

CHAPTER V

SUMMARY AND CONCLUSION

Autism, also known as Autism Spectrum Disorder (ASD), is a lifelong developmental condition that affects how individuals perceive and interact with their surroundings and other people. Children with autism experience challenges in social communication and interaction, along with repetitive behaviors, restricted interests, and specific routines. While all autistic children share common difficulties, the way autism affects them varies based on their unique strengths and needs. Due to these challenges, they often require constant care and support from parents or caregivers to manage everyday functioning. Raising a child with autism can be both rewarding and demanding, placing a significant emotional, physical, and mental strain on parents. High levels of stress arise from various factors, including cognitive delays, communication difficulties, unpredictable behaviors, hyperactivity, and struggles with self-regulation and independence in daily tasks. Many parents feel overwhelmed by the complexities of autism and the uncertainty surrounding their child's development and future, making it essential to provide them with the right knowledge and support to navigate these challenges effectively.

In addition, children with autism have less amount of time for work and leisure activities. Additionally, parents experience high level of fatigue because of their autistic children sleeping issues that disturbs their sleep pattern. Parents also describe themselves as burned out, exhausted and stressed out, due to their extensive care giving responsibilities. All these challenges affect their adjustment and life satisfaction. Therefore, there is a dire need to educate parents about their child's disorder, the importance of pre-requisite skills as well as on how to impart training to their autistic child and make them aware of its influence on their adjustment and life satisfaction.

Therefore, this study aimed to educate parents about autism and highlight the significance of knowledge, attitude, and practices on pre-requisite skills in shaping their child's development. Additionally, efforts were made to train parents on effective techniques for teaching pre-requisite skills to their children with autism, ensuring a positive impact on their learning and independence.

The scope of the study highlighted children with autism often face significant challenges in social interactions, daily activities, and the ability to generalise learned skills

across different settings. These difficulties make it essential for them to receive consistent support from parents and caregivers in routine tasks. However, many parents struggle to provide adequate support due to constraints such as limited time, high levels of stress, and a lack of knowledge about effective teaching methods tailored for autistic children. Without proper guidance, parents may find it difficult to equip their child with the necessary skills to function independently in various aspects of life.

Parental training plays a crucial role in addressing these challenges. When parents receive structured training on how to develop pre-requisite skills in their children, they can actively support their child's independence at home, in school, and in their communities. Teaching parents evidence-based strategies for skill-building not only enhances the child's ability to perform daily tasks but also fosters self-sufficiency, reducing dependence on caregivers. Over time, improving these skills can lead to a decrease in problem behaviors, make daily life more manageable for families, and open up greater employment opportunities for autistic individuals. This, in turn, allows them to lead more independent, fulfilling lives with better social and economic integration.

Need of the study

Parents of children with autism often experience intense emotions such as guilt, anxiety, and sadness when they feel unable to care for their child as they wish. In addition to these emotional struggles, they also face social stigma, which can further diminish their confidence in their parenting abilities. Negative emotions, coupled with a lack of knowledge about pre-requisite skills, can lead to increased dependency on others for their child's daily living activities, making their care giving journey even more challenging. Sensitization programmes play a vital role in addressing these issues by helping parents feel understood, reducing societal stigma, and providing the emotional resilience needed to care for their child with confidence. These programs empower parents with knowledge, enabling them to practice essential pre-requisite skills at home, which is crucial for their child's successful development and independence. When parents actively engage in fostering these skills, they support their child's ability to function more independently, paving the way for a smoother transition into adulthood and improving their overall quality of life.

Objectives of the study

The objectives of this study were to explore the knowledge, attitude, and practices (KAP) of parents on pre-requisite skills for children with autism (ASD) and to assess their levels of mental health (MH) and self-efficacy (SE). The study also aimed to design and implement a sensitization programme to educate parents on the importance of pre-requisite skills, positive mental health, and self-efficacy, as well as to evaluate its effectiveness in improving their understanding and coping mechanisms. Furthermore, the study sought to examine how parents' knowledge, attitudes, and practices related to pre-requisite skills influence their overall mental health and sense of self-efficacy in managing their child's needs. Additionally, the research aimed to analysis various socio-demographic factors of parents, such as gender of parents, education qualification, occupation, number of siblings, types of family and area of residence, and to determine their impact on parents' KAP, mental health, and self-efficacy. By addressing these objectives, the study aimed to empower parents with the necessary skills and knowledge to support their autistic children effectively while also enhancing their own well-being and confidence in care giving.

Review of Literature

Literature review helps to build a strong foundation for their own work. It guides them in choosing the right theories and research methods by learning from what others have done. This helps avoid mistakes and ensures the study is designed well. It also shows that the researcher understands the topic and is aware of what has already been studied. In short, a literature review is not just a requirement it plays a big role in improving the quality of research, helping researchers ask better questions, choose better methods, and make useful contributions to their field.

In the present study, the researcher conducted a comprehensive review of existing literature focusing on parents' knowledge, attitude, and practices (KAP) related to pre-requisite skills, and how these factors influence parents' mental health and self-efficacy. The literature was drawn from both Indian and international sources to ensure a broad and inclusive understanding of the topic. Through this review, key theories, research findings, and methodologies concerning the interrelationship between parents' KAP, mental health, and self-efficacy were identified and analyzed. The literature survey served as a foundation for understanding how these elements coexist and influence one another,

especially in the context of parenting children with autism. It provided valuable insights that guided the researcher in shaping the study's objectives and developing focused research questions. These questions specifically aim to explore how enhancing parents' knowledge, attitude, and practice regarding pre-requisite skills can promote positive mental health and strengthen their self-efficacy, ultimately benefiting both the child and the parent.

Conceptual frame Work

Raising a child with Autism Spectrum Disorder (ASD) presents numerous challenges for parents. Many autistic children struggle with responding to their names, making eye contact, and engaging in social interactions and communication. These difficulties can significantly impact their daily lives, making routine tasks more complex. Consequently, parents often experience physical, emotional, financial, and mental strain, leading to exhaustion, anxiety, and stress. Their concerns about their child's future further add to their burden. One way to support both autistic children and their parents is by introducing pre-requisite skills, which include essential abilities such as scheduling, attention, communication, imitation, socialisation, self-control, safety awareness, and self-advocacy. Parents need to be aware of these skills as they play a crucial role in a child's development and independence. To understand whether parents have knowledge of these skills, the aim is to assess their Knowledge, Attitudes, and Practices (KAP) regarding pre-requisite skills. Additionally, examine how socio-demographic markers such as gender, occupation, education, family type, income, and area of residence influence parents' KAP, mental health (MH), and self-efficacy (SE). Identifying these influences will help tailor effective interventions. Based on the findings, sensitization programme will be designed to improve parents' mental health, self-efficacy, and KAP on pre-requisite skills. This programme will provide training and awareness sessions on key topics related to pre-requisite skills and mental health, equipping parents with the knowledge and tools to better support both their child's development and their own well-being. The expected outcome of this initiative is an enhanced understanding of pre-requisite skills, improved mental health, and stronger self-efficacy among parents of autistic children.

Methodology

The focus of the present study was to enhance parents' knowledge, cultivate a more favourable attitude, and strengthen the practical application of pre-requisite skills essential for the child's development. By equipping parents with a deeper understanding of these pre-requisite skills, the study intended to empower them to actively support their child's early learning and functional abilities within the home environment. Taking into account the theoretical framework, literature from various research studies, the methodology for the study was outlined. Based on the objectives and the analysis of findings from the reviewed literature the following research questions were framed

Research Questions

1. Do parents of autistic children know, believe and practice the pre-requisite skills of children with autism?
2. Does parents' KAP on pre-requisite skills influence their mental health and self-efficacy?
3. Do socio-demographic factors determine parents' KAP, mental health and self-efficacy?
4. Does sensitising parents improve their KAP on pre-requisite skills, mental health, and self-efficacy?

The current research was an action- based cross sectional study. Survey, questionnaire, and interview methods were predominantly adopted to collect the data. With the objectives identified and research questions formed, the current study was framed under four phases:

Phase 1

- **Literature survey** - In the present study, the researcher conducted a comprehensive review of existing literature focusing on parents' knowledge, attitude, and practices (KAP) related to pre-requisite skills, and how these factors influence parents' mental health and self-efficacy. The literature was drawn from both Indian and international sources to ensure a broad and inclusive understanding of the topic. Through this review, key theories, research findings, and methodologies concerning the interrelationship between parents' KAP, mental health, and self-efficacy were identified and analyzed.

- **Population and sampling** – In the first phase of the study, purposive sampling technique was employed, implemented in two steps: (a) selection of the study area, and (b) selection of population.

A-Selection of area: The study was conducted in Coimbatore city of Tamil Nadu State, India. Tamil Nadu is located in the southernmost part of India, is a state rich in cultural heritage, linguistic identity, and socio-economic development.

b. Selection of the population: The investigator identified parents of children with autism as the sample of the study through purposive sampling technique. The investigator conducted a survey in Coimbatore to reach out to the schools and seek their permission to carry out the study. A total of 16 schools were initially shortlisted for the study, however, only 5 schools agreed to participate and granted permission to conduct the research. Initially, 250 parents were invited to be part of the study. Out of these, 200 parents consented to participate, finally, 143 parents completed the process and were selected for the study.

The inclusion criteria for the study consisted of parents of children who were enrolled in special schools specifically catering to children with Autism Spectrum Disorder (ASD) and also based on their direct care giving role. Conversely, the exclusion criteria involved parents of children who had co morbidity conditions or other disabilities apart from autism, as the presence of multiple diagnoses could confound the study outcomes and influence parental experiences in ways that differ from those of parents of children diagnosed exclusively with ASD.

Tool development-four sets of tools were needed for the study such as socio-demographic profile of parents, parents knowledge, attitude and practices on pre requisite skills scale, as well as scales to assess mental health and parenting self-efficacy.

- Questionnaire to collect socio-demographic profile of parents-*** A questionnaire on socio-demographic profile was developed to elicit information on the socio demographic conditions of the parents of Children with Autism. The questionnaire included the socio demographic markers such as gender of parents, educational qualification, occupation, family income, number of siblings, types of family and area of residence.

b. *Parents knowledge, attitude and practices (KAP) on pre-requisite skills scale-*

The development of tools to assess KAP of parents on pre-requisite skills followed a systematic methodology consisting of five key stages: conducting a comprehensive literature review, performing an overall examination of relevant constructs, engaging in group discussions, obtaining expert evaluations, and carrying out pre-testing procedures.

Face validity and content validity

A group discussion was organised, involving academicians from the fields of Human Development, special education and Psychology. At first, the initial item of the scale was critically evaluated to ensure clarity, grammatical accuracy, and relevance. Items found to be repetitive or ambiguous were either revised or eliminated to enhance the overall coherence and readability of the scale. The refined version of the tool was subjected to expert evaluation. A total of five experts, three academicians from Human Development, and two practicing clinical therapists were consulted to assess the content validity and appropriateness of the items. Their feedback led to further refinement, ensuring that the tool was both theoretically grounded and practically applicable.

Tool description

(i)Scale to assess knowledge on pre-requisite skills

Focusing on the knowledge scale on pre-requisite skills, six key dimensions were identified and defined: Scheduling, Attention, Socialisation, Self-Control, Self-Advocacy, and Safety. These dimensions reflect essential developmental areas that are crucial for children with autism to function independently and adaptively. The knowledge scale comprised of 30 items with 5 items in each dimension, structured on a three-point Likert scale. Further, the statements had three points with No, Don't know and Yes options with a rating of 0, 1 and 2 respectively. The score ranged from 0 to 90, 0 as minimum and 90 as maximum score, indicating higher scores as higher knowledge levels. Further, the knowledge levels as high, medium and low were classified by averaging the total score. The score < 48 was classified as low level, 48 score was considered as medium level, and > 48 score was categorized as high level of knowledge.

(ii) Scale to assess attitude on pre-requisite Skills

A self-constructed scale was designed to test the attitude of parents on pre-requisite skills. The scale was a 5 points likert scale consisting of 30 items with 5 items in each dimension. The items covered the aspects under scheduling, attention, socialisation, self-control, self-advocacy and safety. Each item had 5 responses namely strongly agree, agree, neither agree nor disagree, disagree, strongly disagree with 1,2,3,4 and 5 ratings and vice versa for negative item. The score ranged from 1 to 150, 1 as minimum and 150 as maximum score indicating higher the scores favourable the attitude of parents of children with autism. Further, the attitude levels as favourable, neither favorable nor unfavourable (neutral) and unfavourable level of attitude were classified by averaging the total score. The score of >86 was classified as unfavorable level, 86 score was considered as neither favourable nor unfavourable level (as neutral) and > 86 score was categorised as favourable level of attitude.

(iii) Scale to assess parents practices on pre requisite skills

The scale on practice of parents of autistic children consisted of 35 items with seven dimensions namely- scheduling, imitation, communication, group work, express emotion, independent and safety. The practice scale on pre-requisite skill with 35 items under 7 dimensions was a likert scale with 3 point rating with 1 for Never, 2 for Sometimes and 3 for Always. The score ranged from 0 to 150, 1 as minimum and 150 as maximum score. Further, the practices levels as low, moderate and high level of practices were classified by averaging the total score where higher score indicates higher levels of practice. A score of <82 depicts low level of practices, a score of 82 and > 82 indicate average and high level of practices respectively.

This format was intended to capture the depth and accuracy of parental understanding regarding the importance and practical application of each pre-requisite skill area. The finalised scales thus were a robust tool intended not only for assessment but also as a foundation for designing parent training modules and sensitization programmes.

Pilot study

In the present study, a pilot test was conducted to evaluate the tools that were developed by the investigator. The purpose was to examine whether the tools were clear, relevant, and capable of collecting meaningful data from the target population. The data for the pilot study was collected from 45 parents of children with autism. The developed

scale for knowledge, attitude and practices was administered and preliminary statistical analysis was performed to understand the overall pattern of data distribution and pre-test the developed tools.

Reliability and Validity

After conducting the pilot study, the tools were evaluated for both reliability and validity.

The reliability was tested using Cronbach's alpha reliability test, score of 0.94 for knowledge, 0.84 for attitude and 0.79 for practice showed an excellent, very good and good reliability of the scales. Validity was tested using principle component analysis (PCA) where the sampling adequacy was also found to be adequate with 0.760, 0.846 and 0.645 for knowledge, attitude and practice respectively and Bartlett' test of Sphericity showed the significant level with cumulative percentage of 69.240 for knowledge, 69.652 for attitude and 69.201 for practices which were in the acceptable ranges. These findings suggested that the items within each scale are measuring the same underlying construct consistently, making the tool suitable for further data collection and analysis in the main study.

c. *Mental Health Inventory (MHI) Jagdish and Srivastava 2005*-Additionally, “to appraise the level of mental health the Mental Health Inventory was used, developed by Jagdish and Srivatsa in 2005, comprising 54 items rated on a 5-point Likert scale. These items were grouped into six dimensions, namely Positive Mental Health Self-Evaluation (PMHSE), Perception of Reality, Integration of Personality, Autonomy, Group-Oriented Attitudes, and Environmental Mastery, with response options ranging from 'very good' to 'very poor.' The total scores were indicative of the level of mental well-being among the parents, with higher scores representing better mental health and lower scores indicating poorer mental health status”.

d. *Early Intervention Parents Self-Efficacy Scale (EIPSES) Guimond, Wilcox, & Lamorey,2008*- to assess parents self-efficacy, the Early Intervention Parenting Self-Efficacy Scale was used (EIPSES), developed by Guimond, Wilcox, and Lamorey in 2008. This scale comprised of 16 items, employing a 7-point Likert-type scale that ranged from 'strongly disagree' (1) to 'strongly agree' (7). The scoring range for parental self-efficacy varied from high to low, with higher scores indicating a greater of self-efficacy and lower scores indicating low self-efficacy.

Institutional Human Ethical Clearance

The parents were oriented and educated about the purpose and objectives of the study and their informed consent was obtained in writing before interviews. Confidentiality was assured to the parents and strictly maintained. Further, the study was subjected to Institutional Human Ethical Committee and was approved for the same with the approval number- **AUW/IHEC/HD-19-20/XPD-46**.

Phase 2

Data collection: data collection was carried out during the second phase of the study. The data collection was done in two steps, first step was rapport building and the second was data collection.

(a) Building rapport for collecting preliminary data: Before starting the data collection, the researcher initiated multiple visits to special schools. These visits were not just procedural, but served a vital purpose to build trust and rapport with the parents of children with autism before beginning the formal process of data collection. Establishing this connection was crucial, as it created a foundation of comfort and mutual respect, encouraging more open and honest communication. This rapport-building phase was critical not only for fostering a trusting relationship but also for ensuring the quality and validity of the responses collected during the study.

(b)Data Collection: Data collection in special schools began soon after the researcher built a good relationship with the parents and got their consent to take part in the study. Before giving out the questionnaires and scales, the researcher took time to clearly explain the purpose of the study and what the parents were expected to do. The parents were told that it would take about 20 to 30 minutes to finish answering all the questions. To make things clearer, the researcher even showed examples and guided them through the process before they started. The set of tools given to the parents included a socio-demographic questionnaire, which asked for personal and family background information, and parents knowledge, attitude and practices on pre requisite skills scales along with Mental health inventory and self-efficacy scale. These tools were carefully combined into four parts to make them easy to follow.

The data that were collected from parents and were analyzed using frequency and percentage and multiple liner regression.

Frequency and Percentage: Frequency and percentage analysis is a commonly used descriptive statistical method in research for organising and summarizing categorical data. In the present study, frequency and percentage analysis were employed to assess the distribution of parents socio demographic factors such as age, qualification, occupation, family income, number of siblings and area of residence along with the levels of parents' Knowledge, Attitude, and Practice (KAP) regarding pre-requisite skills, along with their mental health status and self-efficacy. This descriptive statistical method helped the investigator to systematically examine how many parents demonstrated adequate or inadequate knowledge, held favorable or unfavorable attitudes, and practiced relevant skills effectively or ineffectively. Additionally, the analysis provided insights into the psychological well-being and confidence levels of the parents in managing their children's needs.

Multiple liner regression analysis: Regression analysis is a statistical technique used to examine and model the relationship between a dependent variable and one or more independent (or predictor) variables. In the present study, multiple liner regression analysis was conducted to examine how independent variables, such as socio-demographic factors, influence dependent variables including knowledge, attitude, practices (KAP), mental health, and self-efficacy.

By analysing these variables, the researcher was able to identify whether there existed significant gaps or deficiencies, thereby determining the necessity of implementing a sensitization programme aimed at enhancing parental understanding, coping strategies, and caregiving practices. The analysis also aimed to investigate how KAP specifically impacts mental health and self-efficacy. This approach helped identify which variables had a significant effect on the outcomes and to what extent they contributed to the variations observed in the dependent variables.

Phase 3

During phase three the sensitization programme was developed and implemented. Based on the results of the data collected during the II phase the investigator proceeds to develop sensitization programme. In order to develop the sensitization programme, the investigator identified a model of instructional design called ASSURE model. It was developed in the mid-1990 by Robert Heinich and Michael Molenda of Indiana University and James Russell of Purdue University, based on Constructivist learning theory

principles. This model offers a structured approach that supports effective lesson planning and delivery by incorporating technology and media. The acronym "ASSURE" represents the six key steps in this instructional design process namely

A - Analysis learners characteristic, S - State objectives, S - Select methods, media, and materials, U - Utilise media and materials, R - Require learner participation, and E - Evaluation.

Conduct Sensitization Programme

The sensitization programme was conducted in one of the special schools in Coimbatore. A total of 60 parents were selected for the sensitization programme using a controlled randomized selection technique, where 30 parents were taken as experimental group based on their willingness to participate in the programme and 30 parents were taken as control group (waitlist). The sensitization programme was conducted over a period of 15 days - 6 days a week from Monday to Saturday. Each session lasted for one and half hour. Questioning and focus group discussion were also included in the end of each session. The programme was conducted with the help of the clinical therapist and experts from field of Human Development. The role of the investigator was to conduct focus group discussions, activities for the parents and facilitate the clinical therapist, provide accurate information, carryout evaluation and conduct impact assessment.

Based on the ASSURE model investigator developed 15 sessions to sensitise parents on KAP. All sessions were planned including basic knowledge on autism, and dimensions of KAP on pre-requisite skills like scheduling, imitation, attention, socialisation, self-control, self-advocacy, and safety along with positive mental health and self-efficacy. The sensitization programme was conducted effectively using audio-visual aids. Focus group discussions were held after every session where the doubts brought up by parents were discussed.

Phase 4

During the fourth phase of the study, post sensitization data was collected and analyzed to see the effect of sensitization programme on the KAP of parents on pre-requisite skills and, their mental health and self-efficacy.

- **Post sensitization data collection-** On the last day of the sensitization programme post-sensitization data was collected from the parents of experimental group as

well as control group respectively. After a gap of 10 days and a gap of one month from the last day of the sensitization programme follow-up one and follow-up two data were collected from the experimental group of parents respectively.

- **Pre and post data analysis**-In this phase, the pre data (data collected during the II phase before sensitization programme) and the post data were processed statistically to examine the effect of the sensitization programme and its sustenance among the parents. Statistical analysis such as paired sample t test, Cohen's D test, and Repeated Measures of Variance (RM-ANOVA) were applied to identify the significant difference between the experimental and control groups in their pre and post sensitization data scores including data from follow up one and follow up two phases. Collectively, these statistical methods provided a robust framework to assess not only the immediate but also the sustained impact of the sensitization programme on parents, ensuring that the findings were both statistically reliable and practically meaningful.

Results and Discussion

The findings of the study are presented and discussed under the following headings:

- 1) Socio-demographic profile of the parents of children of 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 parents 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 of 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

In the present study, reflecting their primary care giving role, majority (75.5%) of the respondents were mothers. With regard to the other socio demographic conditions, it was reported that 58% of the parents were postgraduates, 38.5% were graduates, while a small percentage had completed higher secondary (2.1%) and Ph.D. (1.4%). Higher percentage (64.3%) of mothers reported to be homemakers, while 21.7% of parents worked in the private sector. Most of the families (71.3%) had an annual family income of ₹5-10 lakhs, 20.3% earned ₹2-5 lakhs, and 8.4% earned above ₹10 lakhs. Majority of the parents (81.8%) had a single child, and lived in nuclear families (75.5%). Urban residents comprised of 85.3%, while 14.7% lived in rural areas.

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

The levels of knowledge, attitude and practices on the pre-requisite skills of parents of autistic children were assessed.

Knowledge: In the dimension of scheduling majority of parents (65.0%) showed a high level of knowledge, 24.5% of them showed a low level and 10.5% of them showed an average level of knowledge. It was observed that a majority of parents (60.1%) demonstrated a high level of knowledge regarding attention related difficulties in autistic children, and 29.4% of parents were found to have low levels of knowledge, and 10.5% showed only an average understanding, In the dimension of socialisation, the findings revealed that 53.1% of parents demonstrated a high level of knowledge on socialisation, 35.7% of parents showed a low level of knowledge, and only 11.2% had an average understanding of socialisation. The self-control dimension of knowledge showed that 61.5% of parents had a high and 28.0% had low level, while few (10.5%) of them had an average level of knowledge on self-control. In the dimension of self-advocacy, 61.5% of

parents demonstrated a high level of knowledge on self-advocacy, while 20.3% showed a low level, and 25.9% reported an average level of knowledge of self-advocacy. In the dimension of safety, 44.8% of parents reported a high level of knowledge on safety, 39.9% showed a low level, and 15.4% demonstrated an average level of knowledge on safety. Lastly, with regard to the overall knowledge levels, the majority of (77.6 %) parents reported a moderate level and 22.4% of parents depicted a low level, and the results observed that none of the parents had a higher level of knowledge on pre-requisite skills.

Attitude: The current study revealed that on the whole, the majority of (66.4%) parents showed an unfavorable attitude regarding pre-requisite skills. While 18.9 percent of parents showed a favorable attitude and 14.7% of the parents had neutral stance by reporting neither a favorable nor unfavorable attitude regarding pre-requisite skills of children with autism. Looking into the scheduling dimension of the attitude, 75.5% of parents showed unfavorable and 15.4% showed favorable. Only 8.4% of parents showed neither a favorable nor unfavorable attitude. In the dimension of attention, the majority (97.2%) of the parents showed an unfavorable attitude, equal number (1.4%) of parents showed favorable nor a neutral attitude towards attention skills. The dimension of socialisation, majority (76.2%) of the parents reported favorable attitudes towards socialisation, 24.5% of parents showed unfavorable and only 12.6% of parents reported as neither favorable nor unfavorable attitude towards socialisation. In the self-control dimension of attitude, most of the parents (62.9%) showed a favorable attitude, 24.5% of parents showed an unfavorable attitude and 12.6% of parents had a neutral stance towards self-control skills. In the dimension of self-advocacy, the majority (59.4%) of the parents showed unfavorable attitude and 27.3% of them had favorable attitude, and 13.3% of the parents showed neither favorable nor unfavorable attitudes towards self-advocacy. Lastly, in the dimension of attitude on safety 76.9% of parents had favorable attitude and 18.2% of them showed unfavorable attitude, while only 4.9% of parents reported a neutral stance toward safety skills.

Practices: The present study represented that, 46.2% of parents reported a high level of overall practice and 48.3% of the parents had a low level of overall practice on pre-requisite skills only 5.6 % showed an average level of practices. Looking at the dimension wise practices, in imitation, 48.3% of parents showed a high level of practice, 32.9% of parents showed a low level of practice and 18.9% of the parents practiced at an average

level of imitation. In the dimension of scheduling, 60.1% of them reported a high level of practice and 21.7% of the parents a low level, while 18.9% of parents showed an average level of practice on scheduling. In the dimension of expressing emotion, 69.2% of parents had a high level of practice, 17.5% of them showed average, and 13.3% of parents showed low levels of practice in expressing emotions. Looking into the communication dimension of practices the majority (70.6%) of parents showed a high level of practice on communication skills and 16.8% of them showed an average level, while 12.6% of parents had a low level of practice on communication skills. In the dimension of group work practices, 59.4% of parents reported a high level of practice, 22.4% demonstrated an average level, and 18.2% of parents showed a low level of practice in facilitating group work activities for their child. Looking into the dimension of independent practices, 47.6% of parents were showing a low level of independent practice and 37.1% of parents were showing high level of practice and only 15.4% of parents were showing an average level of practice on independent skills. Lastly, regarding the level of safety dimension of practices, the majority (75.7%) of parents showed a low level of safety practices, while 29.4% exhibited a high level, and only 18.9% showed an average level of practice in the safety dimension.

3) Levels of parents' mental health (MH) and self-efficacy (SE)

Mental health status of parents of autistic children: The results depicted that a majority (84.6%) of the parents reported to have 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 status, in the dimension of Parents' Mental Health Self-Evaluation(PMHSE), parents showed poor (65.7%) to average (20.3%) level of mental health. In 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, while only 1.4% of them were found to be at an average level. In the dimension of integration of personality, a higher percentage of parents showed a poor (60.8%) to very poor (33.6%) levels of mental health, and 5.6% of them reported to have an average level of mental health. 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. Group-oriented attitudes dimension of mental health showed that 59.4% of parents had a poor level and 35.0% had a very poor level, while few (4.2%) of them had an average level of group-oriented attitudes. Lastly, in the

dimension of environmental mastery, 59.4% of parents reported to be having poor level and very poor levels (34.3%) of environmental mastery and 6.3% of parents showed to be having average levels.

Levels of self-efficacy of parents of autistic children: The levels of parents' self-efficacy showed that, 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 notably, 21.7% of parents came up with a high level of parents self-efficacy.

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

The predictive capacities of socio-demographic markers on the knowledge, attitude, and practice on pre-requisite skills, mental health and self-efficacy of parents are presented under the following headings

- a) Predictive capacity of socio-demographic markers on parents' Knowledge on pre-requisite skills
- b) Predictive capacity of socio-demographic markers on parents' attitude towards pre-requisite skills
- c) Predictive capacity of socio-demographic markers on parents' practices on pre-requisite skills
- d) Predictive capacity of socio-demographic markers on parents' Mental Health
- e) Predictive capacity of socio-demographic markers on parents' Self-efficacy

a. Predictive capacity of socio-demographic markers on parents' Knowledge on pre-requisite skills: Among the individual predictors, family income ($\beta = 0.189$, $p = .046$) were found to be significant predictors of parents' 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.

- b. Predictive capacity of socio-demographic markers on parents' attitude towards pre-requisite skills:** An examination of the individual predictor variables none of the socio-demographic markers demonstrated a predictive capacity on parental attitudes ($p > 0.05$). The findings indicated that demographic characteristics alone do not significantly influence parents attitudes toward autism and pre-requisite skills.
- c. Predictive capacity of socio-demographic markers on parents' practices on pre-requisite skills:** The individual predictors revealed several significant influences. Gender of parents ($\beta = 0.284, p = 0.015$), parents' occupation ($\beta = -0.364, p = 0.002$), family income ($\beta = -0.209, p = 0.025$), type of family ($\beta = -0.179, p = 0.033$), area of residence ($\beta = -0.173, p = 0.035$) were found to be the significant predictors of parents practices on pre-requisite skills, while education qualification and number of siblings were not found to be the significant predictors of parenting practices.
- d. Predictive capacity of socio-demographic markers on parents' mental health:** Analysing the coefficients, the type of family ($\beta = -0.202, p = 0.020$) was observed as a significant predictor of parents mental health, with parents in nuclear families experiencing higher mental health stress compared to those in joint families. This suggested that the presence of extended family members may provide emotional and practical support, reducing stress levels in caregivers. This suggested that while socio-economic status and employment might contribute to stress, they are not the primary determinants of mental health in this sample.
- e. Predictive capacity of socio-demographic markers on parents' self-efficacy:** Notable results were observed with regard to socio demographic markers and parents self-efficacy. None of the socio-demographic markers were found to be significantly predicting parents self-efficacy. This suggested that neither economic nor educational factors strongly impact parental confidence in this context.

5) Influence of parents Knowledge, Attitude, and Practices towards pre-requisite skills on parents Mental Health and Self-Efficacy of parents of autistic children

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

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

When analyzed individual coefficients, self-control dimension of knowledge was seen as a significant predictor for parents mental health ($\beta = -0.205$, $p = 0.027$) and socialisation dimension of knowledge was found to be a significant predictor of parenting self-efficacy ($\beta = -0.224$, $p = 0.044$). Other dimensions of knowledge, including safety, scheduling, self-advocacy, and attention, did not show significant associations with parental mental health and self-efficacy. Notably, parents' overall knowledge also did not significantly predict parents mental health levels or self-efficacy. The results indicated that parents who are able to manage their emotion had better knowledge on pre-requisite skills which may influence better levels of mental health. Meanwhile it also suggested that knowledge on pre-requisite skills of autistic children is essential for parenting a child with ASD, but 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

The results depicted that, out of all the attitudes evaluated, attention stands out as a statistically significant predictor ($B = -0.299$, $p = 0.016$) of parents mental health and ($\beta = 0.176$, $p = 0.058$) was found to be a marginally significant predictor of parenting self-efficacy. Other attitudes, including scheduling, socialisation, self-control, self-advocacy, safety, and overall attitude did not emerge as significant predictors of parents' mental health and self-efficacy.

c. Influence of parents practice of pre-requisite skills on their Mental health and Self-efficacy

The results revealed that, parents over all practice showed an unstandardised coefficient of 0.174 and a standard error of 0.048, which resulted in a t-value of 3.637 and a significance level of $P < 0.000$. This indicated that parents practice has a statistically significant positive association with parents' mental health. While, independent dimensions of practices such as imitation, scheduling, express emotions, communication, group work, independent, and safety did not show significant associations. With regard to self-efficacy, the dimension of expressing emotions ($\beta = 0.347$, $p < 0.001$) was found to be a highly significant predictor of parenting self-efficacy. This suggested 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, safety, and overall parents' practice did not predict parents self-efficacy.

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

- Present investigation was done to assess the effect of sensitization programme and note the significant difference between KAP, MH and SE among the experimental and controlled group in pre and post sensitization. Results revealed that the post-sensitization scores were found to be higher than the pre-scores in the knowledge, attitude, and practices among the experimental group parents, showing significant differences with small and medium effect.
- Differences between Control and Experimental Groups- The analysis revealed no significant differences in Knowledge, Attitude, and Practice (KAP) scores, as well as in mental health and self-efficacy, within the control group. This suggested that, in the absence of intervention, there was no measurable change in these variables. However, in the experimental group, a significant improvement was observed between pre-test and post-test mean scores, indicating substantial positive changes following the sensitization programme. Effect size analysis using Cohen's *d* showed variation in the magnitude of these improvements. Specifically, knowledge exhibited a small effect size, while attitude and practice demonstrated medium effects. Similarly, mental

health displayed a smaller effect, whereas self-efficacy showed a medium effect. These findings suggested that the sensitization programme had a notable impact on both behavioral and psychological aspects among parents of autistic children.

- The analysis of mean differences across four assessment points- pre-sensitization, post-sensitization, follow-up 1, and follow-up 2. The Wilks' Lambda value indicated a statistically significant difference in mean scores across these time points, confirming that the intervention had a meaningful impact over time. The assumption of sphericity was tested for different variables. It was not assumed for KAP measures as well as for mental health and self-efficacy, suggesting that different statistical considerations were required for these factors.
- Univariate analysis revealed a significant interaction between subject factors and knowledge, with a Partial Eta Squared value indicating that 51% of the variance in knowledge. Similarly, attitude accounted for 47.8% of the variance, while practices contributed 50.1%. These findings demonstrated the effectiveness of the sensitization programme in improving KAP levels among parents.
- Beyond KAP, the program also had a profound impact on psychological variables. Mental health improvements accounted for 96.6% of the variance, highlighting the substantial influence of the intervention on parental well-being. Additionally, self-efficacy showed a meaningful change, explaining 33.9% of the variance. These results underscore the importance of structured sensitization programmes in fostering both behavioral and psychological growth among parents of autistic children.
- Overall, the findings indicate that the sensitization programme was highly effective in enhancing parental knowledge, attitudes, and practices, while also promoting better mental health and self-efficacy. These improvements highlight the need for continued support and intervention programmes for parents of autistic children to enhance their overall well-being and caregiving abilities.

Conclusion

The study's results addressed the objectives and answered the research questions clearly by exploring the levels of KAP, mental health and self-efficacy of parents of children with autism.

- The study depicted that majority of the parents had average to low levels of knowledge, unfavorable attitudes, and low level of practice regarding pre-requisite skills. This result thus accepts the hypothesis H₀₁(Parents of autistic children have lower levels of knowledge, unfavorable attitudes, and lower practices on pre-requisite skills). The majority of the parents had poor to very poor levels of mental health and average to low levels of self-efficacy, thus accepts hypothesis H₀₂(Parents of autistic children have poor mental health status and lower self-efficacy). These results on the whole address the first two primary objectives and research question no 1.
- The dimensions of knowledge, such as perception of reality and group-oriented activities, were found to predict mental health and self-efficacy, respectively. The dimension of attention in attitude predicted mental health but did not predict self-efficacy. Overall practices predicted mental health and only one dimension namely expressing emotions predicted self-efficacy, thus partially accepts H₀₃(Parents' knowledge, attitudes, and practices do not influence mental health and self-efficacy) and addresses the primary objective 3 and research question no 2.
- A few socio demographic markers have significant predictive capacities only on parents' knowledge, practices, and mental health, but not attitude and self-efficacy of parents of autistic children thus addressing the secondary objective and research question no 3, while partially accepts H₀₄(Socio-demographic markers do not determine parents' knowledge, attitudes, and practices on pre-requisite skills, mental health, and self-efficacy).
- Further, the study represented the pre and post sensitization scores, the post-sensitization scores were found to be higher than the pre-scores in KAP among the experimental group parents, showing significant differences with small and medium effect. Similar results were observed in the mental health status and self-efficacy as well. The MANOVA results also showed that differences

between the scores of pre- and post-test and of follow-up1 and follow-up2 were significantly different. The score showed a drastic increase during the post-test, sustained through follow-up 1, and follow-up 2 phases, indicating the positive effect of the sensitization programme on the KAP levels, MH, and SE of parents of autistic children, thus rejecting H_{05} (Sensitizing parents do not improve their KAP on pre-requisite skills, mental health and self-efficacy). While addressing the primary objective number 4 and research question no 4.

Parents raising children with autism face multiple challenges, which puts a lot of fretfulness on parents themselves and their families. They might need to spend a lot of time helping their child get the support they need, eventually overlooking their own needs and interests, which can be very stressful and exhausting, as it may be tough to make time for them and family, affecting their relationships and mental well-being. Hence, hand-holding and motivating parents of autistic children through educational sensitization, intervention, and training programmes can bring about a change in the lives of parents with improved knowledge, attitude, and practices on pre-requisite skills for autistic children and leading towards sustainable mental health and well-being with enhanced abilities for thriving parenting. Nevertheless, these positive outcomes in parents of autistic children will eventually positively impact the development of autistic children and their well-being.

Implications

The present study on *Parents' Knowledge, Attitude, and Practice on Pre-requisite Skills for Children with Autism and its Influence on Parents' Mental Health and Self-efficacy – A Sensitization Study*, puts forward a few implications based on the study findings that are as follows:

- Implications for parents and families - Parents and family are the primary support system for a child with autism, their well being is essential for child's overall development. The present study output and outcomes gives an insight into significant improvement in parents knowledge, favourable attitude, and better practices on pre-requisite skills. In addition, the programme also leads a notable development in their mental health and self-efficacy. By enhancing awareness and practical understanding of these skills parents can create more supportive learning environments for their children with efficient guidance. Additionally, the study

also spotlighted to promote parents positive mental health and self-efficacy as these factors are directly linked to their care giving and decision making capacity regarding their child. To sustain their own wellbeing parents need to seek professional help when dealing with their mental health issues, stress, burnout, and work-life balance. Families need to provide unconditional support for parents. So parents and family should work together and share responsibilities in care giving, decision making and training the autistic child towards a sustained future.

- Implications for the organisations and professionals working for autistic children - Organizations and professionals are making commendable efforts in caring for autistic children through the provision of rehabilitation services, specialised education, and guidance for parents. However, the present study implies that, the existing support is primarily centered on meeting the needs of the children, with comparatively less attention given to the well-being of the parents themselves. It is essential for these organisations and professionals to also focus on addressing parents' needs, such as managing financial burdens, coping with stress, and balancing caregiving responsibilities. Initiatives could include establishing parent support groups to reduce negative impacts, creating targeted support services through educational interventions, and implementing programmes aimed at enhancing parental well-being.
- Implications to the policy makers - While numerous laws and policies already exist to support the training and rehabilitation of children with special needs, it is equally important to incorporate provisions that address the needs of parents. Policy makers should consider introducing dedicated training programmes for parents, initiatives to promote positive mental health, and welfare schemes aimed at enhancing parents' capacity to care for their children. Furthermore, policies should include the establishment of support services for parents to aid their personal development, strengthen coping mechanisms, and ensure access to professional help, not only for parents of autistic children but also for those caring for children with other disabilities.
- Implications to the special educators - Special educators should place greater emphasis on developing pre-requisite skills for children with autism, as these skills form the foundation for future learning, independence, and vocational opportunities. In addition, special educators play a vital role in creating awareness

about autism among all parents to enhance their understanding and capacity to support their child's development. Parents should be educated about the significance of these skills so they can actively reinforce them at home, rather than relying solely on professionals. Special educators can also organise workshops and hands-on training sessions for parents, demonstrating practical strategies for teaching and practicing pre-requisite skills in everyday routines. By fostering consistent learning both at school and at home, children are more likely to achieve better outcomes in communication, social interaction, and daily living skills. Collaboration between educators and parents will not only strengthen the child's developmental progress but also empower parents to become confident, capable partners in their child's growth.

Limitations

- One of the major limitations of the study was the sample size. A larger and more inclusive sample could have yielded more representative results. Additionally, the study focusing on a specific geographic area presents other limitations, as it may restrict the generalisability of findings to broader populations. Cultural, social and economic difference across regions could influence parents Knowledge, Attitude and Practice of pre-requisite skills, mental health and self-efficacy in unique ways. The operationalisation of sociodemographic variables remains a limitation of the study as they were treated as ordinal for the exploratory purpose.
- The limitation of the study also includes the aspect of the severity of ASD symptoms in children. The data on the severity of ASD symptoms were not collected in the study. The severity of the ASD may have significant implications for the parents' Knowledge, Attitude and Practice, as well as their mental health and self-efficacy.
- Another limitation of the study is that some parents of autistic children were not fully open in sharing information. This reluctance may have led to not put in qualitative explanations regarding the parents and children's day to day life activities, life circumstances, stressors that would explain the underlying cause for poor levels of mental health, self-efficacy and not so good levels of knowledge, attitude, and practices of pre-requisite skills, potentially influencing the depth of the findings.

Recommendations

The study places certain recommendations in connection with the research in the topic of knowledge, attitude and practices on pre-requisite skills of parents with autism and its influence on parents mental health and self-efficacy, which can be taken forward to form an impactful piece of work that can be assistive document for implementing policies and programmes for individuals with special needs-

- The study can be conducted with large sample size with cultural stratification. The operationalisation of socio demographic variables is recommended for future studies, where employing categorical modeling approaches (coding variables as nominal instead of ordinal) with dummy coded regression or group comparison methods, to examine group-specific differences in greater depth.
- The study also recommends including the severity of ASD symptoms as a covariate in future studies, which may have significant implications for parents, and also extending its focus to include parents of children with other disabilities, recognising that the challenges they face in terms of stress, emotional strain and care giving demands may be similar to those experienced by parents of autistic children.
- The fairly small sample size ($n = 30$) taken in the study for sensitization programme may limit the generalizability of the findings. Although the repeated measures design enhances statistical power, future studies can be undertaken with larger samples is recommended. Furthermore, the study emphasises the need for developing targeted interventions specifically designed for parents of autistic children to address their mental health concerns and overall well-being. Such interventions could include structured counseling programmes, stress management workshops and parents support with practical training to enhance coping strategies. These approaches would not only help parents to manage the emotional and psychological impact of care giving but also empower them to provide more effective and sustainable support to their children.