	86(60.1%)
Socialisation	51(35.7%)	16(11.2%)	76(53.1%)
Self-Control	40(28.0%)	15(10.5%)	88(61.5%)
Self-Advocacy	29(20.3%)	37(25.9%)	77(53.8%)
Safety	57(39.9%)	22(15.4%)	64(44.8%)
Overall Knowledge	32(22.4 %)	111(77.6%)	-

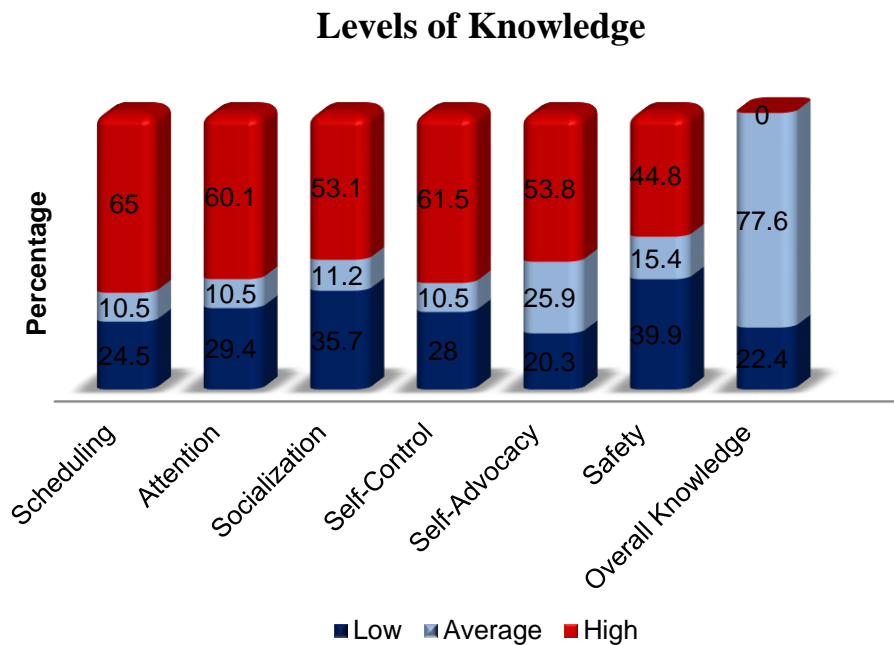


Figure No. IV

The dimension-wise knowledge level of parents (Table VI) depicts that, in the dimension of scheduling majority of parents (65.0%) showed a high level of knowledge, 24.5% showed a low level, and 10.5 % an average level of knowledge.

In the dimension of attention, it was observed that a majority of parents (60.1%) demonstrated a high level of knowledge. This suggests that parents are well-informed. However, 29.4% of parents were found to have low levels of knowledge, and 10.5% showed only an average understanding. Children with ASD may display reduced ability to engage in joint attention, have difficulty filtering irrelevant stimuli, or show atypical patterns of visual attention, all of which can hinder learning and daily functioning (Landry & Bryson, 2004).

In the dimension of socialisation, the findings revealed that 53.1% demonstrated a high level of knowledge, 35.7% showed a low level, and only 11.2% had an average level. Socialisation was a core area of difficulty for children with ASD, characterised by limited social reciprocity, difficulty in forming peer relationships, and challenges in understanding social cues and norms (American Psychiatric Association, 2013). Impaired social skills can significantly affect a child's ability to interact effectively in everyday situations and can lead to isolation or peer rejection (Carter *et al.*, 2005). Parental knowledge regarding socialisation is vital because, when parents are less informed, these challenges may go unaddressed, reducing the child's opportunities for social inclusion and development (Kasari *et al.*, 2012).

The self-control dimension of knowledge showed that 61.5% of parents had a high level and 28.0% had a low level, while few (10.5%) had an average level. Self-control, including the ability to regulate emotions, behaviors, and impulses, was often impaired in children with ASD. These children may struggle with frustration, tolerance, emotional outbursts, or difficulty adapting to changes in routine (Mazefsky *et al.*, 2013).

In the dimension of self-advocacy, 61.5% of parents demonstrated a high level of knowledge, while 20.3% showed a low level, and 25.9% reported an average level. For individuals with ASD, the development of self-advocacy skills is crucial for promoting independence, self-determination, and participation in decision-making, especially in educational and social settings (Test *et al.*, 2005).

In the dimension of safety, 44.8% of parents reported a high level of knowledge, 39.9% showed a low level, and 15.4% demonstrated an average level. Children with ASD are at a higher risk for safety-related incidents due to characteristics such as impaired danger awareness, poor impulse control, sensory processing issues, and a tendency to wander or elope from safe environments (Anderson *et al.*, 2012). Also, common safety

concerns include traffic accidents, drowning, self-injury, encounters with strangers, and vulnerability to abuse or bullying (Rice *et al.*, 2016).

Lastly, it can be seen that the majority (77.6 %) of parents reported a moderate level of overall knowledge of pre-requisite skills, and 22.4% depicted a low level, and none showed a higher level. Similar results were noted by Van de Belt *et al.*, (2017) in their study, indicating that parents of autistic children had average to poorer knowledge regarding ASD. Parental knowledge plays a crucial role in identifying developmental delays, supporting at-home learning, and ensuring consistency between home-based strategies and professional interventions (Zwaigenbaum *et al.*, 2015). The fact that none of the parents in the current study demonstrated a high level of knowledge underscores a critical need for targeted parent education programmes.

b. Levels of parent’s attitude on pre-requisite skills

Table VII: Levels of parent’s attitude on pre-requisite skills

Dimension of Attitude	Levels of Attitude		
	Unfavourable	Neither favourable Nor unfavourable	Favourable
Scheduling	108(75.5%)	12(8.4%)	22(15.4%)
Attention	139(97.2%)	2(1.4%)	2(1.4%)
Socialisation	21(14.7%)	13(9.1%)	109(76.2%)
Self- Control	35(24.5%)	18(12.6%)	90(62.9%)
Self- Advocacy	39(27.3%)	19(13.3%)	85(59.4%)
Safety	26(18.2%)	7(4.9%)	110(76.9%)
Overall Attitude	95(66.4%)	21(14.7%)	27(18.9%)

Levels of Attitude

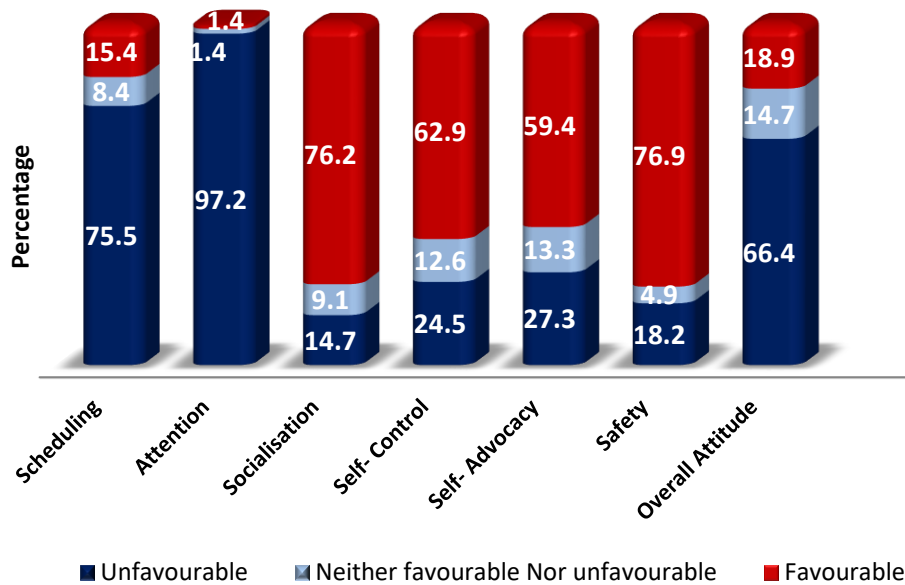


Figure No. V

Regarding parents’ attitudes toward pre-requisite skills (Table VII), the current study revealed that, overall, the majority of parents (66.4%) showed an unfavourable attitude toward these skills. While 18.9% of parents showed a favourable attitude, 14.7% had a neutral stance, reporting neither a favourable nor an unfavourable attitude towards the prerequisite skills of children with autism. Similarly, Tokarewicz *et al.*, (2017) in a study found that the attitudes of parents are not desirable for child-rearing, which has a potential negative effect on the upbringing and development of a child. Marcus and Schopler (2019) supported these findings through their study, where it was found that 72% of parents, which is the majority, had a negative attitude toward the child with autism. However, these studies highlight raising autistic children, though not about pre-requisite skills, yet the attitude of parents toward autistic children and parenting them was a concern here. Glover-Graf (2011) believed that parents, along with parenting an autistic child, also have issues in their marital and extended family relationships, social isolation, resentment, challenging educational arrangements, and grief related to the restricted opportunities for their children, which may affect their beliefs and attitudes.

Looking into the scheduling dimension of the attitude, 75.5% showed unfavourable, and 15.4% showed favourable. Only 8.4% of parents showed neither a favourable nor unfavourable attitude. Studies have shown that children with autism

spectrum disorder (ASD) often struggle with transitioning between activities and adhering to structured routines, which can increase parental stress and reduce confidence in implementing schedules (Troy, Connolly, & Novak, 2007). Moreover, consistent scheduling may be seen as unrealistic due to the unpredictable nature of the child's behaviour and sensory sensitivities (Woodgate, Ateah, & Secco, 2008).

In the dimension of attention, the majority (97.2%) showed an unfavourable attitude, and 1.4% equally showed a favourable and a neutral attitude towards pre-requisite skills. This perception was supported by Keen (2009), that parents often report frustration and a sense of helplessness in teaching attention-related behaviours, as these deficits are perceived to be deeply rooted in the child's neurodevelopmental profile, thereby shaping an unfavourable attitude towards attention as a pre-requisite learning skill.

Looking into the dimension of socialisation, the majority (76.2%) of the parents reported favourable attitudes, 24.5% showed unfavourable, and only 12.6% reported neither a favourable nor unfavourable attitude. Wang *et al.*, (2011) revealed that parents often emphasise the importance of social communication skills in intervention goals, even more than academic or behavioural skills. Similarly, Mandell and Salzer (2007) highlighted that parents frequently advocate for social skills training programs, showing a willingness to participate actively in such interventions. They view parental involvement as crucial in generalising social skills beyond clinical settings into real-life scenarios.

Looking into the self-control dimension of attitude, most of the parents (62.9%) showed a favourable attitude, 24.5% showed an unfavourable attitude, and 12.6% showed neither a favourable nor unfavourable attitude. Parents having autistic children know that they can be aggressive and uncontrollable, leading to an isolated life. This is supported by Matson *et al.*, (2012), who found that parents viewed self-control and behaviour regulation as priority targets in intervention programs for children with ASD.

In the dimension of self-advocacy, the majority (59.4%) of the parents showed an unfavourable attitude and 27.3% had a favourable attitude, and 13.3% showed neither a favourable nor unfavourable attitude. Trainor (2008) highlighted that parents often feel protective over their children with autism and may inadvertently take over decision-making tasks, believing that their child is not capable of effective self-advocacy.

Lastly, in the dimension of attitude on safety, 76.9 % had a favourable attitude, and 18.2% showed an unfavourable attitude. Only 4.9% showed neither favourable nor

unfavourable attitudes. Anderson *et al.*, (2020) found that parents ranked safety concerns as one of their top priorities when planning interventions for children with autism, particularly due to challenges with impulsivity, lack of situational awareness, and difficulty following safety instructions.

c. Levels of parents practices on pre-requisite skills

Table VIII: Levels of parent’s practices on pre-requisite skills

Dimension of Practices	Levels of Practice		
	Always	Sometimes	Never
Imitation	69(48.3%)	27(18.9%)	47(32.9%)
Scheduling	86(60.1%)	26(18.2%)	31(21.7%)
Express Emotions	99(69.2%)	25(17.5%)	19(13.3%)
Communications	101(70.6%)	24(16.8%)	18(12.6%)
Group Work	85(59.4%)	32(22.4%)	26(18.2%)
Independent	53(37.1%)	22(15.4%)	68(47.6%)
Safety	42(29.4%)	27(18.9%)	74(51.7%)
Overall Practices	66(46.2%)	8(5.6%)	69(48.3%)

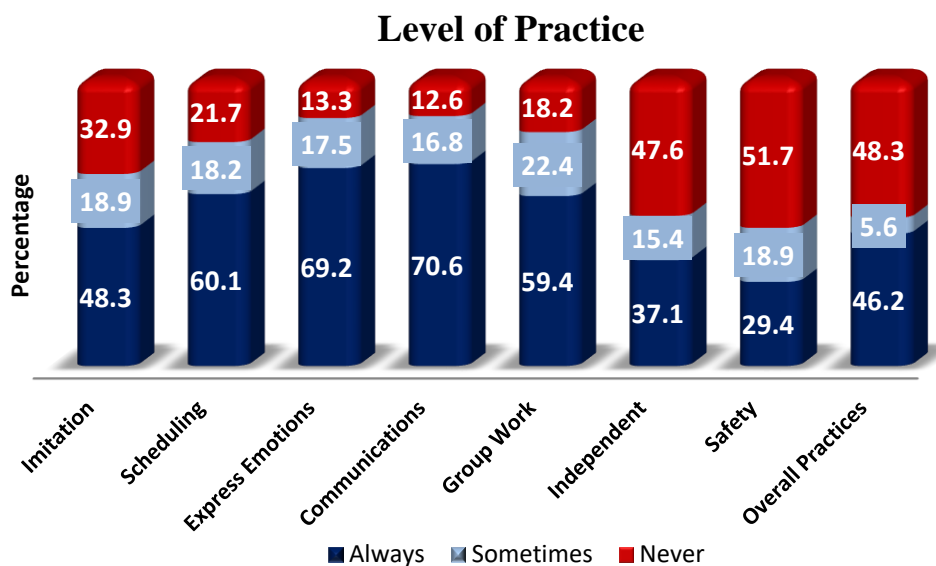


Figure No. VI

Table VIII above shows that 46.2% of parents reported a high level, 48.3% low level, and only 5.6 % an average level of overall practice on pre-requisite skills. Parents have multiple roles in family life, including the needs of the typically developing children, their personal needs, professional needs, family commitments, etc. They often have job-related stress, with fathers citing career restrictions and mothers reporting inability to maintain their work outside the home (Montes and Halterman, 2007).

Looking at the dimension-wise practices, in imitation, 48.3% of parents showed a high level, 32.9% a low level, and 18.9% an average level. Parents also know that it can be hard for their child with ASD to imitate, yet they practice imitation to teach their children certain skills to become independent; if not, other areas of growth may be affected.

In the second dimension of parents' practices on scheduling, 60.1% reported a high level, and 21.7% low level, while 18.9% showed an average level of practice on scheduling. Knight, Sartini, and Spriggs (2015) emphasized how important practicing a schedule is because, in their study, they found that schedules and structured routines are effective strategies for increasing task completion and reducing problem behaviours in children with ASD and that parents who applied structured scheduling practices at home observed improvements in their child's ability to follow instructions and manage daily tasks with greater autonomy.

In the dimension of expressing emotion, 69.2% had a high level, 17.5% showed average, and 13.3% reported low levels of expressing emotion in practice. These parental practices are essential in fostering emotional intelligence and improving social functioning in children with autism. Begeer *et al.*, (2011) mentioned that when parents consistently practice emotion recognition tasks, such as using facial expressions, visual aids, and situational role-play, children with ASD show measurable improvements in both expressing their own emotions and identifying the emotional states of others.

Looking into the communication dimension of practices, the majority (70.6%) showed a high level, and 16.8% showed an average level, while 12.6% had a low level of practice on communication skills. Roberts and Kaiser (2011) conducted a meta-analysis of parent-implemented language interventions for children with autism and found strong evidence that when parents were trained and actively involved in communication

practices, their children exhibited marked improvements in both verbal and non-verbal communication skills.

In the dimension of group work practices, 59.4% reported a high level, 22.4% demonstrated an average level, and 18.2% showed a low level of practice in facilitating group work activities for their child. Kasari *et al.*, (2012) and Kamps *et al.*, (2015) found that parent-supported peer-mediated interventions in small group settings significantly improved children's social engagement and peer relationships and their study demonstrated that when parents facilitated small-group activities with structured support, children showed significant improvements in initiating interactions and responding to peers.

Looking into the dimension of independent practices, 47.6% were showing a low level and 37.1% were showing a high level, and only 15.4% were showing an average level. Matson *et al.*, (2012) noted that parental over-involvement and a tendency to over-assist can hinder the development of independent living skills in children with ASD. Similarly, Hodgetts *et al.*, (2013) highlighted that time constraints, parental stress, and a lack of formal training in teaching life skills are significant barriers preventing parents from consistently promoting independence in their children with ASD.

Lastly, regarding the level of safety dimension of practices, the majority (75.7%) showed a low level, while 29.4% exhibited a high level, and only 18.9% showed an average level. Meadan *et al.*, (2016) emphasised that children with autism may not instinctively recognise hazardous situations, requiring explicit instruction and repetitive teaching by caregivers to ensure their safety in various environments. Furthermore, a study by Westphal *et al.*, (2022) found that parental involvement in structured safety education significantly reduces unintentional injuries among children with autism, highlighting the critical role of parental safety practices

In summary, the assessment of parents' knowledge, attitude, and practice (KAP) regarding pre-requisite skills for children with autism revealed significant differences among the three dimensions. However, even though parents have low knowledge and attitude, they still show average to high levels of practice. The observed gap between knowledge, attitude, and practice highlights a critical area for intervention, where enhancing parental awareness and fostering positive attitudes through education and support programmes could further strengthen their practices on pre-requisite skills.

3) Levels of mental health and self-efficacy of parents of children with autism

a. Levels of parents mental health

Table IX: Levels of Parent’s mental health

Dimension of Mental Health	Levels of Mental Health				
	Very Good	Good	Average	Poor	Very Poor
PMHSE	-	2(1.4%)	29 (20.3%)	94 (65.7%)	18 (12.6%)
Perception of reality	-	-	2(1.4%)	102 (71.3%)	39 (27.3%)
Integration of personality	-	-	8(5.6%)	87 (60.8%)	48 (33.6%)
Autonomy	-	3 (2.1%)	50 (35.0%)	83 (58.0%)	7 (4.9%)
Group-oriented attitudes	-	-	6 (4.2%)	87 (60.8%)	50 (35.0%)
Environmental mastery	-	-	9 (6.3%)	85 (59.4%)	49 (34.3%)
Overall Mental Health	-	-	-	121(84.6%)	22(15.4%)

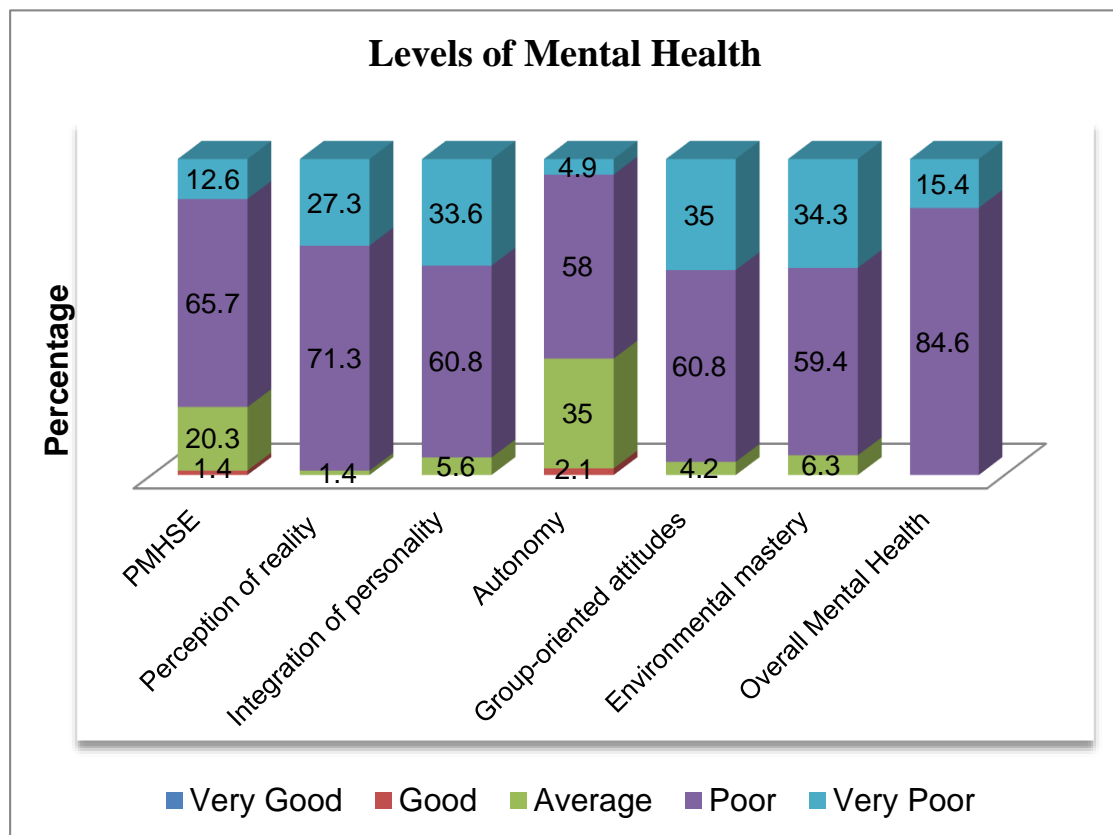


Figure No. VII

Table IX shows the levels of mental health of parents with children with autism. A majority (84.6%) of parents showed a poor level of overall mental health and 15.4% of parents reported to be in a very poor level of overall mental health. Looking into the dimension-wise mental health, in the dimension of PMHSE - Parents' Mental Health Self-Evaluation, parents showed poor (65.7%) to average (20.3%) levels of mental health.

Studies have consistently shown that parents of children with ASD experience higher levels of stress, anxiety, and depression compared to parents of neurotypical children (Hayes & Watson, 2013). The constant demands of managing behavioural difficulties, navigating therapy services, and addressing societal stigma contribute to chronic stress and emotional exhaustion (Bitsika and Sharpley, 2004). A meta-analysis by Zablotsky *et al.*, (2013) found that mothers of children with ASD were significantly more likely to report poor mental health compared to mothers of children with other developmental disabilities. Similarly, Dykens (2015) emphasises that the persistent caregiving responsibilities and reduced social support amplify feelings of isolation. Moreover, Lai *et al.*, (2015) highlighted that caregiver strain is not only psychological but also physical, leading to health deterioration over time if adequate support systems are not in place. Interventions focusing on parental coping strategies, access to respite care, and psycho educational support have been shown to mitigate some of these negative mental health outcomes (Hartley *et al.*, 2010).

In the dimension of perception of reality, it can be seen that a higher percentage (71.3%) of the parents reported poor and very poor levels (27.3%) of mental health. Only 1.4% of them were found to be at an average level of mental health. Accepting the child's condition, getting mentally prepared to support and encourage the child takes a toll on parents.

In the dimension of integration of personality, a higher percentage of parents showed a poor (60.8%) to very poor (33.6%) level of mental health, and 5.6% of them reported an average level. When parents find it difficult to organize this effectively, conflict arises.

A higher percentage (58.0%) of parents showed a poor and 35.0% reported an average level of mental health in the dimension of autonomy and only a few (2.1%) of them depicted a good level of autonomy. Parents face a lack of social acceptance for their children. Their decisions are greatly influenced by this.

Group-oriented attitudes dimension showed that 59.4% of parents had a poor level and 35.0% had a very poor level, while few (4.2%) had an average level. Parents of autistic children may withdraw from being a part of a group due to various reasons based on the circumstances they are in.

Lastly, in the dimension of environmental mastery, 59.4% of parents reported having poor levels and very poor levels (34.3%), and 6.3% showed average levels. Parents testified to having poor to very poor levels of environmental mastery. Parents may feel low about their environmental mastery when they feel that their child is not able to work independently or play with peers.

Parents encourage their children to be independent and also motivate them to enhance adaptive behaviour. Support from the spouse and other members of the family is very significant because if parents are not able to cope with emotions, it can be the reason for their lower mental health.

b. Levels of parents self-efficacy

Table X: Levels of parent’s self-efficacy

Levels of Self- efficacy		
Levels	Frequency	Percent
Low	51	35.7
Average	61	42.7
High	31	21.7

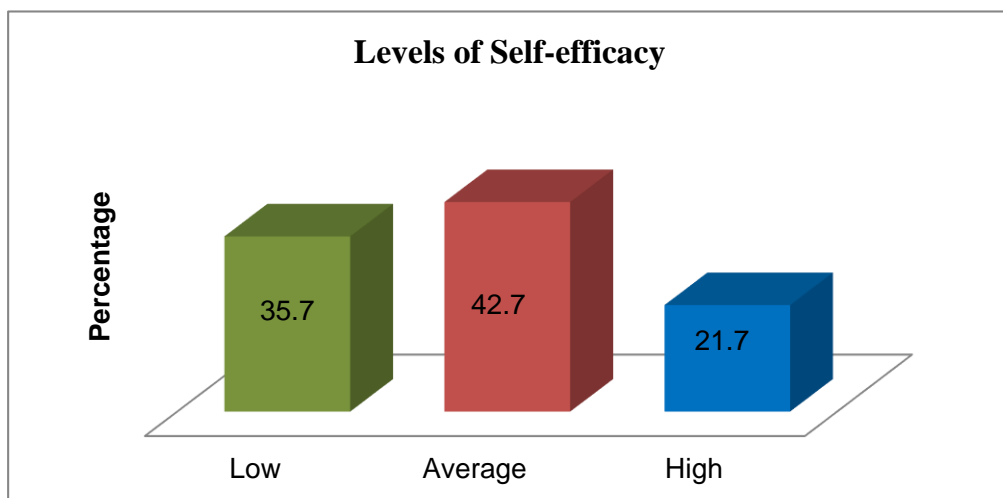


Figure No. VIII

Levels of parents self-efficacy can be seen in the Table X, 42.7% of parents testified an average level of parents self-efficacy and 35.7% of parents reported a low level of parents self-efficacy and 21.7% of parents came up with a high level of parents self-efficacy. Meleady *et al.*, (2020) mentioned that, parents of autistic children often report a range of positive experiences related to their parenting journey. These include developing a renewed sense of purpose following their child's diagnosis, experiencing personal growth through benefit-finding (Pakenham *et al.*, 1997), and holding positive perceptions of their child's role within the family. Additionally, increased resilience has been observed among these parents (Lu *et al.*, 2021). Taking care of a child with autism is very demanding, and not knowing what will happen can make them feel very tired and like they can't do anything.

In summary, parents have to deal with their child's behaviour problems, difficulties in communication, and the stress of managing various therapies and treatments. This constant pressure can make them feel tired, anxious, and emotionally drained over time. In addition, many parents face social stigma and feel judged by others who do not understand autism, which makes them feel isolated and lowers their confidence. As a result, their self-efficacy, which is their belief in their own ability to handle these parenting challenges, is often found to be at an average to low level. The combination of these emotional burdens and lacks of support causes their mental health to suffer while also making it harder for them to believe in their ability to cope with the demands of parenting a child with autism. The investigation also highlighted the critical importance of focusing on parents' mental health and boosting their self-efficacy. Sensitization programs can provide parents with emotional support, clear up misconceptions, and equip them with practical strategies to handle daily challenges. This not only reduces their stress and emotional burden but also empowers them to feel more capable and confident in managing their child's condition.

4) Predictive capacity of socio-demographic markers on parents knowledge, attitude, practice, mental health and self-efficacy

Examining the predictive capacity of socio-demographic markers on knowledge, attitude, practice, mental health, and self-efficacy is essential to understand how socio-demographic markers such as gender of parents, education, income, occupation, family type and area of residence influence parents' awareness, perceptions, and behaviors regarding their child's development. Results are presented under the following headings

- a. Predictive capacity of socio-demographic markers on parent's Knowledge on pre-requisite skills
- b. Predictive capacity of socio-demographic markers on parent's attitude towards pre-requisite skills
- c. Predictive capacity of socio-demographic markers on parent's practices on pre-requisite skills
- d. Predictive capacity of socio-demographic markers on parent's mental health
- e. Predictive capacity of socio-demographic markers on parent's self-efficacy

To assess the predictive capacity of the socio-demographic markers on the parents knowledge, attitude, practice on pre-requisite skills, mental health and self-efficacy, multiple linear regression analysis was applied. The relevant assumptions were tested with all the dependent variables, where a sample size of 143 was deemed to be adequate, given the independent variable was seven namely parents (coded 1=father, 2=mother), education qualification (coded 1=high school, 2=undergraduate, 3=postgraduate, 4=ph.d), occupation (coded 1=government sector, 2=private sector, 3=self-employed, 4=home maker), income in rupees (coded 1=< 2 lakhs, 2=2-5 lakhs, 3=5-10 lakhs, 4=>10 lakhs), siblings (coded 1=single child, 2=1 sibling, 3=2 siblings), types of family (coded 1=nuclear, 2=joint), area of residence (coded 1=urban, 2=semi urban, 3=rural). The assumption of singularity was met and, in the correlation, the independent variables did not have coefficient loadings of more than 0.8. The collinearity statistics were met, with tolerance values being less than 1 and VIF values being less than 5. Extreme univariate outliers were not found, and the Cook's distance was found to be in the acceptable range.

a. Predictive capacity of socio-demographic markers on parent’s knowledge on pre-requisite skills

Table XI (a): Correlation between the socio-demographic markers and parents knowledge on pre-requisite skills

Variables	Overall Knowledge	Gender of Parents	Education Qualification	Parents Occupation	Family Income	Number of Sibling	Type of Family	Area of Residence
Overall Knowledge	1.000							
Gender of Parent	-.150*	1.000						
Education Qualification	.204**	-.100	1.000					
Parents Occupation	-.157*	.710	-.089	1.000				
Family Income	.199**	-.348	.143	-.387	1.000			
Number of Sibling	-.051	-.069	-.009	-.021	.246	1.000		
Type of Family	-.085	-.016	-.133	-.131	.130	.153	1.000	
Area of Residence	.081	.006	-.047	.031	-.170	-.093	-.052	1.000

The Pearson correlation coefficient indicated the strength and direction of the relationship between overall knowledge and various socio-demographic markers such as gender of parents, educational qualification, parent’s occupation, family income, number of sibling, type of family and area of residence.

A negative correlation (-0.150, $p < 0.05$) existed between gender of parents and total knowledge, suggesting that the parents gender (mother or father) has a slight inverse relationship with knowledge levels. A significant positive correlation (0.204, $p < 0.01$) indicated that higher educational qualifications are associated with better parental knowledge. The negative correlation (-0.157, $p < 0.05$) between parents' occupation and overall knowledge implied that certain occupational engagements might limit the knowledge levels of parents. A positive correlation (0.199, $p < 0.01$) suggested that higher family income is associated with greater parental knowledge.

The negative correlation (-0.051) indicates no significant relationship between the number of siblings and parental knowledge. A weak negative correlation (-0.085) suggested that the type of family (nuclear or joint) does not significantly influence parental knowledge. A weak

positive correlation (0.081) suggested that parents' area of residence (urban or rural) has little effect on their knowledge levels.

Recent research underscores the significant impact of socio-demographic markers on parental knowledge. A study by Bornstein *et al.*, (2022) found that maternal age and education level are positively correlated with parenting knowledge, indicating educated mothers tend to have a better understanding of child-rearing practices. Additionally, the study highlighted that mothers improved their parenting knowledge from their first to their second child. These findings emphasize the importance of considering socio-demographic markers when developing parenting support programs.

Table XI (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.324 ^a	.105	.058	.406
a. Predictors: (Constant), Area of Residence, Parent of Gender, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation				
b. Dependent Variable: Overall Knowledge				

Table XI (b): The R-square value of 0.105 indicated that 10.5% of the variance in parents' knowledge is explained by the socio-demographic markers as depicted in the model. The adjusted R-squared value of 0.058 suggests that when adjusting for the number of predictors, the explanatory power slightly decreases.

Table XI (c): Results of ANOVA

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.603	7	.372	2.257	.033 ^b
Residual	22.236	135	.165		
Total	24.839	142			
a. Dependent Variable: Overall Knowledge					
b. Predictors: (Constant), Area of Residence, Gender of parents, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation					

Table XI (c): The ANOVA table shows that the overall regression model is statistically significant ($F = 2.257$, $p = .033$), indicating that the set of predictors collectively has a significant effect on parents' knowledge.

Table XI (d): Regression Coefficients for Socio-Demographic Predictors of Parents' Knowledge on pre-requisite skills of autistic children

Coefficients					
Predictor variables	Unstandardised Coefficients		Standardised Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	1.197	.383		3.129	.002
Gender of Parents	-.029	.114	-.030	-.259	.796
Education Qualification	.121	.062	.162	1.946	.054
Parents Occupation	-.023	.045	-.063	-.520	.604
Family Income	.151	.075	.189	2.015	.046
Number of Sibling	-.084	.092	-.078	-.908	.366
Type of Family	-.076	.082	-.079	-.926	.356
Area of Residence	.131	.098	.111	1.341	.182

Table XI (d): Among the individual predictors, education qualification ($\beta = 0.162$, $p = .054$) and family income ($\beta = 0.189$, $p = .046$) were found to be significant predictors of parents' knowledge. This suggested that parents with higher education levels are more likely to be knowledgeable about autism and pre-requisite skills. Similarly, higher family income is associated with greater knowledge. Conversely, other socio demographic markers, including gender of parents, parents' occupation, number of siblings, type of family, and area of residence, did not show a statistically significant impact on knowledge levels ($p > .05$). This suggested that while economic and educational factors play a crucial role, structural family characteristics and geographical location may not independently determine knowledge acquisition. These findings align with previous research, such as that of Khan *et al.*, (2024), who highlighted that higher parental education and socio-economic status are strong predictors of autism awareness and early intervention engagement. Additionally, studies by Ndindeng (2024) have indicated that low-income families often face barriers to accessing autism-related information and services, reinforcing the importance of socio-economic factors in shaping parental knowledge. These findings have important implications for public health and educational policy. Community outreach programs, affordable educational workshops, and improved

accessibility to autism-related resources could help mitigate disparities in knowledge levels.

b. Predictive capacity of socio-demographic markers on parent’s attitude towards pre-requisite skills

Table XII (a): Correlation between the socio-demographic markers and parents attitude towards pre-requisite skills

Variables	Overall Attitude	Gender of Parents	Education Qualification	Parents Occupation	Family Income	Siblings of Child	Type of Family	Area of Residence
Overall Attitude	1.000							
Gender of Parents	.069	1.000						
Education Qualification	.126	-.100	1.000					
Parents Occupation	.108	.710	-.089	1.000				
Family Income	-.001	-.348	.143	-.387	1.000			
Number of Sibling	.008	-.069	-.009	-.021	.246	1.000		
Type of Family	-.007	-.016	-.133	-.131	.130	.153	1.000	
Area of Residence	-.025	.006	-.047	.031	-.170	-.093	-.052	1.000

Table XII (a): The correlation analysis indicates that most socio-demographic factors have no significant relationship with parents' attitudes. Gender of parents (0.069), education qualification (0.126), and parents' occupation (0.108) showed weak positive correlations, suggesting minimal impact. Family income (-0.001), number of siblings (0.008), type of family (-0.007), and area of residence (-0.025) exhibited negative correlations, implying that these factors do not shape parental attitudes significantly. Socio-demographic factors do not significantly influence parents' attitudes. Awareness campaigns, parental counseling, and peer-group discussions may be more effective in shaping positive attitudes than socio-economic improvements alone.

Table XII (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.178 ^a	.032	-.018	.802
a. Predictors: (Constant), Area of Residence, Gender of parents, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation				
b. Dependent Variable: Overall Attitude				

Table XII (b): The model summary revealed only 3.2% of the variance in parental attitude is explained by the socio-demographic markers as shown in the model with R² being 0.032. The adjusted R-square value is negative (-0.018), indicating that after accounting for the number of predictors, the model does not significantly explain variations in parental attitude. This suggested that other external factors, such as personal experiences, cultural beliefs, and exposure to autism-related information, may have a greater influence on parental attitudes.

Table XII (c): Results of ANOVA

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.854	7	.408	.634	.727
Residual	86.810	135	.643		
Total	89.664	142			
a. Dependent Variable: Overall Attitude					
b. Predictors: (Constant), Area of Residence, Gender of Parents, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation					

Table XII (c): The ANOVA results indicated that the overall regression model is not statistically significant ($F = 0.634, p = 0.727$). This suggested that the combined effect of the socio-demographic markers does not significantly predict variations in parents' attitudes toward autism.

Table XII (d): Regression Coefficients for Socio-Demographic Predictors of Attitude on pre-requisite skills of autistic children

Coefficients					
Predictor variables	Unstandardised Coefficients		Standardised Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	.618	.756		.817	.416
Gender of Parents	-.012	.225	-.006	-.053	.958
Education Qualification	.193	.123	.136	1.569	.119
Parents Occupation	.097	.088	.138	1.102	.272
Family Income	.036	.148	.024	.245	.807
Number of Sibling	.001	.182	.001	.007	.995
Type of Family	.045	.163	.025	.280	.780
Area of Residence	-.039	.193	-.018	-.204	.838
a. Dependent Variable: Overall Attitude					

Table XII (d): An examination of the individual predictor variables confirms the lack of statistically significant effects. However, education qualification ($\beta = 0.136$, $p=0.119$) and parents' occupation ($\beta = 0.138$, $p = 0.272$) had the highest, though non-significant, scores on attitudes. Similarly, family income ($\beta = 0.024$, $p = 0.807$), type of family ($\beta = 0.025$, $p = 0.780$), and area of residence ($\beta = -0.018$, $p = 0.838$) did not show any notable predictive capacity on attitude. The findings indicated that demographic characteristics alone do not significantly influence parental attitudes toward autism and pre-requisite skills. This aligns with research by Huang *et al.*, (2022), who found that parental attitudes are more strongly influenced by personal experiences, emotional resilience, and perceived social support rather than socio-demographic factors.

c. Predictive capacity of socio-demographic markers on parent’s practices on pre-requisite skills

Table XIII (a) Correlation between the socio-demographic markers and parents practices on pre-requisite skills

Correlations								
Variables	Overall Practice	Gender of Parents	Education Qualification	Parents Occupation	Family Income	Number of Sibling	Type of Family	Area of Residence
Overall Practice	1.000							
Gender of Parent	.105	1.000						
Education Qualification	-.016	-.100	1.000					
Parents Occupation	-.060	.710	-.089	1.000				
Family Income	-.170*	-.348	.143	-.387	1.000			
Number of Sibling	-.102	-.069	-.009	-.021	.246	1.000		
Type of Family	-.155*	-.016	-.133	-.131	.130	.153	1.000	
Area of Residence	-.133	.006	-.047	.031	-.170	-.093	-.052	1.000

Table XIII (a): The correlation analysis revealed that two socio-demographic markers exhibited significant relationship with parental practices. Family income showed a weak negative correlation (-0.170, $p < 0.05$), indicating that higher income levels are associated with slightly lower engagement in certain parenting practices. This could be due to busier lifestyles or greater reliance on external caregivers. Similarly, the type of family had a weak negative correlation (-0.155, $p < 0.05$) with parental practices, suggesting that parents in nuclear families may engage in slightly different care giving behaviours compared to those in joint families, possibly due to differences in shared responsibilities and support systems.

Gender of parents (0.105) showed a weak positive correlation, implying minimal differences in practices between mothers and fathers. Education qualification (-0.016) and parents’ occupation (-0.060) exhibited near zero correlations, suggesting that formal education and employment status do not strongly impact parental behavior. Additionally, the number of siblings (-0.102) and area of residence (-0.133) also showed weak negative correlations, indicating that these markers do not play a crucial role in shaping parenting practices. This suggested that parental behavior is more influenced by individual

preferences, cultural values, and personal experiences rather than external socio-economic factors. Since higher income is linked to lower parental engagement, awareness programs should emphasize the importance of active parental involvement, regardless of financial status. Additionally, family dynamics in nuclear and joint families should be considered while designing parenting interventions.

Recent research has examined the impact of socio-demographic factors on parental practices. A study by Liu *et al.*, (2024) investigated how family socio-demographic characteristics influence parental mediation strategies and adolescents' digital literacy. The findings revealed that higher parental education levels were positively associated with active mediation practices, while better family economic status was linked to less restrictive mediation.

Table XIII (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.376 ^a	.141	.097	.927
a. Predictors: (Constant), Area of Residence, Gender of Parent, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation				
b. Dependent Variable: Overall Practice				

Table XIII (b): The model summary indicated 14.1% of the variance in parenting practices is explained by the socio-demographic markers included in the analyze given the $R^2 = 0.141$. The adjusted R-squared value of 0.097 suggested that the model has some predictive power, though not very strong.

Table XIII (c): Results of ANOVA

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	19.047	7	2.721	3.170	.004 ^b
Residual	115.890	135	.858		
Total	134.937	142			
a. Dependent Variable: Overall Practice					
b. Predictors: (Constant), Area of Residence, Gender of Parent, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation					

Table XIII (c): The ANOVA table shows that the overall regression model is statistically significant ($F = 3.170$, $p = 0.004$), indicating that socio-demographic markers collectively influence parental practices in a meaningful way.

d. Table XIII (d): Regression Coefficients for Socio-Demographic Predictors of Parents' Practice towards Pre-requisite Skills

Coefficients					
Predictor variables	Unstandardised Coefficients		Standardised Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	4.202	.874		4.810	.000
Gender of Parent	.643	.260	.284	2.470	.015
Education Qualification	-.039	.142	-.022	-.271	.787
Parents Occupation	-.314	.102	-.364	-3.082	.002
Family Income	-.388	.171	-.209	-2.269	.025
Number of Sibling	-.068	.211	-.027	-.323	.747
Type of Family	-.405	.188	-.179	-2.153	.033
Area of Residence	-.474	.223	-.173	-2.125	.035
a. Dependent Variable: Overall Practice					

Table XIII (d): A closer look at the individual predictors reveals several significant influences. Gender of parents ($\beta = 0.284$, $p = 0.015$) showed a positive and significant coefficient, suggesting that parents gender exhibited variations in parenting practices, highlighting the need for tailored support programs for different caregiver roles. Parents' occupation ($\beta = -0.364$, $p = 0.002$) had a negative and highly significant association, indicating that parents with demanding occupations may have less time or fewer opportunities to engage in autism-specific parenting practices on pre-requisite skills. Flexible work arrangements and employer support may help improve parental involvement.

Family income ($\beta = -0.209$, $p = 0.025$) showed a negative association, suggesting that lower-income families may face challenges in implementing optimal parenting practices, possibly due to financial constraints limiting access to therapy and educational

resources. The type of family ($\beta = -0.179$, $p = 0.033$) also had a significant negative relationship, indicating that nuclear families may have different approaches to parenting compared to joint families. Extended family support structures may influence caregiving practices. The area of residence ($\beta = -0.173$, $p = 0.035$) had a negative impact, suggesting that rural or semi-urban families may have fewer opportunities for specialised interventions compared to urban families. This highlights the importance of improving autism-related services in less developed areas. On the other hand, education qualification ($\beta = -0.022$, $p = 0.787$) and number of siblings ($\beta = -0.027$, $p = 0.747$) were not significant predictors of parenting practices.

These findings are consistent with the study by Duyile (2023), which found that parental occupation and socio-economic status significantly influenced autism-related parenting practices. The study highlighted that financial and occupational constraints often limit parents' ability to implement specialised interventions, while strong family support structures improve caregiving approaches. Future research should explore the role of social networks and community support in shaping parental practices.

e. Predictive capacity of socio-demographic markers on parent's mental health

Table XIV. (a) Correlation between the socio-demographic markers and parent's Mental health

Variables	Parents Mental Health	Gender of Parents	Education Qualification	Parents Occupation	Family Income	Number of Sibling	Type of Family	Area of Residence
Parents Mental Health	1.000							
Gender of Parent	.163*	1.000						
Education Qualification	.032	-.100	1.000					
Parents Occupation	.094	.710	-.089	1.000				
Family Income	-.097	-.348	.143	-.387	1.000			
Number of Sibling	-.101	-.069	-.009	-.021	.246	1.000		
Type of Family	-.208**	-.016	-.133	-.131	.130	.153	1.000	
Area of Residence	.067	.006	-.047	.031	-.170	-.093	-.052	1.000

Table XIV. (a): The correlation analysis explored how various socio-demographic markers have the cause and effect relationship with parents' mental health. Among these,

gender of parents and type of family showed statistically significant relationships, while the rest exhibited minimal or no significant relationship.

A weak positive correlation (0.163, $p < 0.05$) suggested that mental health differs slightly between mothers and fathers. This variation may stem from differing parental roles, emotional stress, or societal expectations affecting their well-being. A weak negative correlation (-0.208, $p < 0.01$) indicated that parents in nuclear families tend to have more mental health challenges than those in joint families. This could be due to a lack of shared caregiving responsibilities, social support, and increased financial or emotional stress in nuclear households.

Education qualification (0.032), parents' occupation (0.094), family income (-0.097), number of siblings (-0.101), and area of residence (0.067) do not show any significant relationship with parents' mental health. Instead, personal experiences, social support, and emotional resilience might play a more crucial role.

To support parental mental well-being, it is essential to strengthen community-based mental health initiatives, promote stress management programs, and encourage family-friendly policies. Providing access to counseling services, parental support groups, and flexible work arrangements can help mitigate mental health challenges, particularly for nuclear families.

Recent research has highlighted the significant impact of socio-demographic factors on parental mental health. A study by Liu *et al.*, (2023) examined geographic and socio-demographic variations in the prevalence of mental health symptoms among parents in the United States, revealing that factors such as household income, housing stability, and food security are closely associated with mental health outcomes.

Table XIV (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.282	.080	.032	.356
a. Predictors: (Constant), Area of Residence, Gender of Parent, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation				
b. Dependent Variable: Parents Mental Health				

Table XIV (b):The model summary indicated 8% of the variance in parental mental health explained by these socio-demographic markers with the R square of 0.080, and with an adjusted R square of 0.032.

Table XIV (c): Result of ANOVA

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.481	7	.212	1.666	.122
Residual	17.135	135	.127		
Total	18.615	142			
a. Dependent Variable: Parents Mental Health					
b. Predictors: (Constant), Area of Residence, Gender of Parent, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation					

Table XIV(c): The ANOVA results indicated that the overall model is not statistically significant ($F = 1.666$, $p = 0.122$), however, individual predictors may still provide insight into specific influences.

Table XIV (d): Regression Coefficients for Socio-Demographic Predictors of Parents' Mental Health

Coefficients					
Predictor variables	Unstandardised Coefficients		Standardised Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	1.809	.336		5.385	.000
Gender of Parent	.186	.100	.221	1.856	.066
Education Qualification	.015	.055	.023	.270	.788
Parents Occupation	-.031	.039	-.095	-.780	.437
Family Income	-.009	.066	-.013	-.141	.888
Number of Sibling	-.045	.081	-.048	-.552	.582
Type of Family	-.170	.072	-.202	-2.348	.020
Area of Residence	.054	.086	.053	.626	.533
a. Dependent Variable: Parents Mental Health					

Table XIV (d): Analysing the coefficients, the type of family ($\beta = -0.202$, $p = 0.020$) was a significant predictor, with parents in nuclear families experiencing higher mental health stress compared to those in joint families. Gender of parents ($\beta = 0.221$, $p = 0.066$) approaches significance, indicating that different parental roles may contribute differently to stress and mental health outcomes.

Other demographic markers, including education qualification ($\beta = 0.023$, $p = 0.788$), parents' occupation ($\beta = -0.095$, $p = 0.437$), family income ($\beta = -0.013$, $p = 0.888$), number of siblings ($\beta = -0.048$, $p = 0.582$), and area of residence ($\beta = 0.053$, $p = 0.533$), does not show significant predictive capacity on parental mental health. These findings align with previous studies, such as the research by Sarwar *et al.*, (2022), which emphasised that social support, rather than economic factors, plays a more significant role in alleviating mental health and stress among parents of autistic children.

f. Predictive capacity of socio-demographic markers on parent’s self-efficacy

Table XV. (a): Correlation between socio-demographic markers and parent’s self-efficacy

Variables	Parents Self-efficacy	Gender of Parents	Education Qualification	Parents Occupation	Family Income	Number of Sibling	Type of Family	Area of Residence
Parents Self-efficacy	1.000							
Gender of Parent	-.085	1.000						
Education Qualification	-.004	-.100	1.000					
Parents Occupation	-.083	.710	-.089	1.000				
Family Income	.173*	-.348	.143	-.387	1.000			
Number of Sibling	.162*	-.069	-.009	-.021	.246	1.000		
Type of Family	.173*	-.016	-.133	-.131	.130	.153	1.000	
Area of Residence	-.081	.006	-.047	.031	-.170	-.093	-.052	1.000

Table XV. (a): The analysis revealed three socio-demographic markers that were significantly related to parenting self-efficacy. Family income (0.173, $p < 0.05$) showed a weak positive correlation, indicating that higher financial stability may contribute to greater confidence in parenting abilities, possibly due to access to better resources and support systems. Number of siblings (0.162, $p < 0.05$) also had a weak positive correlation, suggesting that parents with more children may develop stronger self-efficacy over time due to increased

parenting experience. Additionally, type of family (0.173, $p < 0.05$) was found to be positively correlated with parenting self-efficacy, implying that parents in joint families may feel more competent in their parenting role, likely due to shared responsibilities and support from extended family members.

Several socio-demographic factors did not show a significant relationship with parenting self-efficacy. Gender of parents (-0.085), education qualification (-0.004), parents' occupation (-0.083), and area of residence (-0.081) all exhibited weak or negligible correlations, indicating that these markers do not play a major role in determining how confident parents feel about their abilities.

Recent research has explored the impact of socio-demographic markers on parenting self-efficacy. A study by Fierloos *et al.*, (2023) examined the association between perceived social support and parenting self-efficacy among parents of children aged 0–8 years. The findings indicated that parents with higher levels of social support reported greater parenting self-efficacy, independent of socio-demographic markers such as parental age, education level, and family income.

Table XV. (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.259	.067	.019	.740
a. Predictors: (Constant), Area of Residence, Gender of Parents, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation				
b. Dependent Variable: Parents Self -efficacy				

Table XV. (b) The model summary indicated that these socio-demographic markers explain 6.7% of the variance in parents' self-efficacy with an R square of 0.067, and an adjusted R square of 0.019

Table XV (c): Result of ANOVA

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.311	7	.759	1.386	.216 ^b
Residual	73.892	135	.547		
Total	79.203	142			
a. Dependent Variable: Parents Self -efficacy					
b. Predictors: (Constant), Area of Residence, Gender of Parent, Type of Family, Education Qualification, Number of Sibling, Family Income, Parents Occupation					

Table XV (c): The ANOVA results showed that the model is not statistically significant ($F = 1.386$, $p = 0.216$), implying that these socio-demographic markers do not collectively have a strong predictive influence on parenting self-efficacy.

Table XV (d): Regression Coefficients for Socio-Demographic Predictors of Parents' Self-efficacy

Coefficients					
Predictor variables	Unstandardised Coefficients		Standardised Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	1.105	.698		1.584	.116
Gender of Parent	-.084	.208	-.048	-.404	.687
Education Qualification	-.008	.113	-.006	-.074	.941
Parents Occupation	.011	.081	.016	.130	.897
Family Income	.159	.137	.112	1.163	.247
Number of Siblings	.203	.168	.105	1.209	.229
Type of Family	.242	.150	.140	1.615	.109
Area of Residence	-.096	.178	-.046	-.539	.591
a. Dependent Variable: Parents' Self-efficacy					

Table XV (d): The type of family ($\beta = 0.140$, $p = 0.109$), number of siblings ($\beta = 0.105$, $p = 0.229$) showed a positive but non-significant relationship with self-efficacy with lower 'p' values. Other markers, such as gender of parents ($\beta = -0.048$, $p = 0.687$), education qualification ($\beta = -0.006$, $p = 0.941$), parents' occupation ($\beta = 0.016$, $p = 0.897$), family income ($\beta = 0.112$, $p = 0.247$), and area of residence ($\beta = -0.046$, $p = 0.591$), were not found to be significant predictors either with parenting self-efficacy.

These findings align with prior research, such as the study by Dai *et al.*, (2022), which emphasized that parenting self-efficacy is more influenced by parental experiences, social support, and coping mechanisms rather than socio-demographic factors alone. Their study highlighted that access to parenting resources, emotional support from family members, and hands-on caregiving experiences significantly enhance self-efficacy. Given these insights, future interventions should focus on skill-building programs, peer support groups, and mental health resources to empower parents in their caregiving roles.

5) Influence of parents' knowledge, attitude, and practices (KAP) pre-requisite skills on parents' mental health and self-efficacy of parents of children with autism

Exploring the influence of parents' knowledge, attitude, and practices (KAP) towards pre-requisite skills on parents' mental health and self-efficacy is important to understand how parents manage the psychological and emotional demands while raising a child with ASD. Results on Influence of Parents' Knowledge, Attitude, and Practices on parents Mental Health and Self-efficacy are presented under the following heads-

- a. Influence of parents' knowledge of pre-requisite skills on their mental health and self-efficacy
- b. Influence of parents' attitude towards pre-requisite skills on their mental health and self-efficacy
- c. Influence of parents' practice of pre-requisite skills on their mental health and self-efficacy

To assess the predictive capacity of the knowledge, attitude and practice on the prerequisite skills of parents on their mental health and self-efficacy, a series of multiple linear regression analyses was conducted. The relevant assumptions were tested with all the dependent variables, where a sample size of 143 was deemed to be adequate, given the independent dimensions were six in knowledge, six in attitude and seven in practice coded

as 1=low, 2=average, 3=high for each dimension of knowledge, unfavourable=1, neutral=2, favourable=3 for each dimension of attitude, and 1=low, 2=average, 3=high for each dimension of practice. The assumption of singularity was met; in the correlation, the independent variables did not have coefficient loadings greater than 0.8. The collinearity statistics were met, with tolerance values being less than 1 and VIF values being less than 5. Extreme univariate outliers were not found and the Cook's distance was found to be in the acceptable range.

a. Influence of parents' knowledge of pre-requisite skills on their mental health and self-efficacy

Table XVI (a): Correlation between parents' knowledge of pre-requisite skills and mental health of parents'

Correlations							
Variables	Parents' Mental health	Scheduling	Attention	Socialisation	Self-Control	Self Advocacy	Safety
Parents' Mental Health	1.000						
Scheduling	.097	1.000					
Attention	.218	.248	1.000				
Socialisation	.129	-.090	.138	1.000			
Self-Control	.128	.070	.214	.065	1.000		
Self Advocacy	-.116	-.087	-.175	-.137	-.141	1.000	
Safety	-.231	-.034	-.274	-.421	-.244	-.042	1.000

Table XVI (a): The analysis highlighted attention and safety dimensions of knowledge showed a significant correlation ($.218p < 0.05$) and ($-.231p < 0.05$) with mental health, Other knowledge dimensions, including scheduling (0.097), socialisation (0.129), self-control (0.128), self-advocacy (-0.116) do not show a significant relationship with parents' Mental health. This suggested that except for the dimensions of attention and safety all the other dimensions do not show a cause and effect relationship with parents' mental health.

Table XVI (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.304	.093	.053	2.469
a. Predictors: (Constant), Safety, Scheduling, Self Advocacy, Self-Control, Attention, Socialisation				
b. Dependent Variable: Total Parents' Mental Health Self Evaluation				

Table XVI (b): The model summary revealed that the knowledge predictors accounted for 9.3% of the variance in parental mental health given the R-squared of 0.093, and with an adjusted R-squared of 0.053. This suggested a weak relationship between dimensions of parents' knowledge on pre-requisite skills and their mental health, indicating that other external factors, may play a more significant role.

Table XVI (c): Results of ANOVA

	Sum of Squa	Df	Mean Squa	F	Sig.
Regression	84.554	6	14.092	2.312	.037
Residual	828.998	136	6.096		
Total	913.552	142			
a. Dependent Variable: Total Parents' Mental Health Self Evaluation					
b. Predictors: (Constant), Safety, Scheduling, Self Advocacy, Self-Control, Attention, Socialisation					

Table XVI (c): The ANOVA results showed that the overall model is statistically significant ($F = 2.312$, $p = 0.37$), implying that knowledge-related variables do collectively exert predictive influence on parents' mental health, but not strongly.

Table XVI (d): Regression coefficients of parents' knowledge predictors on pre-requisite skills for mental health

Coefficients					
Predictor variables	Unstandardised Coefficients		Standardised Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	26.682	1.731		15.415	.000
Scheduling	.151	.252	.051	.601	.549
Attention	.366	.254	.130	1.442	.152
Socialisation	.074	.252	.027	.293	.770
Self-control	.112	.246	.039	.454	.650
Self-advocacy	-.277	.273	-.087	-1.016	.312
Safety	-.486	.265	-.176	-1.833	.069
a. Dependent Variable: Parents' Mental Health					

Table XVI (d): When analysed individual coefficients, none of the dimension of knowledge showed as a significant predictor for parents' mental health, suggesting that

better knowledge on pre requisite skills may influence better levels of mental health. This aligns with previous research suggesting that parents’ who possess greater knowledge are better equipped to manage stress and adapt to challenges, making them more likely to seek out and retain valuable information about their child's development. These findings are consistent with research by Rahayu, (2023), which highlights that while parents’ knowledge levels support positive parenting behaviours, it does not necessarily determine them unless accompanied by proactive learning behaviours and external support systems.

Table XVII. (a): Correlation between parents’ knowledge of pre-requisite skills and parents’ self-efficacy

Correlations							
Variables	Total Parenting Self Efficacy	Scheduling	Attention	Socialisation	Self-Control	Self Advocacy	Safety
Total Parenting Self Efficacy	1.000						
Scheduling	-.069	1.000					
Attention	-.026	.248	1.000				
Socialisation	-.186	-.090	.138	1.000			
Self-Control	.004	.070	.214	.065	1.000		
Self Advocacy	-.082	-.087	-.175	-.137	-.141	1.000	
Safety	.145	-.034	-.274	-.421	-.244	-.042	1.000

Table XVII (a), the analysis revealed a significant negative correlation between socialisation and a positive correlation between the safety dimension of knowledge and parents’ self-efficacy ($r = -0.186, p < 0.05$) and ($r = 0.145, p < 0.05$). Other knowledge dimensions, including scheduling (-0.69), attention (-0.026), self-control (0.004), and self-advocacy knowledge (-0.082), did not show significant correlations with parenting self-efficacy. This indicates that knowledge in these areas does not directly influence parents’ confidence in their parenting skills. This aligns with recent research by Yildirim et al. (2024), which found that mothers' parenting self-efficacy levels were moderate and not significantly influenced by general knowledge about child-rearing.

Table XVII. (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.244 ^a	.060	.018	8.379
a. Predictors: (Constant), Safety, Scheduling, Self Advocacy, Self-Control, Attention, Socialisation				
b. Dependent Variable: Total Parenting Self Efficacy				

Table XVII.(b): The model summary indicated that knowledge-related factors explain only 6.0% of the variance in parenting self-efficacy (R square = 0.060), with an adjusted R² of 0.018. This suggests that while knowledge might play a role in shaping parenting self-efficacy, its overall contribution is relatively low.

Table XVII. (c): Result of ANOVA

ANOVA					
	Sum of Squa	Df	Mean Squa	F	Sig.
Regression	605.844	6	100.974	1.438	.204
Residual	9548.366	136	70.209		
Total	10154.210	142			
a. Dependent Variable: Total Parenting Self Efficacy					
b. Predictors: (Constant), Safety, Scheduling, Self Advocacy, Self-Control, Attention, Socialisation					

Table XVII (c): The ANOVA results confirmed that the model is not statistically significant (F = 1.438, p = 0.204), meaning that the collective impact of different dimensions of knowledge of pre-requisite skills on parenting self-efficacy is not strong enough to make a meaningful prediction.

Table XVII (d): Regression coefficients of parents' knowledge of pre-requisite skills on parents' self-efficacy

Coefficients ^a					
Predictor Variables	Unstandardized Coefficients		Standardized Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	67.547	5.874		11.498	.000
Scheduling	-.979	.855	-.099	-1.145	.254
Attention	.189	.861	.020	.220	.826
Socialisation	-1.678	.856	-.184	-1.960	.052
Self-Control	.200	.836	.021	.239	.811
Self Advocacy	-1.133	.926	-.107	-1.224	.223
Safety	.641	.899	.070	.713	.477
a. Dependent Variable: Total Parenting Self-Efficacy					

Table XVII (d): Regression coefficients shows that individual predictors were not found to be significant predictors of parenting self-efficacy. These findings indicated that while knowledge of pre-requisite skills of autistic children is essential for parenting a child with ASD, it does not necessarily translate into higher self-efficacy.

b. Influence of parents’ attitude towards pre-requisite skills on their mental health and self-efficacy

Table XVIII. (a): Correlation between parents’ attitude towards pre-requisite skills and parents’ mental health

Correlations							
Variables	Total Parents’ Mental Health	Scheduling	Attention	Socialisation	Self-Control	Self Advocacy	Safety
Total Parents’ Mental Health	1.000						
Scheduling	-.136	1.000					
Attention	-.072	.350	1.000				
Socialisation	.042	-.251	-.099	1.000			
Self-Control	.000	-.349	-.261	.406	1.000		
Self Advocacy	-.212	.177	.095	.082	.253	1.000	
Safety	.028	-.045	.086	.298	.248	.141	1.000

Table XVIII.(a): The given correlation matrix looks at how parents’ attitudes toward pre-requisite skills, with the dimensions on necessary abilities, relate to their mental health. The analysis revealed that most correlations were weak. Scheduling (-0.136) and attention (-0.072) showed negative correlations with parents’ mental health. Similarly, self-advocacy (-0.212) exhibited a weak negative correlation. However, socialisation (0.042), self-control (0.000), and safety (0.028) displayed negligible positive correlations, indicating that these factors have little to no effect on parents’ mental health. However, given the weak nature of all correlations, it is unlikely that attitudes toward these skills play a significant role in determining mental health outcomes for parents.

Table XVIII (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.238	.057	.015	5.603
a. Predictors: (Constant), Safety, Scheduling, Self Advocacy, Attention, Socialisation, Self-Control				
b. Dependent Variable: Total Parents' Mental Health				

The model summary of the regression analysis that was done to look at how these attitudinal characteristics affected the mental health of parents is shown in the Table XVIII (b). These attitudinal characteristics account for just 5.7% of the variance in parents' mental health, according to the R-squared value of 0.057. A low level of explanatory power is indicated by the adjusted R-squared of 0.015, which also takes into consideration the number of predictors in the model. This implied that attitudes toward pre-requisite skills do not significantly predict variations in parents' mental health.

Table XVIII (c): Result of ANOVA

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	254.915	6	42.486	1.353	.238
Residual	4238.521	135	31.396		
Total	4493.437	141			
a. Dependent Variable: Total Parents' Mental Health					
b. Predictors: (Constant), Safety, Scheduling, Self Advocacy, Attention, Socialisation, Self-Control					

Table XVIII (c): The overall significance of the regression model, as revealed by the ANOVA table, shows that the model does not substantially predict differences in parents' mental health, according to the F-value of 1.353 and the significance value of 0.238.

Table XVIII (d): Regression coefficients of parents' attitude towards pre-requisite skills and parents' mental health

Coefficients					
Predictor Variables	Unstandardised Coefficients		Standardised Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	143.196	3.193		44.853	.000
Scheduling	-.637	.738	-.084	-.863	.390
Attention	-.388	1.971	-.018	-.197	.844
Socialisation	.295	.730	.038	.404	.687
Self-Control	.027	.682	.004	.039	.969
Self Advocacy	-1.273	.585	-.198	-2.177	.031
Safety	-.104	.648	-.014	-.160	.873

a. Dependent Variable: Total Parents' Mental Health

Table XVIII (d): The predictive capacity of parents' attitudes towards pre-requisite skills on parents' mental health revealed that, when all other variables are held constant, the unstandardised coefficients (B) show the expected change in the dependent variable (parents' mental health) for every unit increase in each predictor. Out of all the attitudes evaluated, self-advocacy stands out as a statistically significant negative predictor (B = -2.1779, p = 0.031), indicating a correlation between lower mental health scores and greater self-advocacy attitude scores, and other attitudes, including scheduling, attention, socialisation, self-control and safety, did not emerge as significant predictors of parents' mental health.

The significant negative association between the dimension of self advocacy and parents' mental health may indicate that parents who place heightened emphasis on advocacy aspects of pre-requisite skills experience increased stress or anxiety, potentially due to the pressures of monitoring and fostering these skills in their children. This finding aligns with research suggesting that certain parental attitudes and coping styles can influence mental health outcomes. For instance, a study by Cheng *et al.*, (2024) explored how parental attitudes and coping mechanisms during prolonged online education periods impacted mental health, highlighting that specific parental attitudes can significantly affect well-being.

Table XIX. (a) Correlation between parents' attitude towards pre-requisite skills and parents' self-efficacy

Correlations							
Variables	Total Parenting Self Efficacy	Scheduling	Attention	Socialisation	Self-Control	Self Advocacy	Safety
Total Parenting Self Efficacy	1.000						
Scheduling	-.058	1.000					
Attention	.102	.350	1.000				
Socialisation	.068	-.251	-.099	1.000			
Self-Control	.084	-.349	-.261	.406	1.000		
Self Advocacy	.037	.177	.095	.082	.253	1.000	
Safety	-.046	-.045	.086	.298	.248	.141	1.000

Table XIX. (a): The analysis revealed that none of the dimension were showing significant relation between parents' attitude and parents' self-efficacy. This suggested that parents who hold positive attitudes towards pre -requisite skills aspects of parenting tend to have higher confidence in their parenting abilities. A favourable outlook on facilitating their children's social interactions and development may enhance parents' belief in their competence to manage challenges effectively. This aligns with recent research by Fidan and Olur (2023), which examined the relationship between parents' digital parenting self-efficacy and digital parenting attitudes. The study found a moderate correlation between self-efficacy and attitudes, indicating that while attitudes contribute to self-efficacy, they are not the sole determinants.

Table XIX (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.198 ^a	.039	-.003	8.450
a. Predictors: (Constant), Safety, Scheduling, Self Advocacy, Attention, Socialisation, Self-Control				
b. Dependent Variable: Total Parenting Self Efficacy				

Table XIX (b): The model summary indicated that attitude-related factors accounted for only 3.9% of the variance in parenting self-efficacy (R-squared = .039), with an adjusted R-squared of -.003. This suggests that attitudes may not play a significant role in shaping parental confidence; their contribution is minimal.

Table XIX (c): Result of ANOVA

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	394.461	6	65.744	.921	.482
Residual	9640.363	135	71.410		
Total	10034.824	141			
a. Dependent Variable: Total Parenting Self Efficacy					
b. Predictors: (Constant), Safety, Scheduling, Self Advocacy, Attention, Socialisation, Self-Control					

Table XIX (c): The ANOVA results showed that the model is not statistically significant ($F = .921$, $p = 0.482$), implying that the combined influence of different attitude dimensions does not strongly predict parenting self-efficacy.

Table XIX (d): Regression coefficients of parents' attitude towards pre-requisite skills on parents' self-efficacy

Coefficients					
Predictor variables	Unstandardized Coefficients		Standardized Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	55.187	4.815		11.462	.000
Scheduling	-.854	1.113	-.075	-.767	.444
Attention	5.368	2.973	.167	1.806	.073
Socialisation	.629	1.102	.055	.571	.569
Self-Control	1.001	1.029	.102	.973	.332
Self Advocacy	.184	.882	.019	.209	.835
Safety	-1.164	.977	-.108	-1.191	.236
a. Dependent Variable: Total Parenting Self Efficacy					

Table XIX (d): Examining the individual predictors, none of the dimensions were found to be a significant predictor of parenting self-efficacy. These findings indicated that while positive attitudes toward parenting are important, they do not necessarily translate into higher confidence in parenting abilities. Self-efficacy is likely influenced by real-life parenting experiences, feedback from others, and personal coping mechanisms rather than attitudes alone.

c. Influence of parents’ practice of pre-requisite skills on their mental health and self-efficacy

Table XX (a) Correlation between parents’ practice of pre-requisite skills and parents’ mental health

Correlations								
Variables	Total Parents’ Mental Health	Imitation	Scheduling	Express Emotions	Communication	Group work	Independent	Safety
Total Parents’ Mental Health	1.000							
Imitation	-.010	1.000						
Scheduling	.057	-.043	1.000					
Express Emotions	.098	.107	-.176	1.000				
Communication	.063	.137	-.060	.216	1.000			
Group work	-.002	.009	.201	-.013	.214	1.000		
Independent	.062	-.049	.194	.058	.029	.208	1.000	
Safety	.248	.247	.309	.138	.243	.428	.557	1.000

Table XX (a): The provided correlation matrix examined the relationships between parents’ engagement in various pre-requisite skill practices, including imitation, scheduling, expressing emotions, communication, group work, independent activities, safety, and their mental health. However, individual practices exhibited negligible correlations, implying limited impact on mental health. Notably, only the safety-related practice demonstrated a significant association with parents’ mental health (0.248).

Table XX (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.319	.102	.055	5.562
a. Predictors: (Constant), Safety, Express Emotions, Imitation, Communication, Scheduling, Group work, Independent				
b. Dependent Variable: Total Parents’ Mental Health				

Table XX (b): Parents’ mental health and pre-requisite skill practices depicted a weakly positive link, according to the regression model's R-value of 0.319. These practices barely account for 10.2% of the variance in parental mental health, according to the R-square value of 0.102. A poor explanatory power is confirmed by the modified R-square (0.055), which takes into consideration the number of predictors in the model.

Table XX (c): Result of ANOVA

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	472.508	7	67.501	2.182	.040
Residual	4176.611	135	30.938		
Total	4649.119	142			
a. Dependent Variable: Total Parents' Mental Health					
b. Predictors: (Constant), Safety, Express Emotions, Imitation, Communication, Scheduling, Group work, Independent					

Table XX (c): The overall significance of the regression model examining the effect of necessary skill practices on parents' mental health is revealed by the ANOVA table. The variation in parental mental health explained by the predictor variables is represented by the regression sum of squares (472.508), and with a significance value of 0.040 and an F-value of 2.182, the model as a whole appeared to be statistically significant at the 0.05 level.

Table XX (d): Regression coefficients of parents' practice of pre-requisite skills on parents' mental health

Coefficients					
Predictor Variables	Unstandardized Coefficients		Standardized Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	139.601	3.290		42.436	.000
Imitation	-.814	.565	-.127	-1.440	.152
Scheduling	-.063	.623	-.009	-.101	.920
Express Emotions	.470	.687	.059	.684	.495
Communication	.007	.712	.001	.010	.992
Group work	-1.079	.677	-.147	-1.593	.113
Independent	-.924	.635	-.148	-1.455	.148
Safety	2.460	.706	.419	3.486	.001
a. Dependent Variable: Total Parents' Mental Health					

Table XX (d): Regression analysis looks at how different parents' practices on pre-requisite skills of autistic children affect parents' mental health. Only safety practices was found to be the significant predictor for parents' mental health. In contrast, other practices

such as imitation, scheduling, express emotions, communication, group work, independent did not show significant associations, as their p-values exceed the conventional threshold of 0.05. This finding aligns with existing literature indicating that positive parenting practices are linked to better mental health outcomes for parents. Recent research highlighted the significance of positive parenting practices in enhancing both parental and child mental health. A study by Green *et al.*, (2024) investigated families with children aged 4 to 15 diagnosed with neurological and neurodevelopmental conditions during the COVID-19 pandemic. Higher levels of parental depression, anxiety, and stress were associated with a decrease in positive parenting behaviours.

Table XXI (a) Correlation between parents’ practices on pre-requisite skills and parents’ self-efficacy

Correlations								
Variables	Total Parenting Self Efficacy	Imitation	Scheduling	Express Emotions	Communication	Group work	Independent	Safety
Parenting Self Efficacy	1.000							
Imitation	-.043	1.000						
Scheduling	-.125	-.043	1.000					
Express Emotions	.314	.107	-.176	1.000				
Communication	.049	.137	-.060	.216	1.000			
Group work	-.074	.009	.201	-.013	.214	1.000		
Independent	-.032	-.049	.194	.058	.029	.208	1.000	
Safety	-.034	.247	.309	.138	.243	.428	.557	1.000

Table XXI (a): The analysis revealed one significant relationship between specific parenting practices and pre-requisite skills and parenting self-efficacy. Expressing emotions, showing a positive correlation (0.314, $p < 0.05$) indicated that parents who actively engage in practices that encourage their children to express emotions tend to have higher self-efficacy. This suggests that facilitating open emotional communication enhances parents’ confidence in their parenting abilities.

Other parenting practices, including scheduling (-0.125) imitation (-0.043), communication (0.049), group work (-0.074), independence (-0.032), safety (0.034), and overall parents’ practice (0.006), did not show significant correlations with parenting self-efficacy. These insights align with research by Sur (2017), who found a moderate relationship between parental self-efficacy and parenting practices, emphasising the importance of adaptable and emotionally supportive parenting approaches.

Table XXI (b): Model summary

Model Summary				
Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.338 ^a	.114	.068	8.163
a. Predictors: (Constant), Safety, Express Emotions y, Imitation, Communication, Scheduling, Group work, Independent				
b. Dependent Variable: Total Parenting Self Efficacy				

Table XXI (b): The model summary indicated that parents' practices on pre-requisite skills accounted for 11.4% of the variance in parents' self-efficacy (R square = 0.114), with an adjusted R-squared of 0.068. This suggests that parents' practices have a moderate influence on self-efficacy.

Table XXI (c): Result of ANOVA

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1158.888	7	165.555	2.485	.020
Residual	8995.322	135	66.632		
Total	10154.210	142			
a. Dependent Variable: Total Parenting Self Efficacy					
b. Predictors: (Constant), Safety, Express Emotions, Imitation, Communication, Scheduling, Group work, Independent					

Table XXI (c): The ANOVA results showed that the overall model is statistically significant (F = 2.485, p = 0.020), indicating that at least one of the parents' practice dimensions significantly contributed to predicting parents' self-efficacy.

Table XXI (d): Regression coefficients of parents' practice of pre-requisite skills on parents' self-efficacy

Coefficients					
Predictor Variables	Unstandardized Coefficients		Standardized Coefficients	t value	p value (Sig.)
	B	Std. Error	Beta		
(Constant)	56.568	4.828		11.717	.000
Imitation	-.766	.830	-.081	-.924	.357
Scheduling	-.579	.914	-.056	-.634	.527
Express Emotions	3.697	1.008	.314	3.669	.000
Communication	.012	1.045	.001	.011	.991
Group work	-.560	.994	-.052	-.563	.574
Independent	-.301	.932	-.033	-.323	.747
Safety	.003	1.036	.000	.003	.998
a. Dependent Variable: Total Parenting Self Efficacy					

Table XXI (d): shows the regression coefficients, examines the individual predictors, and only expressing emotions was found to be a highly significant predictor of parenting self-efficacy ($\beta = 0.314$, $p < 0.001$). This suggests that parents who actively practice expressing emotions tend to feel more confident in their abilities. However, other dimensions of practices, such as imitation, scheduling, communication, group work, independent and safety did not predict parents' self-efficacy. These findings highlight the importance of practising emotional expression, suggesting that fostering open emotional communication can enhance parental confidence. Other dimensions of parents' practices, while valuable, may not directly contribute to self-efficacy.

6) Effectiveness of the sensitization programme on parents' knowledge, attitude, practices on pre-requisite skills, mental health and self-efficacy

Assessing the effectiveness of the sensitization programme on parents' knowledge, attitude, practices on pre-requisite skills, mental health, and self-efficacy is necessary to determine whether the sensitization programme successfully equipped parents. This evaluation not only validates the programme's relevance and effectiveness but also provides insights for refining future sensitization/interventions to better support families of children with autism. The results on effectiveness of the sensitization programme are presented under the following heading

- a. The effect of the sensitization programme - analysis of significant differences in KAP on pre-requisite skills among the experimental and control group parents in the pre and post sensitization assessment
 - b. Significant effect of sensitization on knowledge, attitude and practices on pre-requisite skills among the parents in the pre, post data and follow up phases.
 - c. The effect of the sensitization programme- analysis of significant differences in mental health and self-efficacy among the experimental and control group of parents in the pre and post sensitization assessment.
 - d. Significant effect of sensitization on mental health and self- efficacy among the parents in the pre, post data and follow up phases.
- a. The effect of the sensitization programme- analysis of significant differences in KAP on pre-requisite skills among the experimental and control group parents in the pre and post sensitization assessment**

Table XXII (a): Paired sample t-test analysis of significant differences in pre- and post-KAP assessment on pre-requisite skills among the experimental group parents.

	Variables	Pre test Mean ± SD	Post test Mean ± SD	95% Confidence Interval of the Difference		Correlation	t- value	df	Sig	Cohen's d
				Lower	Upper					
Experimental Group	Knowledge	39.40±9.29	49.40±1.291	- 14.109	-6.491	.544**	- 5.530	29	.000	0.17
	Attitude	74.47±18.76	90.13±8.633	2.889	-21.57	.907**	- 5.423	29	.000	0.57
	Practices	82.40±8.173	88.83±5.446	-8.837	-4.030	.618**	- 5.475	29	.000	0.47

Table XXII (b): Paired sample t-test analysis of significant differences in pre- and post-KAP assessment on pre-requisite skills among the control group parents.

	Variables	Pre test Mean ± SD	Post test Mean ± SD	95% Confidence Interval of the Difference		Correlation	t- value	df	Sig	Cohen's d
				Lower	Upper					
Control Group	Knowledge	43.67±2.987	43.90±2.833	-.730	.264	.897**	-960	29	.345	0.00
	Attitude	75.00±19.41	74.43±18.51	1.132	-1.749	-.668**	.500	29	.621	-0.01
	Practices	85.37±8.002	84.23±7.87	-.144	2.411	.948**	1.814	29	.080	-0.07

Table XXII (a) and (b) represents the results of the paired sample t-test. A paired sample t-test was conducted to determine the effect of the sensitization programme on the knowledge, attitude, and practices on pre-requisite skills of parents of autistic children. The results indicated that there was a significant difference between the experimental group's knowledge scores in their pre-sensitization (M=39.40; SD=9.29) and the post-sensitization (M=49.40; SD=1.29); $t(29) = -5.530, P < .000$. The 95% confidence interval of the mean ranged from (-14.109 to -6.491) indicating a difference between the means of the samples. Paired sample correlation revealed that pre and post-sensitization were positively correlated ($r=0.544$). The effect sizes of pre and post-sensitization scores were

calculated using Cohen's d resulting in a value of $d = 0.17$ which is considered as the small effect.

The results showed that there was a significant difference between the experimental group attitude scores of pre-sensitization ($M=75.00$; $SD=19.41$) and post-sensitization ($M= 74.43$; $SD=18.51$); $t(29) = -5.5423$, $P<.000$. The 95% confidence interval mean ranged from (2.889 to -21.57) indicating a difference between the means of the samples. Paired sample correlation showed a positive correlation between the pre and post-sensitization scores ($r=0.907$). The effect size between the pre and post-sensitization attitude scores showed a medium effect size with Cohen's d value of $d = 0.57$.

A significant difference was found between the experimental group pre-sensitization practice scores ($M=52.40$; $SD=8.173$) and post-sensitization ($M= 88.83$; $SD=5.446$); $t(29) = -5.5473$, $P=.000$. The 95% confidence interval mean ranged from (-8.837 to -4.080) indicating a difference between the means of the samples. Paired sample correlation showed that pre and post-sensitization were positively correlated ($r=0.618$). The effect size was found to be medium with Cohen's d value of $d = 0.47$.

Among the control group KAP, the pre-sensitization and post-sensitization scores of knowledge ($M=43.67$; $SD=2.987$) and ($M=43.90$; $SD=2.833$), attitude ($M=75.00$; $SD=19.41$) and ($M=74.43$; $SD=18.51$) and practice ($M=85.37$; $SD=8.002$) and ($M=84.23$; $SD=7.87$) did not show differences and the t-values were statistically not significant. Cohen's d scores showed no effect with scores of $d = 0.00$, $d = -0.01$, and $d = -0.07$ for knowledge, attitude and practices respectively.

Results indicated that there was a significant difference between the pre and post-KAP scores of the sensitization programme among the experimental group parents with small to medium level effect size based on Cohen's d. However, the control group showed no difference between the pre and post-sensitization scores of KAP with any effect size.

b. Significant effect of sensitization programme on knowledge, attitude and practices on pre-requisite skills among the experimental group parents in the pre, post data and follow up phases.

Repeated measures analysis of variance (RM-ANOVA) was done to test the statistical significance of the effect of the independent variables on the set of dependent variables that is the effect of the sensitization programme on KAP of parents of the

experimental group during the pre and post-sensitization and the two follow-up data, that is follow up one (after 10 days), follow up two (after one month).

Repeated measures ANOVA examined within-subject differences across measurement points. Descriptive statistics were explained, and Wilks' Lambda was examined to check robustness. The assumption of sphericity was assessed using Mauchly's test, and Greenhouse–Geisser corrections were applied where necessary, followed by pairwise comparisons.

Table XXIII (a): Descriptive statistics: mean and standard deviation of pre, post and follow-up of KAP scores of parents on pre-requisite skills

Dependent Variable	Time of Measurement	Experimental Group (N=30)	
		M	SD
Knowledge	Pre-sensitization	39.40	9.294
	Post sensitization	49.67	1.295
	Follow-up 1	49.57	1.223
	Follow-up 2	49.60	1.329
Attitude	Pre-sensitization	74.47	18.763
	Post sensitization	91.47	5.806
	Follow-up 1	91.47	5.764
	Follow-up 2	91.33	5.915
Practices	Pre-sensitization	82.40	8.173
	Post sensitization	88.83	5.446
	Follow-up 1	88.77	5.488
	Follow-up 2	88.777	5.444

The first step of the analysis is descriptive statistics (table XXIII (a)) which shows the mean and standard deviation of the variables. Pre-sensitization mean scores (M=39.40, SD=9.29) of the knowledge showed less than the post-sensitization scores (M=49.67, SD=1.29). The follow-up mean scores of post-sensitization that is after ten days and one month were M=49.57, SD=1.22 and M=49.60, SD=1.32 respectively. It can be noted that the mean scores of post-sensitization and follow-ups showed similar mean scores.

Coming to the pre-sensitization mean scores of attitude (M=75.63, SD=19.90) which was found to be lower than the post-sensitization mean score (M=91.47, SD=5.80). The post-sensitization mean scores were sustained for follow-up one (M=91.47, SD=5.76) and follow-up two (M=91.433, SD=5.91).

The pre-sensitization mean scores of practices (M=82.40, SD=8.17) were also found to be lower than post-sensitization mean scores (M=88.83, SD=5.44) and the scores persisted for the follow-up one and two (M=88.77, SD=5.48 and M=88.77, SD=5.44) respectively.

The constant mean scores of post-sensitization of KAP indicated that the effect was sustained for follow-up one and follow-up two.

Table-XXIII (b): The test between the subject effect

Measures	Wilk's Lambda Value	F(df1, df2)	P	η^2
Times (4-times measures)	.001	12049.096(3,27)	.000	.999

The test between the subject effect (table XXIII b) indicated by Wilk's Lambda value of significant ($\Lambda = .001$, $P < .000$) showed that the means were significantly different with a strong subject effect.

Table XXIII (c): The test of Sphericity

Within Subject effect (N=30)	Variables	Mauchly's W	Chi Square	Df	Sig.
Time	Knowledge	.000	253.018	5	.000
	Attitude	.000	360.001	5	.000
	Practices	.000	213.831	5	.000

Mauchly's test of Sphericity (XXIII c) in the present analysis showed a highly significant value with $p < 0.05$ for the measures of KAP, indicating the Sphericity cannot be assumed, demonstrating the variances of differences are not equal within subject levels.

Table XXIII (d): Univariate Analysis of Variance for knowledge, attitude, practices

Measures	Sum of squares	F (df1,df2)	Mean	P	η^2
Knowledge	2346.158	30.131(3,1)	2326.569	.000	.510
Attitude	5609.358	26.568(3,1)	5601.693	.000	.478
Practices	918.492	29.071(3,1)	902.827	.000	.501

Since the test of sphericity was not assumed, the scores of Greenhouse-Geisser were taken to evaluate the test within the subject effect for the KAP measures. The univariate test (table XXIII d) results showed a significant interaction between the subject factors of knowledge ($F(3, 1.008) = 30.131, P < .000$). The partial eta squared value of $\eta^2 = .510$ showed 51% of variance between the subject factors.

A significant interaction was also found between the subject factors of attitudes ($F(3, 1.001) = 26.568, P < .000$). A variance of 47.8% was seen between the subject factors given the partial eta squared value of $\eta^2 = .478$.

Similarly, a significant interaction was found between the subject factors of practices ($F(3, 1.017) = 29.071, P < .000$), given the partial eta squared value of $\eta^2 = .501$, 50.1% of variance was observed between the subject factors of practices.

Table XXIII (e): Pair-wise comparison of KAP measures of parents' on the pre-, post-sensitization and follow-up one and follow-up two phases.

Measure	(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig.
Knowledge	Pre sensitization	Post sensitization	-10.267*	1.867	.000
		Follow-up 1	-10.167*	1.840	.000
		Follow-up 2	-10.200*	1.865	.000
	Post sensitization	Pre sensitization	10.267*	1.867	.000
		Follow-up 1	.100	.121	1.000
		Follow-up 2	.067	.095	1.000
	Follow-up 1	Pre sensitization	10.167*	1.840	.000
		Post sensitization	-.100	.121	1.000
		Follow-up 2	-.033	.102	1.000
	Follow-up 2	Pre sensitization	10.200*	1.865	.000
		Post sensitization	-.067	.095	1.000
		Follow-up 1	.033	.102	1.000
Attitude	Pre sensitization	Post sensitization	-15.833*	3.068	.000
		Follow-up 1	-15.833*	3.067	.000
		Follow-up 2	-15.700*	3.053	.000
	Post sensitization	Pre sensitization	15.833*	3.068	.000
		Post sensitization	.000	.048	1.000
		Follow-up 1	.133	.079	.620
	Follow-up 1	Pre sensitization	15.833*	3.067	.000
		Post sensitization	.000	.048	1.000
		Follow-up 2	.133	.079	.620

Measure	(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig.
	Follow-up 2	Pre sensitization	15.700*	3.053	.000
		Post sensitization	-.133	.079	.620
		Follow-up 1	-.133	.079	.620
Practices	Pre sensitization	Post sensitization	-6.433*	1.175	.000
		Follow-up 1	-6.367*	1.186	.000
		Follow up 2	-6.367*	1.183	.000
	Post sensitization	Pre sensitization	6.433*	1.175	.000
		Follow-up 1	.067	.095	1.000
		Follow-up 2	.067	.082	1.000
	Follow-up 1	Pre sensitization	6.367*	1.186	.000
		Post sensitization	-.067	.095	1.000
		Follow up 2	.000	.107	1.000
	Follow-up 2	Pre sensitization	6.367*	1.183	.000
		Post sensitization	-.067	.082	1.000
		Follow-up 1	.000	.107	1.000

Pair-wise comparison (table XXIII, e) showed the difference between the mean scores of the factors of the KAP measures. Coming to the knowledge aspect, the pre-sensitization factor significantly differed with post-sensitization and the follow-up one and two with mean differences being MD= -10.267, P< .000, MD= -10.167, P<.000, and MD= -10.200, P<.000 respectively. Further, the knowledge factors of post-sensitization and follow-ups one and two significantly differed only with the pre-sensitization factor. There were no significant differences between the post-sensitization scores and the scores of follow-ups one and two.

In the measures of attitude, there was a significant difference between the pre-sensitization and the post-sensitization as well as the follow-ups one and two with the mean difference being MD= -15.833, P< .000, MD= -15.833, P<.000 and MD= -15.700, P<.000 respectively. The attitude factors of post-sensitization and follow-ups one and two did not show a significant difference in between except with the pre-sensitization scores.

With regards to the measures of practices, the pre-sensitization scores showed a significant difference with post-sensitization and follow-ups one and two with the mean difference being MD= -6.433, P< .000, MD= -6.367, P<.000 and MD= -6.367, P<.000 respectively. The post-sensitization scores and the follow-up one and two were also found

to be significantly different from pre-sensitization scores but did not show a significant difference among post-sensitization and follow-up one and two scores.

The results of MANOVA indicated that the sensitization programme for parents on the measures of KAP showed a significant post-sensitization effect. The test results showed a significant effect between pre and post-sensitization scores. The post-sensitization scores and the scores of the follow-up one and two explained that the effect was sustained with the mean scores persisting the same though slightly lowered with the decimal points.

A couple of studies have evidenced the improvements shown by the parents after the training and intervention. A study by Waddington (2019) showed great variability and the results showed that the mothers learned to use the techniques of the model that was given during training, generating positive changes in their children in the management of unwanted behaviors, greater commitment, and improvements in expressive language. Rogers *et al.*, (2014) revealed the experimental group achieved greater changes in symptomatology, language, and visual response.

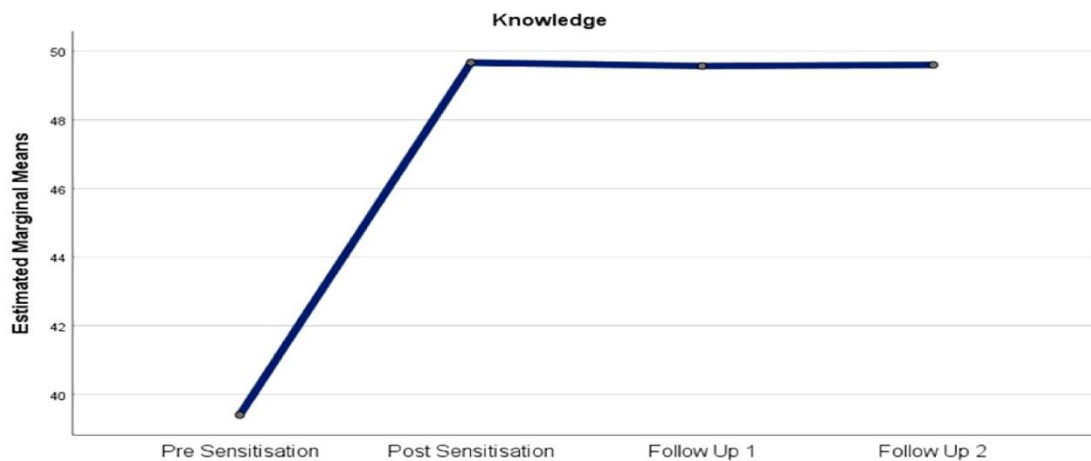


Figure No. IX

Knowledge levels of parents during pre-post sensitization and follow up one and follow up two

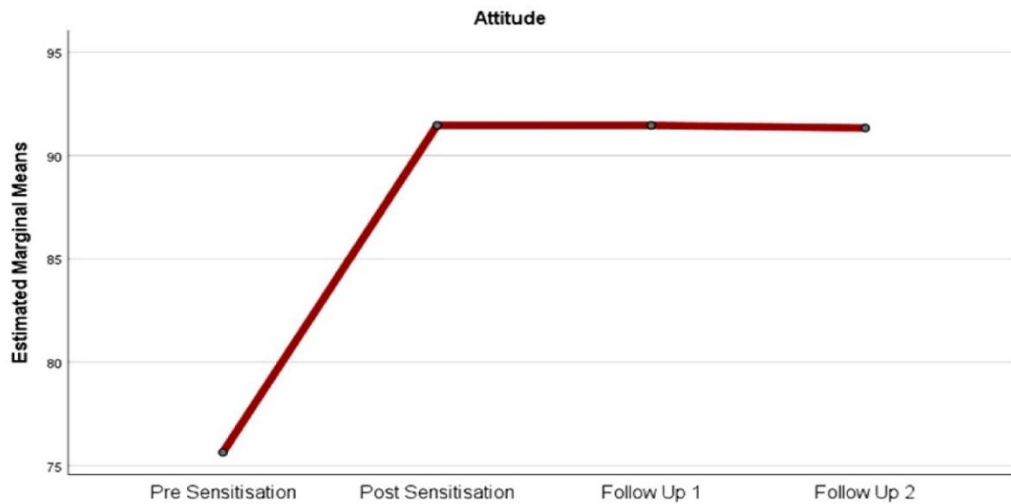


Figure No.X

Attitude levels of parents during pre-post sensitization and follow up one and follow up two

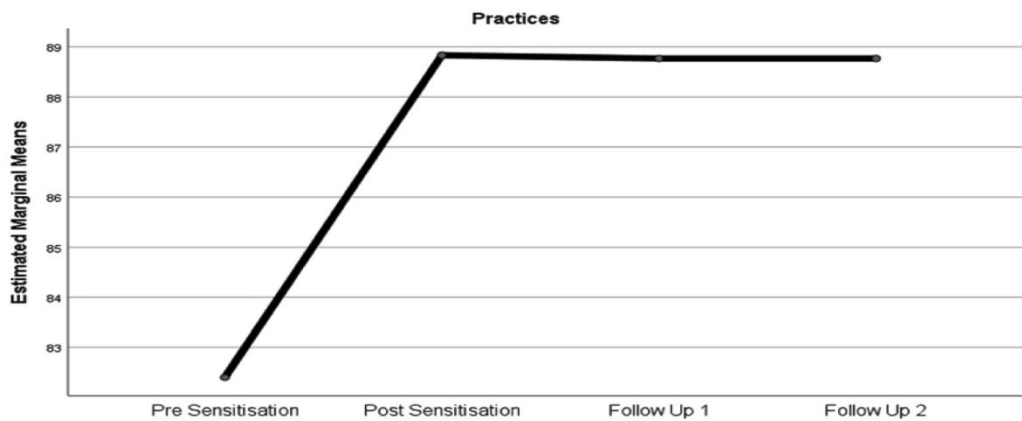


Figure No.XI

Practices levels of parents during pre-post sensitization and follow up one and follow up two

- c. The effect of the sensitization programme- analysis of significant differences in mental health and self-efficacy among the experimental and control group parents in the pre and post sensitization assessment.

Table XXIV (a) Paired sample t-test analysis of significant differences in pre- and post-assessment of mental health and self-efficacy among the experimental group parents.

Experimental Group	Variables	Pre-test Mean±SD	Post-test Mean±SD	95% Confidence Interval of the Difference		Correlation	t-value	df	Sig	Cohen's d
				Lower	Upper					
Experimental Group	Mental health	139.03±6.770	179.9 ±5.795	-4.703	3.703	.218	-28.382	29	.000	0.21
	Self-efficacy	62.77 ±7.947	69.57 ±5.437	-14.208	-7.459	-.075	-3.740	29	.001	0.50

Table XXIV (b) Paired sample t-test analysis of significant differences in pre- and post-assessment of mental health and self-efficacy among the control group parents.

Control Group	Variables	Pre-test Mean±SD	Post-test Mean±SD	95% Confidence Interval of the Difference		Correlation	t-value	df	Sig	Cohen's d
				Lower	Upper					
Control Group	Mental health	139.03±6.770	138.8 ±6.89	-3.499	3.499	.997	1.720	29	.096	-1.01
	Self-efficacy	62.27 ±8.313	58.73 ±7.44	-44.359	-37.77	.483	2.405	29	.023	-0.22

The data in Table XXIV (a) and (b) shows the outcomes of the paired sample t-test, which was carried out to assess the effect of the sensitization programme on the mental health and self-efficacy of parents of autistic children. The findings revealed a notable contrast in the mental health scores of the experimental group in pre (M=139.03; SD=6.770) and post sensitization programme (M=179.9; SD=5.795); $t(29) = -28.382$, $P < .000$. The 95% confidence interval for the mean difference ranged from (-4.703 to -3.703), signifying a substantial variance between the sample means. A positive correlation ($r=0.218$) was observed between the pre- and post-sensitization mental health scores, with the effect size computed using Cohen's d indicating small impact ($d = 0.21$).

Furthermore, a significant difference was identified between the experimental group's pre-sensitization self-efficacy scores (M=62.77; SD=7.947) and post-sensitization

self-efficacy scores ($M=69.57$; $SD=5.437$); $t(29) = -3.740$, $P \leq .001$. The 95% confidence interval for the mean difference ranged from (-14.208 to -7.459). The paired sample correlation demonstrated a weak positive correlation ($r = -.075$) between the pre- and post-sensitization self-efficacy scores, with the effect size ($d = 0.50$) indicating a medium impact.

The results highlight a significant difference in the pre- and post-sensitization mental health and self-efficacy scores among parents in the experimental group, with the sensitization programme exhibiting a small to medium level of effectiveness based on Cohen's d . However, the control group did not demonstrate any significant differences in the pre- and post-sensitization scores for parental mental health and self-efficacy, with no noticeable effect size.

e. Significant effect of sensitization programme on mental health and self- efficacy among the parents of experimental group during the pre, post data and follow up phases.

Repeated measures of variance (RM-ANOVA) were applied to examine the statistical significance of the impact of the independent variables on a set of dependent variables, specifically focusing on the effect of the sensitization programme on the mental health and self-efficacy of parents belonging to the experimental group. This analyze was conducted across various time points, including the pre-sensitization phase, the post-sensitization phase, as well as two subsequent follow-up assessments, namely follow-up one (after 10 days) and follow-up two (after one month).

Repeated measures ANOVA examined within-subject differences across measurement points. Descriptive statistics were explained, and Wilks' Lambda was examined to check robustness. The assumption of sphericity was assessed using Mauchly's test, and Greenhouse–Geisser corrections were applied where necessary, followed by pairwise comparisons.

Table XXV (a) - Descriptive statistics: mean and standard deviation of pre, post and follow-up of mental health and self-efficacy scores of parents

		Mean	Std. Deviation
Mental Health	Pre sensitization score	139.03	6.770
	Post sensitization score	179.93	5.795
	Follow up 1 score	180.30	5.018
	Follow up 2 score	180.37	4.958
Self-efficacy	Pre sensitization score	62.77	7.947
	Post sensitization score	69.57	5.437
	Follow up 1 score	70.03	5.189
	Follow up 2 score	69.87	5.198

The initial stage of the analysis involved examining descriptive statistics (Table XXV, a), which shows the mean and standard deviation of the variables. The mean scores prior to the sensitization programme (M=139.03, SD=6.770) for mental health were lower compared to the scores after the programme (M=179.93, SD=5.795). The mean scores for the follow-up assessments conducted after ten days and one month of the post-sensitization phase were found to be M= 180.30, SD=5.018 and M=180.37, SD=4.958 respectively, indicating a similarity in the mean scores between the post-sensitization and follow-up periods.

Similarly, the mean scores prior to the sensitization programme for self-efficacy (M=62.77, SD=7.947) were also observed to be lower than the mean scores of post sensitization programme (M=69.57, SD=5.437), and this higher mean score persisted during follow-up one (M=70.03, SD=5.189) and follow-up two phases (M=69.87, SD=5.198).

The consistent mean scores in parental mental health and self-efficacy following the post-sensitization period indicated the positive effect of the programme and were maintained during both the follow-up one and follow-up two assessments.

Table XXV (b): The test between the subjects' effect

Measures	Wilk's Lambda Value	F(df1,df2)	P	Sig,
Times (4-times measures) Mental health	.029	303.322(5,3)	.000	.971
Times (4-times measures) Self-efficacy	.551	7.329(5,3)	.001	.449

The test between the subject effect (table XXV, b) indicated by the Wilk's Lambda value of significant ((Λ) =.029, $P < .000$) and ((Λ) =.551, $P < .001$) for mental health and self-efficacy of parents showed that the means are significantly different with strong effect between subjects.

Table XXV (c): The test of Sphericity

Within Subject effect (N=30)	Variables	Mauchly's W	Chi Square	df	η^2
Time	Mental Health	.004	156.090	5	.000
	Self-efficacy	.002	170.316	5	.000

Table XXV (c) shows the Mauchly's test of Sphericity in the present analysis. The significant value of $p < .000$ for the measures of parents mental health and self-efficacy indicates that the Sphericity cannot be assumed as the P value was found to be less than 0.05.

Table- XXV(d): Univariate Analysis of Variance for mental health and self-efficacy

Measures	Sum of squares	F (df1, df2)	Mean	P	η^2
Mental health	38133.892	820.170(5,3)	30470.696	.000	.966
Self-efficacy	1123.425	14.847(5,3)	1045.871	.000	.339

Since the test of sphericity was not assumed, the scores of Greenhouse-Geisser were taken to evaluate the test within the subject effect for parents' mental health and self-efficacy measures. The univariate test (table XXV, d) results showed a significant interaction between the subject factors of parents' mental health and self-efficacy ($F(5, 820.170) = 30470.696, P < .000$) and ($F(5, 14.847) = 1045.871, P < .000$) with the Partial Eta Squared value of $\eta^2 = .966$ and $\eta^2 = .339$ respectively, indicating that the mental health scores explained about 96.6% of variance and self-efficacy explained 33.9% of variance signifying the proportion of change and the effect has been large in mental health and medium in self-efficacy.

Table XXV (e) Pair wise comparison of mental health and self-efficacy measures during-, post sensitization, follow up one and follow up two phases

Measure	(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig
Mental health	Pre sensitization	Post sensitization	-40.900*	1.441	.000
		Follow-up 1	-41.267*	1.342	.000
		Follow up 2	-41.333*	1.335	.000
	Post sensitization	Pre sensitization	40.900*	1.441	.000
		Post sensitization	-.367	.524	1.000
		Follow-up 1	-.433	.509	1.000
	Follow-up 1	Pre sensitization	41.267*	1.342	.000
		Post sensitization	.367	.524	1.000
		Follow-up 2	-.067	.067	1.000
	Follow-up 2	Pre sensitization	41.333*	1.335	.000
		Post sensitization	.433	.509	1.000
		Follow-up 1	.067	.067	1.000
Self-efficacy	Pre sensitization	Post sensitization	-6.800*	1.818	.005
		Follow-up 1	-7.267*	1.791	.002
		Follow-up 2	-7.100*	1.818	.003
	Post sensitization	Post sensitization	6.800*	1.818	.005
		Follow-up 1	-.467	.345	1.000
		Follow-up 2	-.300	.372	1.000
	Follow-up 1	Pre sensitization	7.267*	1.791	.002
		Post sensitization 2	.467	.345	1.000
		Follow-up 2	.167	.118	1.000
	Follow-up 2	Pre sensitization	7.100*	1.818	.003
		Post sensitization	.300	.372	1.000
		Follow-up 1	-.167	.118	1.000

The pair wise comparisons of various factors related to parents' mental health and self-efficacy are detailed in Table XXV (e). Regarding mental health, significant improvements were observed when comparing the pre-sensitization phase with the post-sensitization and both follow-up assessments. The mean differences were substantial: MD = -40.900 (P < .000) for post-sensitization, MD = -41.267 (P < .000) for follow-up one, and MD = -41.333 (P < .000) for follow-up two. Notably, there were also significant differences between the post-sensitization and follow-up assessments, indicating continued variation over time.

Similarly, for self-efficacy, marked improvements were recorded when comparing pre-sensitization with subsequent post sensitization phases. The mean differences were MD = -6.800 (P < .000) for post-sensitization, MD = -7.267 (P < .000) for follow-up one, and MD = -7.100 (P < .000) for follow-up two. Similarly, significant differences were also noted between the post-sensitization and the two follow-up phases, suggesting evolving changes in self-efficacy over time.

The Multivariate Analyze of Variance (MANOVA) results confirmed that the sensitization programme had a significant positive effect on parents' mental health and self-efficacy. The strong differences between pre- and post-sensitization scores demonstrated the programme's immediate effectiveness. Moreover, the consistent scores during the follow-up phases indicated a sustained impact of the programme, despite slight declines in the mean values during follow up two.

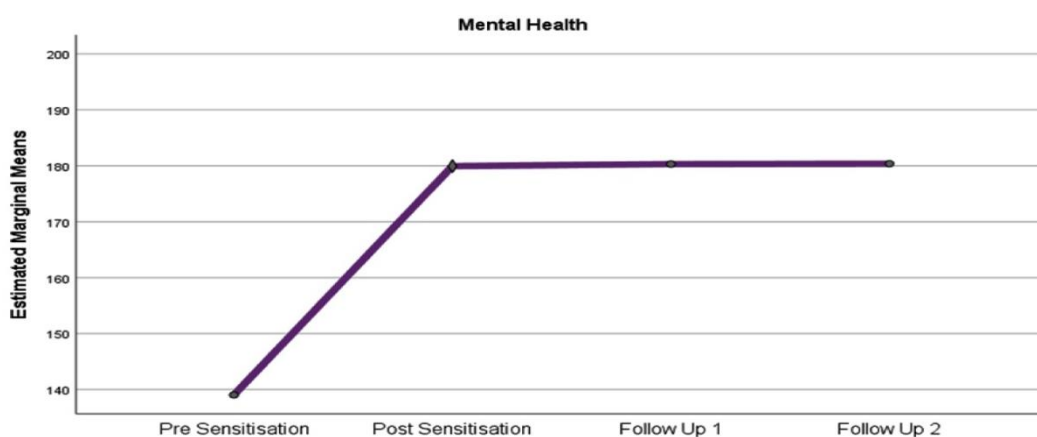


Figure No.XII

Mental Health of parents during pre-post sensitization and follow up one and follow up two

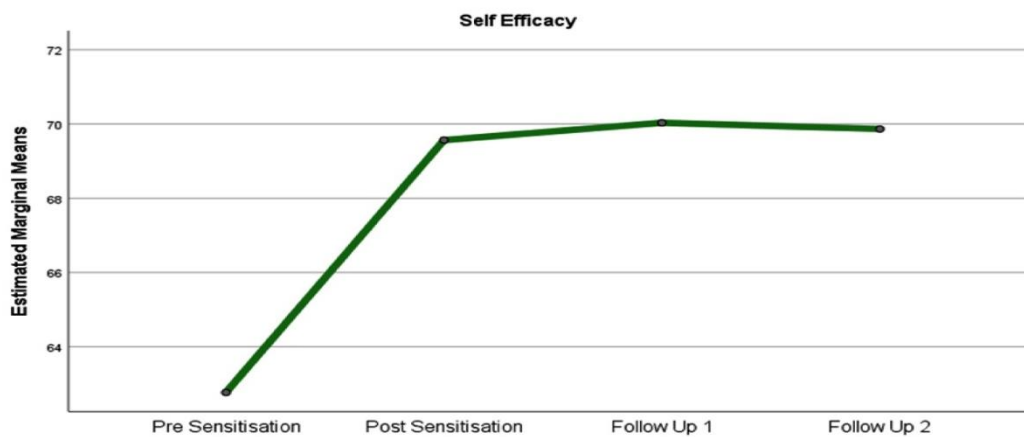


Figure No. XIII

Self-efficacy of parents during pre-post sensitization and follow up one and follow up two

Discussion

The results of current study on parents knowledge, attitude and practices on pre-requisite skills, their mental health and self-efficacy highlighted that majority of parents showed average to low levels of knowledge about pre-requisite skills and their attitude were generally unfavourable suggesting that a limited understanding on these skills may be the reason for most of the parents to have an unfavourable attitude regarding pre-requisite skills. With regards to practices parents of children with autism showed high to average level of practices regarding pre-requisite skills. Moreover, the average level of practices observed could be also influenced by multiple pressure parents face such as social expectation, family responsibilities and workload which may limit their capacity to fully engage in structured or specialised practices.

The study highlighted the level of parent’s mental health and self-efficacy of children with autism. Parents of children with ASD are at risk for increased levels of emotional problems and fight against the challenges of hopelessness along with distress, guilt, and coping with different stressful events in everyday life. They usually face more financial strain due to expenses including medical and have to pay more attention to the child as well as the parental demands, which in turn enhance psychological strain and burden on parents. These parents continually carried the disproportionate burden of raising an autistic child, thereby experiencing stress-related issues in terms of child care and often

demonstrating depression, anxiety, health concerns, social isolation, and low self-esteem. All these emotional outcomes are indications of poor mental health. Parents of children with autism are very focused on trying their level best to provide the best therapy sessions for their child and don't have adequate time to address their own mental health. Therefore, parents experienced poor psychological well-being and low resilience, which resulted in increasing stress levels and feelings of despair (Ooi, Ong, Jacob, and Khan, 2016).

In this present study, parents with ASD children have shown poor to very poor levels of mental health. Parents think that they should be able to give their best for their child, and the feeling of the care they give to the child may be not enough leads them towards depression, frustration, anxiety, etc. The results also resembled some previous studies by Hart and Kelley, (2006) and Pesonen *et al.*, (2008). Nikmat *et al.*, (2008) that parents with autistic children have higher levels of stress and psychological disturbances. Lai *et al.*, (2015), also examined parents of children with ASD who reported significantly more parenting stress symptoms (i.e., negative parental self-views, lower satisfaction with parent-child bond, and experiences of difficult child behaviors), more depression symptoms, and more frequent use of active avoidance coping, than parents of typically developing children.

The results on parents' self-efficacy showed that parents had low to average levels and a smaller number of parents reported high levels of parents self-efficacy. In terms of parents of autistic children, their self-efficacy plays a very important role. Self-efficacy refers to a person's confidence in himself in his ability to complete the challenges which he may face during his lifetime. Parents' confidence in raising a child with ASD will affect individual emotional state and self-control. Parents with a high parenting sense of choosing more appropriate types of therapy respond to challenges more actively. Parents with low self-efficacy are likely to experience negative emotions such as stress, depression, and anxiety in the process of raising children with ASD.

According to Fields (2006), parents' self-efficacy is developed through experience, perceived success, examples of others, and validation from others. Parents of children with autism spectrum disorders (ASD) may be at particular risk for lower self-efficacy due to specific symptoms associated with the disorder. Since children with ASD struggle with difficult and rigid behaviour, parents may likely experience more failure and frustration with typical parenting strategies. Children with ASD frequently show inappropriate behavior, parents may feel criticized and rejected when their child behaves counter to

public expectations. Ryan (2018) explaining overall parenting self-efficacy, which indicates that parents of children with autism are at particularly high risk for lower levels of parenting self-efficacy. Higher levels of stress, depression, and a difficult parent–child bond seen in parents with a child with ASD also place them at higher risk. Lower levels of parenting self-efficacy may then exacerbate problems at home and interfere with their child’s treatment. As mentioned previously, lower levels of self-efficacy also led to more problems for parents with higher rates of anxiety, depression, and stress and for negative child outcomes in treatment. If parents of children with ASD are experiencing lower parenting self-efficacy, it is important to understand why and how professionals can help address parenting self-efficacy in treatment. Russell and Ingersoll (2021) state that, if the parents have positive attitudes toward their child, it might help parents to reduce their mental stress in a positive way and make better levels of confidence. Feng *et al.*, (2022) also supported that, parents with greater parental efficacy are more involved in rehabilitation and treatment processes. Some studies have revealed improvement in the levels of parenting self-efficacy among parents who take part in psycho-educational interventions and parent training. Benedetto *et al.*, (2021) says that, greater parenting sense of competence predicts better parent child relationships and less parenting stress. Mothers with a high parenting sense of competence often have higher intervention willingness and motivation, can promote family members to actively participate in parenting, and play a vital role in children's therapy.

The predictive capacities of socio-demographic factors, knowledge, attitude, and practice (KAP), mental health (MH), and self-efficacy (SE) among parents of children with autism highlighted that, only a few socio-demographic markers had a significant influence on parents’ knowledge, practices, and mental health status of parents. However, these factors did not show a strong predictive relationship with parents’ attitudes or parent’s self-efficacy. This suggests that while socio demographic markers such as education, income, or types of family may shape what parents know and do, they are less impactful in shaping how parents feel about their caregiving roles or their confidence in managing the challenges of raising a child with autism.

Within the knowledge domain, parents’ mental health correlated significantly with attention and safety, however, knowledge dimensions were not found to determine parents’ mental health. Parents who had a more realistic and informed of their child’s condition tended to report better psychological well-being. This finding highlighted the

importance of awareness and education in enhancing parental mental health. Furthermore, socialization and safety dimensions correlated with self-efficacy, but were not found to be the significant predictors of self-efficacy. Nevertheless, engaging parents and providing them with emotional support, opportunities to learn from shared experiences, and exposure to coping strategies, help build their confidence in caregiving and foster a stronger belief in their ability to manage their child's needs.

In terms of attitudes, the study found that the self-advocacy dimension was found to correlate with mental health and was a significant predictor as well. But attitude was not found to be the predictor of self-efficacy. However, this awareness alone did not translate into higher self-efficacy, suggesting that attitude alone is not sufficient to boost parental confidence. When it comes to practical caregiving behaviours, consistent involvement in skill-building activities for their child was associated with better mental health and effectiveness in their caregiving journey.

In relation to practices, the safety dimension was found to be a significant determinant of parents' mental health. While expressing emotions was found to be a significant predictor of self-efficacy. This indicates that recognizing the importance of these pre-requisite skills is associated with improved psychological well-being of parents, helping them feel more capable. Parents who paid more attention to express emotions as pre-requisite skills would have a better outcome in communication, social interaction, and daily living skills of their children. Emotional responsiveness, therefore, plays a key role in fostering stronger parent-child bonds.

The study was a sensitization study; hence the effect of sensitization was assessed. The mean scores of post-sensitizations being consistent on knowledge, attitude, practices on pre-requisite skills, mental health and self-efficacy indicated that the effect was sustained during follow-up one and follow-up two phases showed that the sensitization programme had a positive effect on parents knowledge, attitude, practice on pre-requisite skills, mental health and self-efficacy. The result reflected the importance of parents' training programs. Most of the parents with negative attitudes are confused in accepting their willingness to take training on pre-requisite skills. This could be because of social pressure and lack of support from their family members. The parents of an autistic child have a negative mindset that ASD is not curable and it's a lifelong process, thus, training may not influence their behavioural change. But the present study results brought out a significant effect on the attitudes showing changes in the scores and also a sustained

higher score during the follow-up phases. The sensitization and intervention programs are very important for improving parents' attitudes and practice of pre-requisite skills which would be more effective and engage parents with continuous support to endure the effect and have a positive outcome throughout their life.