THE PREDICTIVE ROLE OF EMOTIONAL AWARENESS AND SOCIAL INTELLIGENCE ON THE PSYCHOLOGICAL SYMPTOMATOLOGY AMONG STUDENTS WITH SPECIFIC LEARNING DISABILITIES (SLD)

Submitted to

THE TAMILNADU Dr. M.G.R. MEDICAL UNIVERSITY

Submitted in partial fulfillment of the requirements for the degree of

M. Phil. in Clinical Psychology

September 2023

Submitted by

M. K. HARISHMA

Register No: 154221104504

Under the guidance of

Mr. Johny. E. V,

Lecturer

Department of Clinical Psychology

National Institute for Empowerment of Persons with Multiple Disabilities(Divyangjan)

East Coast Road, Muttukadu, Chennai – 603 112

CERTIFICATE

This is to certify that, **Harishma. M. K** has been a research scholar for M.Phil. Degree in Clinical Psychology, National Institute for Empowerment of Persons with Multiple Disabilities, Chennai during the academic year of 2021-2023

Hereby, it is certified that the dissertation titled **"The predictive role of Emotional Awareness and Social Intelligence on the psychological symptomatology among students with Specific Learning Disabilities (SLD)"** is the original research work done by Harishma. M. K (154221104504) submitted in partial fulfilment of the requirement for the Degree of Master of Philosophy in Clinical Psychology is a work of the candidate's personal efforts under my guidance and has not previously formed the basis of award for any other degree or diploma to the candidate.

Guide

Mr. Johny.E.V

Lecturer,
Department of Clinical Psychology,
NIEPMD,
Chennai- 603 112

Head of the Department

Dr.S.Karthikeyan,

Lecturer & Head of the Department,
Department of Clinical Psychology,
NIEPMD,
Chennai- 603 112.

Internal Examiner 24/11/23

External Examiner 24/11/23

DECLARATION

I, Harishma. M. K, hereby declare that the thesis titled **"The predictive role of Emotional Awareness and Social Intelligence on the psychological symptomatology among students with Specific Learning Disabilities (SLD)"**, was carried out by me at the National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD), Chennai, during the year 2021-2023, is an original research work carried out under the guidance and supervision of Mr. Johny.E.V., Lecturer, Department of Clinical Psychology, NIEPMD, Chennai. This work has not formed the basis of award for any other degree.

Signature of the candidate

(HARISHMA. M. K)

Place : Chennai

Date : 03/08/2023

राष्ट्रीय बहुविकलांग व्यक्ति अधिकारिता संस्थान
(विकलांगजन सशक्तिकरण विभाग, सामाजिक न्याय और अधिकारिता मंत्रालय, भारत सरकार)
National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD)
(Dept. of Empowerment of Persons with Disabilities, Ministry of Social Justice & Empowerment, Govt. of India)
ईस्ट कोस्ट मार्ग, मुत्थुकाडु, कोवलम पोस्ट, चेन्नै - 603 112. तमिलनाडु, भारत
East Coast Road, Muttukadu, Kovalam Post, Chennai - 603 112. Tamilnadu, INDIA

BONAFIDE CERTIFICATE

This is to certify that **HARISHMA M K (Reg no. 154221104504)** is a bonafide student of this institute undergoing 2nd year MPhil Clinical Psychology programme of 2 years duration, during the academic session 2021-2023 at National Institute of Empowerment of Persons with Multiple Disabilities (Divyangjan), Chennai.

This institute is a central body funded by Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice & Empowerment, and Government of India. The MPhil programme offered at NIEPMD is recognized by Rehabilitation Council of India (RCI), New Delhi, and affiliated with the Tamil Nadu Dr M.G.R. Medical University

Dr .Karthikeyan.S
Associate Professor & Head
Department of Clinical Psychology
NIEPMD (D), Chennai

टेली फैक्स / Telefax : 044-27472389, Telephones : 2747 2104, 2747 2113, 2747 2046
ई-मेइल / E-mail : niepmd@gmail.com Website : www.niepmd.tn.nic.in

NATIONAL INSTITUTE FOR EMPOWERMENT OF PERSONS WITH MULTIPLE DISABILITIES (Divyangjan)
(Dept. of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice & Empowerment, Govt. of India)
Muttukadu, East Coast Road, Kovalam (P.O), Chennai - 603 112
Tamil Nadu - India. Phone: 044 - 27472046, 27472104, 27472113, 27472423
~ Accredited by NAAC~ ~ ISO 9001:2015~

NIEPMD/R.D20 (5)/Ethic Committee/2023/04 14.04.2023

CERTIFICATE OF ETHICS APPROVAL

TO WHOMEVER IT MAY CONCERN

This is to certify that, the project entitled "**THE PREDICTIVE ROLE OF EMOTIONAL AWARENESS AND SOCIAL INTELLIGENCE ON THE PSYCHOLOGICAL SYMPTOMATOLOGY AMONG STUDENTS WITH SPECIFIC LEARNING DISABILITIES (SLD)**" submitted by Ms. **HARISHMA M K,** II year M.Phil. Clinical Psychology was placed before the Institutional Ethics Committee. The committee given ethical clearance to conduct the study.

NIEPMD MUTTUKADU, CHENNAI-603 112

Dr.A.Amarnath
Member Secretary (IEC)
NIEPMD.

Dr. A. AMARNATH
M.A., M.Phil., Ph.D. Dip.Dev.Reha, M.Ed(MD).,
Member Secretary
Institutional Ethics Committee
National Institute for Empowerment of Persons with Multiple Disabilities (Divyangjan) (NIEPMD)
DEPwD, MSJ&E, Govt. of India,
ECR, Muttukadu, Kovalam (PO), Chennai - 603 112.

CERTIFICATE-II

This is to certify that this dissertation work titled, **"The predictive role of Emotional Awareness and Social Intelligence on the psychological symptomatology among students with Specific Learning Disabilities (SLD)"** of the candidate **HARISHMA. M. K** with registration Number **154221104504** for the award of the **Degree of Master of Philosophy** in the branch of **Clinical Psychology**. I personally verified the urkund.com website fort the purpose of plagiarism Check. I found that the uploaded thesis file contains from introduction to conclusion pages and result shows 7 percentage of plagiarism in the dissertation.

Guide & Supervisor signature.

Mr. Johny E.V
Lecturer

Dept. of Clinical Psychology
NIEPMD (MSJ&E, Govt of India)
East Coast Road, Muttukadu,
Chennai, Tamil Nadu - 603 112

ACKNOWLEDGEMENT

I express my sincere gratitude to Associate professor and Head of the Department - Department of Clinical Psychology, Dr. S. Karthikeyan, for his guidance and support that he has generously provided.

I would sincerely like to thank my guide, Mr. Johny. E.V, for his constant feedback and for his efforts to offer remote guidance, while he was residing in a different city.

I would sincerely like to thank, Mr. R. Kumaran Rajan, Ms. P. Kalaivani, Ms. S. K. Anandhalakshmi, and Ms. Srigowri Rajesh, Lecturers, Department of Clinical Psychology, who has been of support in many ways during the process of completion of this record work.

I would like to thank all my fellow scholars and my seniors and juniors who were with me right from the process of brainstorming project ideas and for their exceptional patience in responding to my inquiries about their clients, who are potential study participants.

Special thanks to Ms. Nivetha, whose unexpected enthusiasm to help me finding samples was truly motivating.

I would like to extend my thanks to Mr. Amrudheen and Ms. Merlin, Department of Clinical Psychology for their support.

I take this opportunity to extend my gratitude and thank the clients and their caregivers for their co – operation that made the process of this research possible.

I express my sincere gratitude to my parents, my brother, friends, and my well-wishers, for their emotional support and motivation during the process of completion of this record work.

HARISHMA. M. K

TABLE OF CONTENTS

LIST OF TABLES

LIST OF GRAPHS

ABSTRACT

Specific Learning Disability (SLD) is a pervasive neurodevelopmental condition which is characterised by deviant cognitive processing caused due to changes in neuronal processing of information. Individuals with SLD often faces academic underachievement, despite possessing adequate cognitive capabilities, consequent of which they are found to undergo stress, reduced sense of self-worth and learned helplessness. Adolescent is a period marked by turbulent changes in psychological as well physiological domains, posing challenges for adaptive adjustment in general, which makes this period more vulnerable for the development of psychopathology. Students with SLD condition, might have to face their adolescence along with the challenges of their condition, which makes them susceptible to the development of psychopathology. Emotional Awareness and Social Intelligence were found to be positively related to mental health and it is assumed that having increased awareness of one's emotions and Social Intelligence, tends to reduce the risk of psychopathology. The aim of the current study is to find out the relationship of emotional awareness and social intelligence on the psychological symptomatology in the students with SLD, to understand the role of Emotional Awareness and Social Intelligence in predicting the psychological symptomatology among the students with SLD. The study involved a sample of 30 students of age 13-16, diagnosed with SLD. After obtaining the informed consent from the participants and their parents, the required data was collected through Emotional Awareness Questionnaire (EAQ), Tromso Social Intelligence Scale (TSIS) and Brief Symptoms Inventory (BSI). The data were analysed using Pearson Product Moment Correlation and Linear Regression Analyses. The results shows that Emotional Awareness was significantly associated and predicted Anxiety as well as psychoticism and Social Intelligence significantly predicted Phobic Anxiety among the students with Specific Learning Disability (SLD).

Keywords: Emotional Awareness, Social Intelligence, Psychological symptomatology

CHAPTER – 1

INTRODUCTION

Specific Learning Disorder (SLD) is an umbrella term which denote significant difficulties in the areas of reading, spelling, writing or mathematics. These difficulties might either occur together or separately.

SLD is a condition, which is conceptualized as a deviance in cognitive processing caused due to underlying biological dysfunction. It has a neurodevelopmental origin, which makes the difficulties prolong throughout the lifetime of the individual, especially affecting the perception and expression of the written language.

Some of the specific types of learning disabilities include

Dyslexia, is characterised by the difficulties in processing language, wherein the individual finds the skills of reading, writing, and spelling as challenging. The individual finds it difficult to associate sounds with various letters, which manifests as the difficult to recognize and remember words promptly, confusion of letter names and sounds, inability to blend words based on their sounds, slower rate of reading and remembering the text after reading.

Dyscalculia, is characterised by deficit in math skills, as a result of which mathematical computations, math facts, time/money concepts become difficult to grasp. The individuals face difficulty in learning to count, unable to smoothly perform mental math skills and difficulty with spatial directions

Dysgraphia, is characterised by difficulty in written expression, involving difficulties of handwriting, spelling and composition, which is reflected through their illegible handwriting and finding difficult to organize thoughts in the form of words.

The underlying mechanisms which hinder their learning processes are multifaceted. Individuals with SLD have atypical eye movements instead of sequential saccadic eye movements, which makes it difficult for the reader to follow through the information in a sequential fashion (Jafarlou, Ahadi & Jarollahi, 2021). This deficit of visual sequencing is pronounced as reversals of letters in a word and omission of letters/words while reading and writing.

Along with deficit in attentional processes, which is crucial for the accurate reception of information, the underlying mechanism which causes vast range of difficulties in learning and other domains could be understood as a function of deficit in organization.

Learning disability is caused due to deficits in perceptual processes involving organizing and comprehending the meaning of the stimuli presented. The features of learning disabilities could be understood from the deficits in visual discrimination, which is the ability to find out and analyse the difference in the characteristic of one item from another. Deficit of this ability makes it difficult to identify the similarities and differences between two letters, objects, and patterns. Accompanying with deficits in visual figure-ground discrimination makes it challenging to find and focus a specific piece of information on a page full of words. Deficits in visual memory are reflected as difficulties remembering spelling from one's memory, trouble in copying words and other images resulting in slow writing and mixing up of letters, as visual memory aids in the recall of visual stimuli exposed to the individual and is crucial for processing the images of words and holding it long enough to attach meaning, thus retaining learned information.

The identification of this condition started from the work of a German Ophthalmologist, Rudolf Berlin, who gave the term "Dyslexia" based on his clinical study on six patients who has acquired disability of reading, as a result of brain lesions. Pringle Morgan and James Kerr

(1896) identified the occurrence of learning disability which is of developmental origin, despite having average intellectual functioning and no sensory difficulties. Despite other previous works, it was Dr. Samuel Kirk (1963), who gave the term "Learning Disability".

The International Classification of Disorders (ICD-10) has placed Specific Learning Disability, under the disorders of psychological development, with the name of "Specific Developmental Disorders of Scholastic Skills" comprising of the disorders of reading, spelling, arithmetic skills, and mixed disorder. It was found that 5% to 17% children of India have learning disorders (In Kohli, Sharma & Padhy, 2018) and male to female ratio of learning disorders was found to be 2.3:1, which suggests that for every one female is identified to have the disorder, two males were identified to have the same.

The diagnostic criteria given by the manuals, DSM-5 and ICD-10, does not differ much in delineating the features of this disorder from the interference of learning caused due to developmental/acquired disabilities (like Intellectual disabilities, disturbances in the modalities of vision and audition, neurological disorders) and other psychosocial factors like learning difficulties caused due to inadequate academic training, lack of opportunity to learn or because of the use of non-dominant language of academic instruction or due to emotional problems). ICD-10 has a separate category for spelling disorder, whereas in DSM – 5, impairment in spelling and written expression is given together as an impairment in written expression. And DSM-5 has classified Specific Learning Disability (SLD) into Mild, Moderate and Severe, based on the level of the difficulties, and on their requirement of resources to compensate the difficulty.

Specific Learning Disability tend to co-occur with other conditions like attention deficit disorder, which is secondary to Learning disability and was found in 12% - 24% individuals

with dyslexia (Lyon, Shaywitz, & Shaywitz, 2003), conduct disorder and developmental disorders of motor function/speech and language.

Those who had co-occuring ADHD along with Learning Disability tend to exhibit deficits in attention and inhibitory control, language-based functions, executive functions, poor self-regulation (Hooper & Williams, 2005) along with difficulties in learning. More specifically ADHD posited deficits related to central executive part of working memory, whereas Learning disabilities were related to the deficits of phonological loop and in visual-spatial sketchpad. The occurrence of conduct disorder with Learning disability often accompanied and moderated by simultaneous occurrence of ADHD and is most common to occur with spelling disorder than with reading disorder (Visser, Kalmar, Linkersdörfer, Görgen, Rothe, Hasselhorn, & Schulte-Körne, 2020)

Despite possessing adequate intellectual development, these individuals could not effectively perform well in their academics which results in a gap between their ability and the expected academic skills of the individual of their age.

As the students with SLD, face significant struggles in school work, they are prone to experience increased negative and less positive emotions in their academic settings, which in turn precipitates behavioural responses like increased anxiety and subsequent avoidance of situations where the individual's skills would be evaluated and are more likely to consider themselves as less valued and incompetent, in comparison with their peers. (Gadeyne, Ghesquiere & Onghena, 2004). Such impact in their sense of self, is evident from the study of Padeliadu (2011), which reported that 70% of students with learning disabilities suffer from poor self-concept and found significant association of school results on their self-worth. In addition to it, it was found that children with learning disability had limited social skills and exhibited less assertive behaviour than their peers (Vallance et al., 1998). Possessing

assertiveness greatly reduces interpersonal conflicts, which serves as a main source of stress (Elizabeth Scott, 2006) and influences one's self-esteem, self-confidence, personal fulfilment and internal locus of control (In Pourjali & Zarnaghash, 2010)

According to Kavale and Forness (1995), approximately 75% of children with SLD lacked social skills that set them apart from those without SLD. Students with learning disability were more likely to be ignored by their peers during interaction and they do have low social status irrespective of their race and sex. It was observed that their peers rejected that they perceived them as a group of scared, unhappy, worried and are seen as a desirable playmate. Also, those with learning disability are less able to put themselves in the place of another and to see things differently from their own views and are less in tune with others (deficit in role-taking) and such failure was found to adversely affect mutual negotiations and successful social interaction between those with learning disability and their peers without learning disability

According to Rose et al., (2013), students with learning disabilities had vulnerability to become victims of bullying due to their social issues, hyperactivity and emotional symptoms, which increased the risk of them becoming a perpetrator and showing hostility towards their peers as a coping mechanism for past abuse or because of their general lack of social skills.

Adolescents with LD had more willingness to conform to negative peer pressure to engage in risk-behaviours like substance and alcohol use, unprotected sexual activity, delinquency and gambling, to avoid social isolation.

Individual with learning disability had difficulty in cognitive processing of their feeling, unable to identify, perceive and describe their own emotions and difficulty adjusting to stressing situations. As it was found that they lack self-regulation and accurate formulation of information and lack of social and interpersonal skills, they encounter more problems in their

life and are more likely to feel disgust from society, might tend to isolate themselves from the community and are likely to engage in perverse behaviours. They are also more likely to use the physiological and psychological properties of substance to regulate and adjust their negative emotions and to obtain emotional stability. They are more likely to misuse the substances to bear their emotional situations (In Abbasi, Bagyan & Dehghan, 2014)

Repeated failure or poor academic performance despite their continuous practice might lead to the development of learned helplessness. Miller (1988) states that learned helplessness involves a substantial decrease in associating action with positive outcome and leads to marked reduction in the range of responses to external demands (In Bargai, Ben-Shakhar & Shalev, 2007)

Adolescence, in general, is a period of increased perplexity caused due to profound changes in endocrinological, neuro cognitive, memory, inhibitory control, abstract thinking and other socio-emotional domains, which invariably poses challenges to all the individuals despite them being neurotypical or have developmental condition, affecting their decisions, thoughts, feelings and their pattern of interaction.

Also, it is the time during which their patterns of behaviour pertaining to various domains gets consolidated, which can be either healthy or those which can add risk to them in their present or their future, resulting in psychopathology. Due to the rapid nature of the adolescence and the lack of enough personal resources to cope adaptively, this period is considered to have increased risk for the development of psychological symptoms and the onset of full-blown mental disorders (Casey et al., 2008; Lee et al., 2014; Paus et al., 2008).

According to Bender (1987), Bladow (1982), Margalit & Shulman (1986), students with learning disabilities are at a greater risk for developing mental disorders as they have lower

self-concepts, higher external loci of control, less socially accepted and are more anxious than their peers.

Students with LD had significantly higher depression scores than the students without learning disability, with approximately 2% of those with learning disability experienced severe symptoms of depression.

According to Maag et al., (1992), the individuals with learning disability had increased frequency of negative cognitions, which is associated with depression. Several studies reviewed by Bender and Wall (1994) shows the association between depression and lower self-concept and lower perceived academic competence.

One probable reason for emotional problems of students with learning disabilities is that they have deficiencies in the emotional cognition domain. They wrongly interpret social symbols and may invert them. These children have problems in distinguishing tag indications, situational indicators, and encoding the nonverbal emotional signs, leading to high levels of aggression and disturbed behaviours in interpersonal relationships

Emotional awareness:

Emotions are defined as complex psychological states involving one's subjective experience, physiological responses, and behavioural/expressive component. Emotion is differentiated from feelings in the way that it has a clear and identifiable cause, whereas the latter involves one's subjective perception of the situation.

Emotions has the tendency to elicit inbuilt action patterns, which has survival value, as it guides our attention to more important stimuli (Gasper & Clore, 2000). But unregulated emotional behaviour, would create more problems in our social environment. It is the cognitive process that helps the individual to respond in an adaptive way, and so it emphasizes the significant role of our attention which interrupts the automatic program and

giving in scope for its control, by identifying the exact emotion, its antecedents, and the potential consequences. According to Paul Ekman, a pioneer in the field of research on emotions, emotions might be harmful if one's learned emotions no longer fit the current situation or when the individual could not understand the reactions caused due to subconscious emotions. Having awareness about one's internal emotional environment would enable better regulation of one's emotions and thus resulting in better management of stress. Emotional Awareness is one of the central components of Emotional Intelligence, which conveys the adaptability component of Intelligence.

The construct of Emotional awareness includes the degree of clarity of emotions based on the type experienced and the source which caused it, ability to distinguish from other emotions and the degree to which one attends to their emotions.

Deficits in Emotional awareness is associated with increased information processing errors, and so the recognizing the emotions of one's own and that of others is a crucial first step of emotional processing, as it through which the external and internal cues are encoded.

Individuals with poor emotional awareness might hardly deal with their emotions by not paying attention to it, which results in prolonged emotional state and either the emotion is detached from the event caused the emotion or inappropriate emotional regulation strategies for handling emotions might be chosen, as a result of not being able to identifying the specific type of emotions. In such cases, the unfavourable course of encoding at the very beginning of information processing results in inappropriate or unhealthy cognitions, beliefs, response decisions, which in long-term might result in psychopathological symptoms that can be either internalizing or externalizing.

Social intelligence:

Social Intelligence, as defined by Edward Thorndike, the one who coined the term, is defined as the ability to understand, manage people and act wisely in relationships.

The conceptualization of social intelligence as given by Albrecht (2004), defines Social Intelligence as a construct which comprises of the abilities to make sense of one's environmental situations, understand the influence of the person/group on the environment, extent of honesty and sincerity the individual exhibits themselves and with others in the situation and the clarity of their self-expression and the ability to create a sense of connectedness with others in the environment.

Empirically, it was found that possessing Social Intelligence is strongly associated with wellbeing and one's psychological health (Hooda et al., 2009), as wellbeing depends on one's ability to effectively adapt to their situations. Possession of social skills and competence to deal with, is essential to build meaningful relationships and to avoid emotional stress and problems (Dogan, Cetin & Sungur, 2009). Social intelligence was also found to have a role in contributing to better affect balance, which allows the individual to experience more pleasant experiences than the unpleasant ones, having better global judgement of one's life and their quality of relationship with others, all these were associated with decreased psychological distress.

According to Greenham (1999) and Vaughn, Elbam & Boardman (2001), Individuals with SLD faces numerous difficulties in overall adjustment and social functioning like rejection or neglect by their peers and other emotional problems, which was found to be related with poor social skills exhibited by the students with learning disabilities.

Some students with developmental and learning disabilities may have a delay in their language development, which affects their ability to communicate their emotions. Many

young children with disabilities struggle to understand and demonstrate nonverbal cues, such as the reading of facial expressions (Greenway 2021). Therefore, they are unable to verbally communicate their emotions, and this can create difficulties with emotional regulation

One probable reason for emotional problems of students with learning disabilities is that they have deficiencies in the emotional cognition domain. They wrongly interpret social symbols and may invert them. These children have problems in distinguishing tag indications, situational indicators, and encoding the nonverbal emotional signs, leading to high levels of aggression and disturbed behaviors in interpersonal relationships (In Agaliotis & Goudiras, 2004)

Research evidences suggests that youth with difficulties in emotional awareness display higher levels of sub-threshold symptoms and threshold symptoms of anxiety disorders and depressive disorders (Boden & Thompson, 2015)

Research evidences suggested that having specific learning disability predisposes students to academic failure, several psychosocial difficulties and puts them at a higher risk for developing mental health problems. The ability to recognize feelings in oneself and in others contributes to managing successful social interactions with other people and promotes positive emotions, which are the underlying mechanism of better mental health.

In this study it is hypothesized that, having better social intelligence and emotional awareness would reduce the susceptibility of developing psychological symptoms among SLD students. And so, this study attempts to establish empirical evidence by understanding the pattern of relationship between Emotional awareness & psychological symptomatology; Social intelligence & psychological symptomatology. And whether the variables (Social Intelligence and Emotional Awareness) predict psychological symptoms would be the focus of the study.

Need for the study:

1. There is a limited knowledge on the emotional aspects of SLD, as most of the studies mostly focussed on cognitive, academic and performance aspects of SLD.
2. This study might lead to an understanding of nature of emotional aspects of students with SLD.
3. By understanding the relationship (whether Emotional Awareness and Social Intelligence predicts psychological symptomatology), interventions could be developed to enhance their level of emotional awareness and Social Intelligence.

CHAPTER – II

REVIEW OF LITERATURE

SLD and psychopathology:

Willcutt, E. G., & Pennington, B. F. (2000) conducted a study titled, **"Psychiatric comorbidity in children and adolescents with reading disability".** This study aimed to investigate the association between reading disability and internalizing and externalizing psychopathology. The study was conducted among twins, where either one had reading difficulty, wherein the data was collected from both the typically developing and the one with reading disability, to understand contribution of the familial influences in the association between reading disability and other disorders. Results indicated the presence of significantly higher rates of all internalizing and externalizing disorders in the individuals with reading disability than those without reading disability, on controlling for co-morbid condition of ADHD, the symptoms of anxiety, depression remained significant. It was found that the relationship between internalizing symptoms and reading disabilities were significant in girls and the relationship between externalizing symptoms and reading disabilities were significant for boys. It was found that internalizing symptoms were significantly associated with reading disabilities and are not attributable to general familial factors.

The study titled **"Psychopathology among Emerging adults with learning disabilities in Canada"** by Chown, S. L., Browne, D. T., Leatherdale, S. T., & Ferro, M. A. (2022). This study aimed to investigate psychological distress in emerging adults aged 15-29 years, with and without SLD. The data was obtained through 2012 Canadian Community Health Survey-Mental Health (CCHS- MH), which included the self-reported data of Kessler Psychological Distress Scale (K6). This study found that males and those aged 25-29 years, with SLD had

increased risk for clinically relevant psychological distress in comparison with those without SLD.

Semra Salik, Mehmood Sadiq and Uzma Masroor (2022) conducted a study titled, "**Specific Learning Disability (SLD) and associated psychosocial difficulties in emerging adolescents: An exploratory study**. Adolescents aged 11-17, who were diagnosed with mild-moderate level of SLD were the participants and their learning disabilities were assessed using Learning Disability Evaluation Scale (LDES) by McCarney & Arthaud (2007) and psychosocial difficulties was measured using Strength and Difficulties Questionnaire (SDQ) by Goodman (1997). SPSS 24 was used to evaluate the data and was analysed using Descriptive statistics, reliability analysis and the independent sample t-test. It was found that men are more likely than women to encounter psychological challenges as they were more likely to experience emotional signs, behaviour issues and peer issues. The study concluded that the students diagnosed with SLD have both internalized problems like low self-esteem and social impairments and externalized concerns like trouble making friends, socializing and engaging in criminal activity. This study has advised to implement inclusive education and therapeutic interventions to address the psychosocial issues.

In a study titled, **"Depressive symptomatology in students with and without learning disabilities"** by Heath, N. L., & Ross, S. (2000), attempted to understand the prevalence and types of depressive symptoms reported by children with and without SLD. 171 children with SLD of Grade 5 and 8, from Toronto and 104 children without SLD, of grades 4,5, &6 from Montreal region were administered Children's Depression Inventory. It was found that there were marginal difference in the prevalence of depression between those with SLD and those without, and girls with SLD had higher prevalence of depression with the increased reports of negative mood, loss of pleasure, negative self-esteem and interpersonal issues, than their peers without SLD.

A study conducted by Scorza, M., Benassi, E., Gennaro, A., Bruganelli, C., & Stella, G. (2018), titled **Psychopathological symptoms in Italian children and adolescents with Specific Learning Disorder: What do mothers and fathers report about?** Examined the emotional and behavioural problems with children and adolescents with and without SLD. 22 children and adolescents with SLD and 29 children without SLD were involved in the study. Either of their parent's reports were used to rate Child Behavioural Checklist (CBCL). It was found that the children and adolescents with SLD had significantly higher internalizing (anxiety and depressive symptoms) and externalizing total scores when compared to those without SLD. This study has also found that children/adolescents with SLD were reported to have social problem than their typically developing peers. This study has concluded that there was no clarity in whether such problem co-occur with SLD or are the consequences of learning difficulties and that there is a need to find the predictors of emotional and behavioural outcomes, so as to reduce the risk of future psychopathological disorders.

A study conducted by Margari, L., Buttiglione, M., Craig, F., Cristella, A., de Giambattista, C., Matera, E., & Simone, M. (2013), titled, "**Neuropsychopathological comorbidities in learning disorders**" aimed to understand the co-morbid conditions that occur along with Learning Disability. The sample consisted of 448 students aged 7-16 years with the diagnosis of Specific Learning Disability (SLD) which were divided into 2 subgroups - SLD including disorders of reading, writing, and mathematics & Learning Disorders Not Otherwise Specified (LD NOS). The study identified the presence of ADHD (33%), Anxiety Disorders (28.8%), Developmental Coordination disorder (17.8%), Language Disorder (11%) and Mood disorder (9.4%) in the sample with SLD; Similarly Language disorder (28.6%), Developmental Co-ordination disorder (27.5%), ADHD (25.4%), Anxiety disorder (16.4%) and mood disorder (2.1%). It was found that the presence of mood and anxiety disorder co-morbidity was significantly found in SLD subgroup.

Emotional Awareness and Psychopathology:

The study, "**Low Emotional Awareness as a transdiagnostic mechanism underlying psychopathology in adolescence**" was conducted by Weissman, D. G., Nook, E. C., Dews, A. A., Miller, A. B., Lambert, H. K., Sasse, S. F., & McLaughlin, K. A. (2020). A part of the study aimed to understand how emotional awareness was related to psychopathology during the transition of adolescence. Adolescents in the age range of 7-19 years were asked to fill Alexithymia Questionnaire to measure emotional awareness and Children Depression Inventory -2 (CDI), Child Anxiety Related Emotional Disorders (SCARED), Youth Self-report and their parents were made to fill in Child Behaviour Checklist (CBCL) – parent report, UCLA PTSD Reaction Index (PTSD-RI)- child and parent version participated in the study and it was found that emotional awareness was negatively associated with transdiagnostic psychopathology. And it was concluded that low emotional awareness may be a transdiagnostic mechanism, have concluded that low emotional awareness contributes to the risk for psychopathology which links adolescent development, sex and trauma in the emergence of psychopathology.

Role of Social Intelligence on Mental Health:

The study titled "**Social Intelligence attenuates association between peer victimization and depressive symptoms among adolescents**" by Lepore, S. J., & Kliewer, W. (2019). This study aimed to analyse whether social intelligence serves as a protective factor between peer victimization and depressive symptoms. The study was carried out with 986 7^{th} graders, who were administered with a computer-assisted survey interview at 2 points of time, with the second survey conducted after 6 months from the first survey. The survey had the measures of Children's Depression Inventory Short form (CDI-S), Problem Behaviour Frequency Scales (PBFS), Peer-Estimated Social Intelligence. The data was analysed using linear

regression analyses. The results showed that peer victimization was associated with higher depressive symptoms among those with low social intelligence and this study concluded that social intelligence could protect youth from psychological harms of peer victimization and could be used in prevention programming.

Emotional Intelligence predicting psychopathology in SLD:

D'Amico, A., & Guastaferro, T. (2017) conducted a study titled, "**Emotional and meta-emotional intelligence as predictors of adjustment problems in students with Specific Learning Disorders**" aimed to study the adjustment problems among adolescents with SLD. Adolescents with SLD, aged 14 to 19 were the participants of the study and their emotional and meta-emotional intelligence were measured using a multi-method tool Intelligenza Emotiva: Abilità, Credenze e Concetto di Sé Meta-Emotivo (IE-ACCME, D"Amico, 2013), adjustment problems were measured by Youth Self-report of Achenback System of Empirically Based Assessments (ASEBA, Achenbach & Rescorla, 2001) and Child Behaviour Checklist (CBCL) were administered to their parents. Perceived levels of Severity of SLD was measured using LGP – self, filled by the participants and LGP- other, filled in by their parents, teachers or tutors questionnaires (D"Amico & Guastaferro, 2016). Correlation analysis and linear regression models were used to identify the association between the variables and their predictive ability. And it was found that emotional beliefs, emotional self-concept and emotional intelligence were important factors in the psychological adjustment of adolescents with SLD.

CHAPTER – III

METHODOLOGY

Research Methodology is a set of procedures and strategies used to conduct a research study. The chapter of research methodology is intended to explain the methods used and along with their rationale, in the context of the current study, to facilitate in the understanding and replication of the current study. This chapter would include would explain the steps conducted in the field, which includes: aim, objectives, hypotheses, research design, sample identification, elaboration on the tools used, procedure involved in collecting the data and the method of analysis of obtained data.

3.1 Aim

To study the role of Emotional Awareness and Social intelligence in predicting the psychological symptomatology among the students with Specific Learning Disability (SLD

3.2 Objectives

To study the effect of emotional awareness on psychological symptomatology among students with SLD

To study the effect of social intelligence on psychological symptomatology among students with SLD

3.3 Hypotheses

There would be no significant relationship between emotional awareness and Somatization

There would be no significant relationship between emotional awareness and Obsession-compulsion

There would be no significant relationship between emotional awareness and Interpersonal Sensitivity

There would be no significant relationship between emotional awareness and Depression

There would be no significant relationship between emotional awareness and Anxiety

There would be no significant relationship between emotional awareness and Hostility.

There would be no significant relationship between emotional awareness and Phobic anxiety

There would be no significant relationship between emotional awareness and Paranoid Ideation

There would be no significant relationship between emotional awareness and psychoticism

There would be no significant relationship between social intelligence and Somatization

There would be no significant relationship between social intelligence and Obsession-compulsion

There would be no significant relationship between social intelligence and Interpersonal Sensitivity

There would be no significant relationship between social intelligence and Depression

There would be no significant relationship between social intelligence and Anxiety

There would be no significant relationship between social intelligence and Hostility

There would be no significant relationship between social intelligence and Phobic anxiety

There would be no significant relationship between social intelligence and Paranoid Ideation

There would be no significant relationship between social intelligence and psychoticism

3.4 Research Design

Quantitative study – Exploratory research design

Quantitative research study involves collecting and analysing numerical data, which helps to find patterns, averages, make predictions and test causal relationships and to generalize the findings to wider populations

Exploratory research design refers to the method of research study which is conducted to better understand the research problems which were not previously investigated. This design does not attempt to give any concrete solutions for the research problem but facilitates the tool for initial research the provides a theoretical understanding of the research problem. This study has attempted to study the association and predictive ability of Emotional Awareness and Social Intelligence on Psychological symptomatology among SLD students

3.5 Variables

Independent variables: Emotional Awareness

Social Intelligence

Dependent variables: Psychological Symptomatology including

Somatization

Obsession-compulsion

Interpersonal sensitivity

Depression

Anxiety

Hostility

Phobic anxiety

Paranoid ideation

Psychoticism

3.6 Operational Definitions

3.6.1 Emotional Awareness

Emotional awareness is the ability characterised by having a precise and elaborate awareness of one's and other's emotions, a knowledge about its antecedents and its potential consequences and the ability to express it clearly.

3.6.2 Social Intelligence

Social intelligence is defined as the ability to efficiently process the information about social situations, possessing skills to be perceptive of other's internal states which facilitates one's interaction with others, which leads to better social adaptation.

3.6.3 Somatization

Somatization is the tendency to experience psychological distress as bodily and medical symptom.

3.6.4 Obsession – Compulsion

Obsession- compulsion is a manifestation of anxiety disorder characterised by a pattern of unwanted thoughts and fears (obsessions), which leads to repetitive behaviours (compulsions)

3.6.5 Interpersonal Sensitivity

Interpersonal sensitivity refers to the tendency of the individuals to expect rejection from others, personal inadequacy, inhibition to avoid criticism

3.6.6 Depression

Depression is characterised by low mood, lacking interest in performing everyday activities and in social interaction, accompanied by reduced self-worth and hope for future.

3.6.7 Anxiety

Anxiety is defined as an emotional state, that occurs as a reaction to stress/unfamiliar situations, characterized by physical changes and feelings of tension.

3.6.8 Hostility

Hostility is a form of aggression, which impacts one's affect, attribution and in responding to others

3.6.9 Phobic anxiety

Phobic anxiety is a form of irrational and persistent anxiety directed towards a specific object, activity, or situation, which results in avoidance.

3.6.10 Paranoid ideation

Paranoid ideation is characterised by the cognitive processes influenced by suspicion or fear about the behaviours and intentions of others

3.6.11 Psychoticism

Psychoticism is the tendency characterized by aloofness and alienated style of life.

3.7 Sample and Sampling Technique

The sample for the study was selected from the students with SLD, who were receiving services from NIEPMD, Chennai. Convenient Sampling Method was employed to draw the samples that include 30 students with SLD

3.8 Inclusion Criteria

- Students who are diagnosed with SLD by a qualified clinical psychologist
- Age range of 13-16 years

3.9 Exclusion Criteria

Students with SLD,

- whose family members have a history of mental illness
- who is currently undergoing grief, due to the death of significant others during the past 6 months
- Who is raised by a single parent
- who has no history of chronic physical/psychiatric condition.

3.10 Tools used

The present research used the following tools for measuring emotional awareness, social intelligence, psychological symptomatology in students with SLD, along with a socio-demographic profile, informed consent form – Parents & Participants.

3.10. 1 Informed Consent form for parents and the participants

This form included the details about the study and the need for the current study. It included the information about their right to withdraw at any point of time, availability of no material or concession benefits, maintenance of confidentiality and anonymity in coding the data. The assent from the parents were obtained directly by the researcher and only when the participants parents agreed, the participant was approached and their willingness in the participation of the study was asked about. The participants were also explained about the current study

3.10.2 Socio-Demographic Profile

It is constructed by the researcher and consisted of details of the student with SLD including name, age, educational qualification, residence, details about the education and occupation of their parents and birth order.

3.10.3 Emotional Awareness Questionnaire

Emotional Awareness Questionnaire (EAQ-30), developed by Rieffe et al., 2007 was used to identify how adolescents feel and think about their feelings. It has 30 items and 6 dimensions, including

- Differentiating Emotions (7 items),
- Verbal sharing of emotions (4 items)
- Not hiding emotions (4 items)
- Bodily awareness of emotions (5 items)
- Attending to others' emotions (5 items) and
- Analyses of emotions (5 items).

The items are to rate on a three-point scale – not true, sometimes true, true. Higher the scores, better the emotional awareness.

3.10.4 Tromso Social Intelligence Scale (TSIS)

Tromso Social Intelligence Scale developed by Silvera, Martinussen and Dahl (2001) is a English version to the scale which was adapted from Norwegian measure of social intelligence. TSIS has 21 items and 3 dimensions, such as Social skills, Social Awareness and Social Information Processing. The items are to be rated on a 7-point scale with 1 – Describes me extremely poor and 7 – Describes me extremely well.

3.10.5 Brief Symptoms Inventory

The Brief Symptoms Inventory (BSI) developed by Derogatis (1991) is a 53-item self-report version of the Symptoms Checklist-90 by Derogatis (1977). The items are rated on a five-point scale to indicate the degree of distress within the last week. Scores are obtained for 9 primary symptom dimensions.

3.11 Procedure

The sample of SLD students were drawn from the population using convenience sampling considering the inclusion and exclusion criteria of the study. The participants and their parents were briefed about the research study and their consent were obtained directly. The students with SLD, who were diagnosed by a qualified clinical psychologist were involved in the study. Socio-demographic details were obtained from the parents. The data of the participants were obtained for Emotional Awareness Questionnaire, Tromso Social Intelligence Scale and Brief Symptoms Inventory. The statements of the questionnaire were read to the participants, considering their condition of having difficulty in reading and the participants were asked to give required range of responses to the statements. The required data were obtained in a single session spanning an average time of 40 minutes.

3.12 Ethical consideration

Participants were explained about the nature of the study, informed about the maintenance of confidentiality of the data, their right to withdraw from the study at any point and their informed consent were obtained. The proposal for the dissertation was presented to the Institute Ethical board and were approved by its panel members.

3.13 Analysis of Data

Descriptive statistics of frequency, percentage, mean and standard deviation would be done to understand the characteristics of the sample.

Shapiro-Wilk test would be carried out to ensure that the sample is normally distributed. Parametric tests – Pearson Product moment correlation would be carried out, to find out the relationship between the variables

When there is a significant relationship between the variables, Simple Linear Regression would be performed to identify whether the independent variables (Emotional Awareness and Social Intelligence) have a predictive relationship with the dependent variables (psychological symptomatology).

All the statistical analysis of data obtained, would be carried out using the software Statistical Package for Social Sciences version 20.0 (SPSS 20.0)

CHAPTER - IV

RESULTS

The main objective of the present study is to investigate the relationship between Emotional Awareness and Psychological Symptoms & Social Intelligence and Psychological Symptoms. The participants included in this study were ongoing students, who was diagnosed with SLD by a mental health professional within the age range of 13-16 years. Data was collected from 30 participants who fit in the inclusion criteria of the study. And the obtained data was analysed using Statistical Packages for Social Sciences (SPSS 20.0)

Table 4.1 shows the socio-demographic details of the participants of the study – Students with Specific Learning Disability.

Socio Demographic variables		**Frequency**	**Percentage**
Gender	Male	17	57%
	Female	13	43%
Age	13 years	6	20%
	14 years	17	57%
	15 years	3	10%
	16 years	4	13%
Education	10^{th} standard	17	57%
	9^{th} standard	7	7%
	8^{th} standard	4	13%
	7^{th} standard	2	23%
Board of Education	State Syllabus	9	30%
	CBSE	12	40%

NIOS	9	30%

As seen from the *Table 4.1*, The frequency and percentage of the socio-demographic data of the participants of this study were calculated for the sample population. The age range of the students involved in this study, were from 13-16. The analysis shows that, in this study 17 (57%) were males and 13 (43%) were females. 17 students (57%) were 14 years old; 6 students (20%) were 13 years old; 4 students (10%) were 16 years old and 3 students (10%) were 15 years old. The participants were enrolled in different grades and different board of education. Majority of the students i.e., 17 (57%) in this study were studying 10^{th} standard, 7 (7%) were studying 9^{th} standard, 4 students (13%) were studying 8^{th} standard, 2 students (23%) were studying 7^{th} standard. 9 students (30%) were studying in schools based on Tamil Nadu State Board Syllabus, 12 students (40%) were studying in schools based on Central Board of Secondary Education (CBSE) syllabus and 9 students (30%) were studying in National Institute of Open Schooling (NIOS) system.

Table 4.2 shows the mean values of the dimensions of emotional awareness and social intelligence present among the students with Specific Learning Disability

Dimensions of Emotional Awareness	**Mean**	**Standard Deviation**
Differentiating Emotions	8	3.305
Verbal Sharing of Emotions	3	1.741

Not Hiding Emotions	4	2.398
Bodily Awareness	6	2.775
Attending to others' emotions	7	2.490
Analyses of Emotions	5	2.080
Total Emotional Awareness	18	8.430

From *Table 4.2*, it was found that, for the dimension of differentiating emotions the sample has got a mean score of 8 with the standard deviation of 3.305. For the dimension of Verbal sharing of emotions, the mean was found to be 3 with the standard deviation of 1.741. In the dimension of Not hiding Emotions, the mean score was found to be 4 and the standard deviation was 2.398. In the dimension of Bodily Awareness, the mean score was found to be 6 and the standard deviation was 2.775. In the dimension of Attending to others' emotions, the mean score was found to be 7 and the standard deviation was 2.490. In the dimension of Analysis of emotions, the mean score was found to be 5 and the standard deviation was 2.080. The overall mean score of Emotional Awareness was found to be 18 with the standard deviation of 8.430. The mean scores lie at the lower quartile range (EAQ scores which are <20 – low; 21 – 40 – Moderate; 41-60 – high) of the emotional awareness score, indicating low emotional awareness.

Table 4.3 shows the mean values of the domains of Social Intelligence present among the students with Specific Learning Disability

	Mean	Standard Deviation
Social Information Processing	28	8.696
Social skills	26	7.844
Social competence	26	9.947
Total Social Intelligence score	41	21.401

From the *Table – 4.3*, it was found that the sample has got a mean score of 28 for the dimension of Social Information Processing with the standard deviation of 8.696. The mean score of the sample for the dimension of Social Skills was found to be 26 with the standard deviation of 7.844. The mean score of the sample for the dimension of Social Skills was found to be 26 with the standard deviation of 9.947. The overall mean score of Social Intelligence of the sample was found to be 41 with the standard deviation of 21.401. It was found that the overall mean score lies at the lower quartile range (<49 – low; 50-98 – Moderate; 99-147 - High) and hence it shows that the group, on an average has lower social intelligence.

Table 4.4 shows the mean values of the psychological symptomatology present among the students with Specific Learning Disability

	Mean	Standard Deviation
Somatization	2.23 (7.96%)	2.223
Obsession -Compulsion	7.90 (32.91%)	3.907
Interpersonal Sensitivity	3.37 (21.06%)	2.580
Depression	3.63 (15.12%)	3.718

Anxiety	3.67 (15.29%)	3.898
Hostility	5.27 (26.35%)	3.903
Phobic Anxiety	3.57 (71.4%)	2.555
Paranoid Ideation	4.63 (23.15%)	4.375
Psychoticism	4.03 (20.15%)	3.792

From the *Table – 4.4*, the sample has got a mean score of 2.23 and the standard deviation of 2.223, for the dimension of Somatization. In Obsession-Compulsion, the mean score of the sample was found to be 7.90 and the standard deviation of 3.907. In Interpersonal Sensitivity, the mean score of the sample was found to be 3.37 and the standard deviation of 2.580. In Depression, the mean score of the sample was found to be 3.63 and the standard deviation of 3.718. In Anxiety, the mean score of the sample was found to be 3.67 and the standard deviation of 3.898. In Hostility, the mean score of the sample was found to be 5.27 and the standard deviation of 3.903. In Phobic Anxiety, the mean score of the sample was found to be 3.57 and the standard deviation of 2.555. In Paranoid Ideation, the mean score of the sample was found to be 4.63 and the standard deviation of 4.375. In Psychoticism, the mean score of the sample was found to be 4.03 and the standard deviation of 3.792. The mean scores were converted to percentages, to compare and identify the symptoms which are dominantly present in the sample. Comparatively, on an average, it was found that Phobic Anxiety is more prevalent among the students with SLD, accounting for 71.4%, obsession compulsion symptoms accounting for 32.91%, Hostility symptoms accounting for 26.35%, paranoid ideation accounting for 23.15%, psychoticism accounting for 20.15%, Anxiety accounting for 15.29%, Depression accounting for 15.12% and Somatization accounting for 7.96%

Table – 4.5 shows the results of Shapiro Wilk test of normality.

Variables	W	df	Significance
Emotional Awareness	.970	30	.553
Social Intelligence	.962	30	.340
Somatization	.875	30	.065
Obsession-compulsion	.951	30	.182
Interpersonal Sensitivity	.939	30	.088
Depression	.919	30	.071
Anxiety	.934	30	.061
Hostility	.935	30	.067
Phobic Anxiety	.904	30	.071
Paranoid Ideation	.984	30	.073
Psychoticism	.965	30	.116

Shapiro-Wilk test is used to check whether the continuous variables are normally distributed, since the sample of the study is limited (<50) determining the distribution of the data was important in choosing the appropriate statistical method and so Shapiro-Wilk test was employed. The test results did not show the evidence of non-normality for the variables, Emotional awareness (W= 0.97, p >0.05), Social Intelligence (W=0.96, p >0.05), Somatization (W=0.88, p >0.05) Obsession-compulsion(W=0.95,p>0.05), Interpersonal sensitivity(W=0.94, p >0.05), depression(W=0.92, p >0.05), anxiety (W=0.93, p >0.05), hostility (W=0.94, p >0.05), phobic anxiety(W=0.90, p >0.05), paranoid ideation(W=0.98, p

>0.05), psychoticism (W=0.97, p >0.05). From the outcome of the tests, along with the visual examination of histogram and QQ plot, parametric test was chosen for the computation of the obtained data.

Table 4.6 shows the correlation of emotional awareness and psychological symptomatology among the students with Specific Learning Disability

	S	**O - C**	**IS**	**D**	**A**	**H**	**PA**	**PI**	**P**
Emotional Awareness	-.253	-.211	-.310	-.239	**-.423***	-.190	-.318	-.218	**-.433***

*- p < 0.05

(S- Somatization; O-C – Obsession compulsion; IS – Interpersonal Sensitivity; D- Depression; A – Anxiety; H- Hostility; PA – Phobic Anxiety; PI – Paranoid Ideation; P – Psychoticism)

The relationship between Emotional Awareness and psychological symptoms were analysed using Pearson Product Moment Correlation (*Table 4.6*)

From the results of *Table 4.6*, the following null hypothesis were accepted:

There is no significant relationship between Emotional Awareness and Somatization (r= -.211, p-value >0.05)

There is no significant relationship between Emotional Awareness and Obsession-Compulsion (r= -.253, p-value >0.05)

There is no significant relationship between Emotional Awareness and Interpersonal Sensitivity (r= -.310, p-value >0.05)

There is no significant relationship between Emotional Awareness and Depression (r= -.239, p-value >0.05)

There is no significant relationship between Emotional Awareness and Hostility (r= -.190, p-value >0.05)

There is no significant relationship between Emotional Awareness and Phobic Anxiety (r= -.318, p-value >0.05)

There is no significant relationship between Emotional Awareness and Paranoid Ideation (r= -.218, p-value >0.05)

From the Table 4.6,

It was found that,

There is a significant relationship between Emotional Awareness and Anxiety (r=-.423; p <0.05).

Emotional Awareness is significantly correlated with anxiety symptoms. Emotional Awareness is negatively correlated with Anxiety symptoms, which implies that the increase in one variable causes the decreases in the another.

There is a significant relationship between Emotional Awareness and Psychoticism (r=-.423; p <0.05)

Emotional Awareness is significantly correlated with Psychoticism. There exists a negative relationship between Emotional Awareness and Psychoticism. i.e., Increase in emotional awareness results in decrease in psychoticism and vice versa.

And so, the following null hypotheses were rejected

Ho – There will not be a significant relationship between Emotional Awareness and Anxiety

Ho – There will not be a significant relationship between Emotional Awareness and psychoticism.

Table 4.6.1 shows the model summary of the linear regression analysis for Emotional Awareness and Anxiety

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.423[a]	.179	.149	3.595

a. Predictors: (Constant), Total EAQ

The regression analysis revealed a moderate positive correlation between the independent and dependent variables, with R = .423. The coefficient of determination, R square, indicated that 17.9% of the variance in the dependent variable was explained by the independent variable. However, after adjusting for the degrees of freedom, the adjusted R square value was .149. The standard error of the estimate was 3.595, which reflected the average distance of the observed values from the regression line.

Table 4.6.2 shows the coefficients of the regression equation Emotional Awareness and Anxiety

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	10.371	2.794		3.712	.001

Total EAQ	-.194	.079	-.423	-2.468	.020

a. Dependent Variable: Anxiety

The strength of the relationship between Emotional Awareness and Anxiety was analysed with Linear regression analysis (Table 4.6.1, 4.6.2). The regression analysis revealed a significant negative relationship between the predictor and the outcome variable. The unstandardized regression coefficient (B) was -.194, indicating that for every unit increase in the predictor, the outcome variable decreased by -.194 units on average, holding other variables constant. The standard error of B was .079, which was used to calculate the t-value of -2.468. The t-value was significant at the .05 level (p = .020). The standardized regression coefficient (Beta) was -.423, showing the strength of the relationship in standard deviation units. The regression equation is y= 10.371 - 0.194x

Graph 4.1 shows the Regression chart (Emotional awareness and Anxiety)

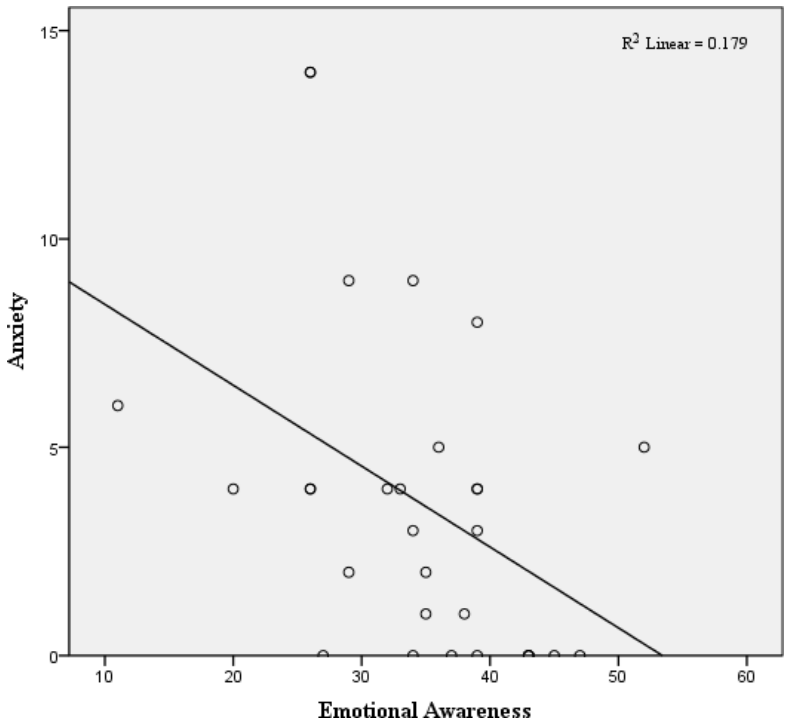


Table 4.6.3 shows the model summary of the linear regression analysis Emotional Awareness and Psychoticism

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.433	.188	.159	3.478

The strength of the relationship between Emotional Awareness and Psychoticism was analysed with Linear regression analysis (*Table 4.6.3 & Table 4.6.4*). The regression analysis revealed a moderate positive correlation between the independent and dependent variables, with R= .433. The coefficient of determination, R square, indicated that 18.8% of the variance in the dependent variable was explained by the independent variable. However, after adjusting for the degrees of freedom, the adjusted R square value was 15.9%, suggesting some overfitting of the model. The standard error of the estimate was 3.478, which reflected the average distance of the observed values from the regression line.

Table 4.6.4 shows the coefficients of the regression equation for Emotional Awareness and Psychoticism

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.719	2.703		3.966	.000
	Total EAQ	-.194	.076	-.433	-2.545	.017

a. Dependent Variable: Psychoticism

The regression analysis revealed a significant negative relationship between the predictor and the outcome variable. The unstandardized regression coefficient (B) was -.194, indicating that for every unit increase in the predictor, the outcome variable decreased by -.194 units on average, holding other variables constant. The standard error of B was .076, which was used to calculate the t-value of -2.545 and the p-value of .017. The standardized regression coefficient (Beta) was -.433, showing the relative strength of the predictor in the regression model. The results suggest that the predictor has a moderate and statistically significant effect on the outcome variable. The regression equation is y= 10.719 - 0.194x

Graph 4.2 shows the Regression chart (Emotional awareness and Psychoticism)

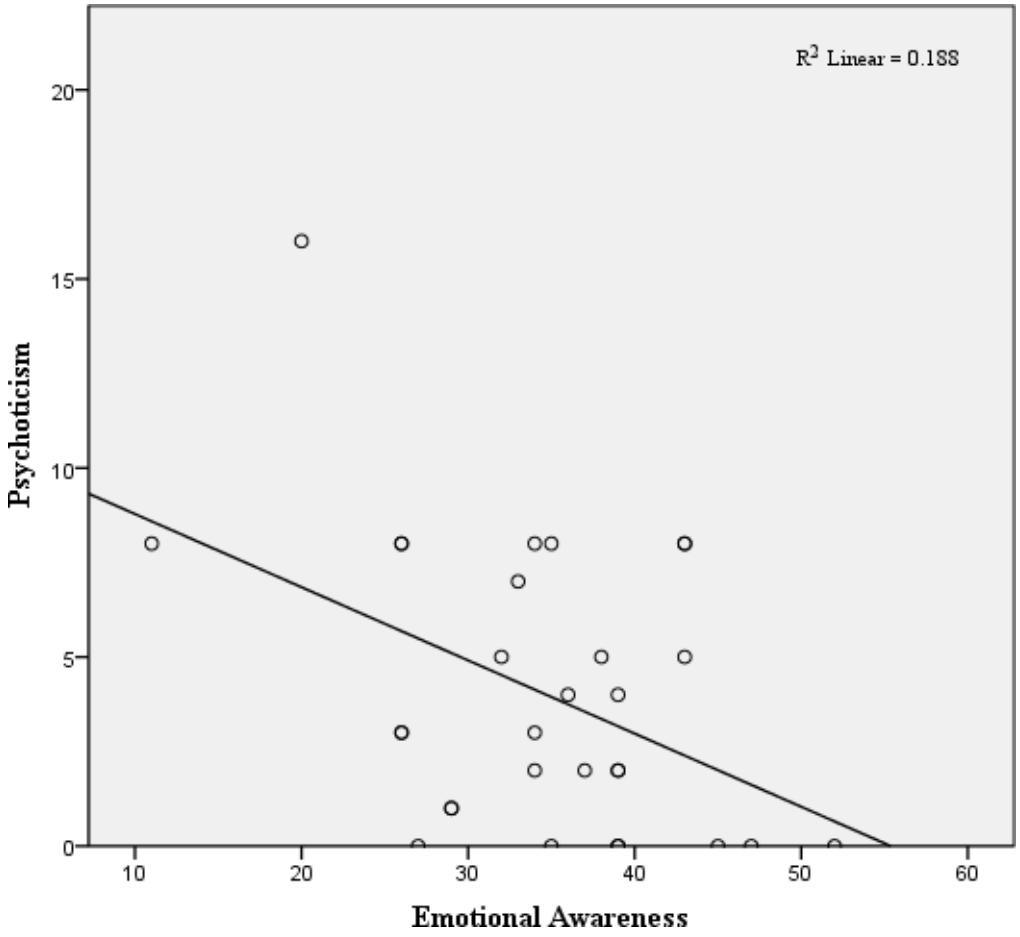


Table 4.7 shows the correlation of Social Intelligence and psychological symptomatology among the students with Specific Learning Disability

	S	**O - C**	**IS**	**D**	**A**	**H**	**PA**	**PI**	**P**
Social Intelligence	-.219	-.301	-.300	-.273	-.211	-.284	**-.496****	-.330	-.358

**p >0.01

(S- Somatization; O-C – Obsession compulsion; IS – Interpersonal Sensitivity; D- Depression; A – Anxiety; H- Hostility; PA – Phobic Anxiety; PI – Paranoid Ideation; P – Psychoticism)

The relationship between Social Intelligence and Psychological Symptomatology were analysed using Pearson Product Moment Correlation (*Table 4.7*)

From the results of *Table 4.7*, the following null hypotheses were accepted:

There is no significant relationship between Social Intelligence and Somatization (r= -.219, p-value >0.05)

There is no significant relationship between Social Intelligence and Obsession-Compulsion (r= -.301, p-value >0.05)

There is no significant relationship between Social Intelligence and Interpersonal Sensitivity (r= -.300, p-value >0.05)

There is no significant relationship between Social Intelligence and Depression (r= -.273, p-value >0.05)

There is no significant relationship between Social Intelligence and Anxiety (r= -.211, p-value >0.05)

There is no significant relationship between Social Intelligence and Hostility (r= -.284, p-value >0.05)

There is no significant relationship between Social Intelligence and Paranoid Ideation (r= -.330, p-value >0.05)

There is no significant relationship between Social Intelligence and Psychoticism (r= -.358, p-value >0.05)

From the *Table 4.7*, it was found that

There is a significant relationship between Social Intelligence and Phobic Anxiety (r=-.496; p <0.01).

Social Intelligence is significantly correlated with Phobic Anxiety symptoms. The results show a negative correlation with Phobic Anxiety symptoms, which implies that the increase in Social Intelligence is associated with the decreases in Phobic Anxiety.

And so, the following hypothesis is rejected.

Ho – There will not be a significant relationship between Social Intelligence and Phobic Anxiety

Table 4.7.1 shows the model summary of the linear regression analysis for Social Intelligence and Phobic Anxiety

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.496	.246	.219	2.258

a. Predictors: (Constant), Total

The strength of the relationship between Emotional Awareness and Psychoticism was analysed with Linear regression analysis (*Table 4.7.1 & Table 4.7.2*). The regression analysis revealed a moderate positive correlation between the independent and dependent variables, with R = .496. The coefficient of determination, R square, indicated that 24.6% of the variance in the dependent variable was explained by the independent variable. The adjusted R square, which considers the number of predictors and the sample size, was slightly lower at 21.9%. The standard error of the estimate, which measures the accuracy of the predictions, was 2.258. This means that the actual values of the dependent variable are expected to deviate from the predicted values by about 2.258 units on average.

Table 4.7.2 shows the coefficients of the regression equation Social Intelligence and Phobic Anxiety

Coefficients[a]

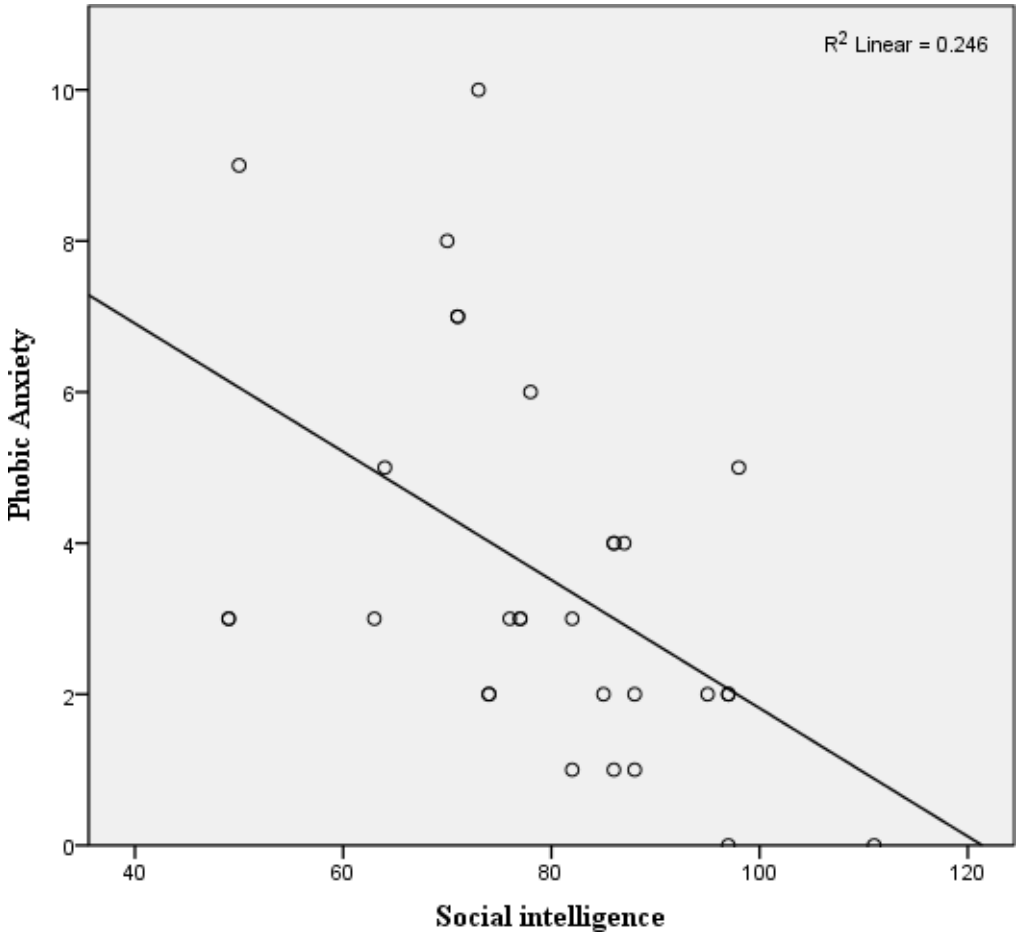
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	Std. Error	Beta		
(Constant)	10.303	2.266		4.548	.000
Total	-.085	.028	-.496	-3.024	.005

a. Dependent Variable: PA

The regression analysis revealed a significant negative relationship between the predictor and the outcome variable. The unstandardized coefficient (B) was -.085, indicating that for every unit increase in the predictor, the outcome variable decreased by -.085 units on average. The standard error of B was .028, which was used to calculate the t-value of -3.024. The t-value was significant at the .005 level, meaning that the null hypothesis of no relationship could be

rejected with 99.5% confidence. The standardized coefficient (Beta) was -.496, showing that the predictor accounted for 49.6% of the variance in the outcome variable. The regression equation is y=10.303 - 0.085x

Graph 4.3 shows the Regression chart (Social Intelligence and Phobic Anxiety)



DISCUSSION

The main objective of this study was to understand the impact of emotional awareness and social intelligence to predict psychological symptomatology among the school- going students with Specific Learning Disability (SLD).

From *Table -1*, it is found that there were 30 participants out of which 17 were male and 13 were female. The age range of the participants was 13 to 16 years, with the majority (17) being 14 years old. The remaining participants were 6 (13 years old), 3 (15 years old), and 4 (16 years old). The participants were enrolled in different grades and boards of education. The highest number of participants (17) were in 10th standard, followed by 7 in 9th standard, 4 in 8th standard, and 2 in 7th standard. The boards of education were State board (9), CBSE (12), and NIOS (9).

From the *Table- 4.2*, it was found that the mean score of Emotional Awareness is 18, which shows low level of emotional awareness. This shows that the individuals might have difficulties in recognizing, understanding and expressing their emotions. Low emotional awareness of the sample could be attributed to the participants' stage of development- early adolescence, as the frontal lobe circuitry responsible for a wide range of abilities including processing of emotions, is relatively late in maturing (Giedd, 2008)

From the *Table- 4.3*, mean score of Social Intelligence was found to be 41, indicating low level of Social Intelligence. This shows that the individuals might have challenges in their ability to deal with social situations. This is in line with the previous research by Kavale & Forness (1995), where in approximately 75% of children with SLD lacked social skills, which is a component of Social Intelligence.

Upon comparing the percentages of each psychological symptom, from *Table 4.4*, it was found that, the symptoms of Phobic Anxiety were highly reported among the students of this

study, when compared with the other symptoms. Some studies have reported that 70% of students with Learning Disabilities do experience higher anxiety symptomatology than do the non- Learning Disability students (Nelson & Harwood, 2011; Mammarella, Ghisi, Bomba, Bottesi, Caviola, Broggi & Nacinovich, 2016)). Students with Learning Disabilities had external locus of control, which makes them to accept responsibility for failure but not for success (Dudley-Marling, Snider & Tarver, 1982) and some studies shows that having external locus of control is associated with increased social and phobic anxiety (Emmelkamp & Cohen-Kettenis, 1975; Cloitre, Heimberg, Liebowitz & Gitow, 1992). Phobic anxiety is characterised by irrational fear and subsequent avoidance behaviour, and it was found that the individuals with external locus of control were more willing to admit irrational thoughts and beliefs than those who had internal locus of control (Wright & Pihl, 1981)

From the *Table- 4.6*, it could be inferred that there exists a general negative relationship between emotional awareness and all the psychological symptoms. This shows that when the emotional awareness decreases the psychological symptoms increases and vice versa. But only the symptoms, anxiety and psychoticism have a significant negative relationship with emotional awareness. And the other symptoms like somatization, obsession-compulsion, Interpersonal Sensitivity, Depression, Hostility, Phobic Anxiety and Paranoid Ideation have no significant relationship with emotional awareness. This is in contrast with the existing literature which says that there is a significant relationship between emotional awareness and psychological symptoms such as somatization, Interpersonal Sensitivity, Depression, Hostility, Phobic Anxiety and Paranoid Ideation. (Bailey & Henry, 2007; Rodin,1991; Thamby, Desai, Mehta & Chaturvedi, 2019), obsession-compulsion (Kang, Namkoong, Yoo, Jhung & Kim, 2012; Eichholz, Schwartz, Meule, Heese, Neumüller, & Voderholzer, 2020),

It was found that Emotional Awareness has significant negative correlation with Anxiety, among the students with Specific Learning Disability (SLD) (*Table – 4.6*). Also, Emotional

Awareness significantly predicted anxiety among the students with Specific Learning Disability (SLD) (*Table – 4.6.1 & Table- 4.6.2*)

The ability of an individual to recognize their own internal experience of emotions as it occurs is defined as the emotional awareness. It was found that there was a negative relationship between the variables i.e., when there is a decrease in the emotional awareness, anxiety symptoms increases and vice versa. This finding could be explained with the avoidance theory developed by Borkovec and colleagues (Borkovec, 2003), which suggests that the individuals with anxiety engages in worry, that enables them to finds ways to prevent future disaster and prepare themselves to face the occurrence of the disaster, but it is done at the expense of distancing their direct emotional experience, thus resulting in reduced emotional awareness.

From the results (*Table – 4.6*), it was found that there was a significant negative relationship between emotional awareness and psychoticism, which means that when there is increase in emotional awareness, psychoticism decreases and vice versa. Also, that decrease in emotional awareness significantly predicts an increase in the symptom- psychoticism (*Table- 4.6.3 & Table 4.6.4*) Psychoticism is the tendency to remain aloof, feeling of being misunderstood and not belonging to others because their standards and beliefs are deviant from that of others. It was shown in the recent studies by Qualter et al. (2009) & Eres et al., (2020), that reduced emotional awareness might decrease one's confidence in disclosing their distress to others, which might make the person remain distant and diminish the quality of their social connections, as disclosure of one's concerns serves as a pathway to receive understanding, validation, and support of others. (Kealy, Seidler, Rice, Cox, Oliffe, Ogrodniczuk & Kim, 2021).

Similarly, from the *Table – 4.7*, it was could be inferred that there exists a negative relationship between Social Intelligence and psychological symptomatology, which means that decreases in social intelligence results in increase in the psychological symptomatology and vice versa. However, the symptoms Somatization, Obsession-compulsion Interpersonal Sensitivity, Depression, Anxiety, Hostility, Paranoid Ideation, and psychoticism is not significantly corelated to Social Intelligence, which is in contrast with the studies which has found inverse relationship between the variables of Emotional Intelligence, with Social intelligence being the component of the former and Obsessive-compulsion(Taylor, Bagby & Parker, 2006), hostility, interpersonal sensitivity(Mayer, Caruso, & Salovey, 1999), psychoticism (Hall, Andrzejewski & Yopchick, 2015), Somatization (Martins, Ramalho & Morin, 2010), Depression, Anxiety and Paranoid Ideation (Bratek, Beil-Gawełczyk, Głowik & Krysta, 2015).

It was found that Social Intelligence is correlated and significantly predicted Phobic Anxiety among the students with Specific Learning Disability (SLD) (*Table 4.7.1 & Table 4.7.2*). In this study, Social Intelligence is negatively related to phobic anxiety, i.e., the decrease in the social intelligence results in increase in phobic anxiety and that the decrease in social intelligence significantly predicts the increase in phobic anxiety. Phobic anxiety refers to any irrational fear while being exposed to the feared stimulus like social situations. Such irrational fears might be due to deficits in the theory of mind (Alvi, Kouros, Lee, Fulford & Tabak, 2020), which is the ability to accurately understand the intentions and emotions of others, which is the one of the core components of social intelligence. And this might have resulted in the negative relationship between social intelligence and phobic anxiety.

CHAPTER - V

SUMMARY AND CONCLUSION

This chapter is intended to summarize the study and present the conclusions drawn from it, along with the implications and limitations of the study.

This study, "The predictive role of Emotional Awareness and Social Intelligence on psychological symptomatology among students with Specific Learning Disabilities (SLD)", aimed to explore the extent to which Emotional Awareness and Social Intelligence predicts psychological symptomatology among the students with Specific Learning Disability (SLD). The results of the study were discussed in the previous chapter. Summary and conclusion of the study would be presented in the current chapter.

5.1 Verification of Hypotheses:

The hypothesis stating that, "there will be no significant relationship between emotional awareness and somatization", was tested using Pearson product moment correlation. The results showed that there is no significant relationship between emotional awareness and somatization.

The hypothesis stating that, "there will be no significant relationship between Emotional Awareness and Obsession-Compulsion", was tested using Pearson product moment correlation. The results showed that there is no significant relationship between emotional awareness and Obsession-Compulsion.

The hypothesis stating that, "there will be no significant relationship between Emotional Awareness and Interpersonal Sensitivity", was tested using Pearson product moment correlation. The results showed that there is no significant relationship between emotional awareness and Interpersonal Sensitivity.

The hypothesis stating that, “there will be no significant relationship between Emotional Awareness and Depression”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between emotional awareness and Depression.

The hypothesis stating that, “there will be no significant relationship between Emotional Awareness and Anxiety”, was tested using Pearson product moment correlation and Simple Linear Regression. The results showed that there is a negative relationship between Emotional Awareness and Anxiety and Emotional Awareness significantly predicted Anxiety.

The hypothesis stating that, there will be no significant relationship between Emotional Awareness and Hostility”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between emotional awareness and Hostility.

The hypothesis stating that, “there will be no significant relationship between Emotional Awareness and Paranoid Ideation”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between emotional awareness and Paranoid Ideation.

The hypothesis stating that, “there will be no significant relationship between Emotional Awareness and Phobic Anxiety”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between emotional awareness and Phobic Anxiety.

The hypothesis stating that, “there will be no significant relationship between Emotional Awareness and Psychoticism”, was tested using Pearson product moment correlation and Simple Linear Regression. The results showed that there is a significant

negative relationship between emotional awareness and Psychoticism and Emotional awareness significantly predicted Psychoticism.

The hypothesis stating that, “there will be no significant relationship between Social Intelligence and Somatization”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between Social Intelligence and Somatization

The hypothesis stating that, “there will be no significant relationship between Social Intelligence and Obsession-Compulsion”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between Social Intelligence and Obsession-Compulsion

The hypothesis stating that, “there will be no significant relationship between Social Intelligence and Interpersonal Sensitivity”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between Social Intelligence and Interpersonal Sensitivity

The hypothesis stating that, “there will be no significant relationship between Social Intelligence and Depression”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between Social Intelligence and Depression

The hypothesis stating that, “there will be no significant relationship between Social Intelligence and Anxiety”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between Social Intelligence and Anxiety

The hypothesis stating that, “there will be no significant relationship between Social Intelligence and Hostility”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between Social Intelligence and Hostility.

The hypothesis stating that, “there will be no significant relationship between Social Intelligence and Phobic Anxiety”, was tested using Pearson product moment correlation and Simple Linear Regression. The results shows that there is a significant negative relationship between Social Intelligence and phobic anxiety, and Social Intelligence significantly predicts phobic anxiety.

The hypothesis stating that, “there will be no significant relationship between Social Intelligence and Paranoid Ideation”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between Social Intelligence and Paranoid Ideation

The hypothesis stating that, “there will be no significant relationship between Social Intelligence and Psychoticism”, was tested using Pearson product moment correlation. The results showed that there is no significant relationship between Social Intelligence and Psychoticism.

5.2 Summary and Conclusion of the study

The aim of this study, “**The predictive role of Emotional Awareness and Social Intelligence on psychological symptomatology among students with Specific Learning Disabilities (SLD)**” was aimed to understand the predictive ability of the variables – Emotional Awareness and Social Intelligence on Psychological Symptomatology among the students with Specific Learning Disability (SLD). The sample of the study included 30 students who were diagnosed with SLD by a clinical psychologist. The required data were collected using Emotional Awareness Questionnaire (EAQ), Tromso Social Intelligence Scale (TSIS) and Brief Symptoms Inventory (BSI). The collected data was analysed using descriptive statistics like mean and standard deviation as well as inferential statistics like Pearson product moment correlation and Simple linear regression. The results revealed that

emotional awareness significantly predicted anxiety and psychoticism and Social Intelligence significantly predicted Phobic Anxiety among the students with SLD.

5.3 Implications of the study

This study has offered valuable insights into the relationship between emotional awareness, social intelligence and psychological symptomatology in students with specific learning disabilities (SLD). Here are some of the possible implications

The findings suggest that interventions aimed at enhancing emotional awareness and social intelligence may have potential benefits for students with Specific Learning Disabilities (SLD). Such interventions could be incorporated into educational and therapeutic programs to help students manage psychological symptoms more effectively.

Schools and educational institutions can use the study's findings to identify students who may be at higher risk for specific psychological symptoms based on their emotional awareness and social intelligence levels. This information can inform the development of targeted support programs.

The study highlights the importance of considering emotional and social factors alongside academic interventions for students with learning disabilities. A holistic approach that addresses emotional and social well-being can contribute to better overall outcomes.

5.4 Limitations of the study

The study was conducted with a limited sample, restricted to one place- those who are availing services in NIEPMD, Chennai and so the findings could not be generalized to the population, considering the variations in the socio-cultural aspects and level of exposure.

This study relied on self-report measures for assessing emotional awareness, social intelligence, and psychological symptoms. Self-report data can be subject to biases and may

not fully capture these complex constructs. The inclusion of multiple assessment methods could strengthen the study.

This study's design helps to find the relationship, but does not establish causality. And so, it's unclear whether emotional awareness and social intelligence directly lead to specific psychological symptoms or if there are other variables at play.

5.5 Recommendations

Future recommendations for similar studies can focus on

- Using a more diverse sample consisting students with different types of learning disabilities and cultural backgrounds. This can help identify potential moderating effects and would enhance the generalizability of the findings of the current study.
- Conducting longitudinal studies to explore the temporal relationships between emotional awareness, social intelligence, and psychological symptoms in students with learning disabilities. This would provide a better understanding of the direction of influence.
- Understanding the neurobiological underpinnings of emotional awareness and social intelligence in individuals with learning disabilities. Neuroimaging studies could shed light on the neural mechanisms involved.
- Can explore, how schools and educators could integrate strategies to enhance emotional and social skills into the educational curriculum for students with learning disabilities.
- Future studies could compare the predictive role of the variables, in those with SLD and neurotypical population.
- Exploring the role of personality in mediating the relationship between emotional awareness and psychological symptomatology & the relationship between Social

Intelligence and psychological symptomatology among the students with Specific Learning Disability (SLD)

- This study found that emotional awareness significantly predicted anxiety and psychoticism; social intelligence predicted phobic anxiety, the future studies could try to understand the how each of these variables qualitatively contribute to the respective psychological symptomatology, to conceptualize the underlying mechanisms.
- Interventional studies can focus on designing and evaluating interventions aimed at enhancing emotional awareness and social intelligence in students with learning disabilities. Measure the impact of these interventions on psychological well-being and academic performance.

In summary, this study provides valuable insights into the relationships between emotional awareness, social intelligence, and psychological symptomatology in students with specific learning disabilities. It offers potential implications for interventions and support while acknowledging its limitations and suggesting directions for future research to further advance our understanding in this area.

REFERENCES

Abbasi, M., Bagyan, M. J., & Dehghan, H. (2014). Cognitive failure and alexithymia and predicting high–Risk behaviors of students with learning disabilities. *International journal of high risk behaviors & addiction*, *3*(2).

Agaliotis, I., & Goudiras, D. (2004). A Profile of Interpersonal Conflict Resolution of Children with Learning Disabilities. *Learning Disabilities: A Contemporary Journal*, *2*(2), 15-29.

Agnoli, S., Mancini, G., Andrei, F., & Trombini, E. (2019). The relationship between trait emotional intelligence, cognition, and emotional awareness: An interpretative model. *Frontiers in psychology*, *10*, 1711.

Alvi, T., Kouros, C. D., Lee, J., Fulford, D., & Tabak, B. A. (2020). Social anxiety is negatively associated with theory of mind and empathic accuracy. *Journal of abnormal psychology*, *129*(1), 108.

Bailey, P. E., & Henry, J. D. (2007). Alexithymia, somatization and negative affect in a community sample. *Psychiatry research*, *150*(1), 13-20.

Bargai, N., Ben-Shakhar, G., & Shalev, A. Y. (2007). Posttraumatic stress disorder and depression in battered women: The mediating role of learned helplessness. *Journal of Family Violence*, *22*, 267-275.

Barowsky, E. I., & Austin, V. (2013). Co-occurrence of emotional and behavioral disorders among adolescents with learning disabilities: implications for education and treatment. *Insights on Learning Disabilities: From Prevailing Theories to Validated Practices*, *10*(1), 1-19.

Boden, M. T., & Thompson, R. J. (2015). Facets of emotional awareness and associations with emotion regulation and depression. *Emotion, 15*(3), 399.

Bratek, A., Beil-Gawełczyk, J., Głowik, D., & Krysta, K. (2015). Emotional intelligence and its relationship with the level of somatization and anxiety symptoms in patients with generalized anxiety disorder. *Psychiatry Research, 226*(1), 116-121.

Bryan, T. H. (1974). Peer popularity of learning-disabled children. *Journal of learning disabilities, 7*(10), 621-625.

Casey, B. J., Jones, R. M., & Hare, T. A. (2008). The adolescent brain. Annals of the New York Academy of Sciences, 1124, 111–126.

Chown, S. L., Browne, D. T., Leatherdale, S. T., & Ferro, M. A. (2022). Psychopathology among Emerging Adults with Learning Disabilities in Canada. *Disabilities, 2*(4), 600-610.

Cloitre, M., Heimberg, R. G., Liebowitz, M. R., & Gitow, A. (1992). Perceptions of control in panic disorder and social phobia. *Cognitive therapy and research, 16*(5), 569-577.

Derogatis, L. R., & Melisaratos, N. (1983). The brief symptom inventory: an introductory report. *Psychological medicine, 13*(3), 595-605.

Di Palma, D., & Saraiello, E. (2023). Stimulating Self-Esteem in Students with SLD through Innovative Teaching in the Motor-Sports Field. *Journal of Inclusive Methodology and Technology in Learning and Teaching, 3*(1).

Dudley-Marling, C. C., Snider, V., & Tarver, S. G. (1982). Locus of control and learning disabilities: A review and discussion. *Perceptual and Motor Skills, 54*(2), 503-514.

Eichholz, A., Schwartz, C., Meule, A., Heese, J., Neumüller, J., & Voderholzer, U. (2020). Self-compassion and emotion regulation difficulties in obsessive–compulsive disorder. *Clinical psychology & psychotherapy*, *27*(5), 630-639.

Gadeyne, E., Ghesquiere, P., & Onghena, P. (2004). Psychosocial functioning of young children with learning problems. *Journal of Child Psychology and Psychiatry*, *45*(3), 510-521.

Gasper, K., & Clore, G. L. (2000). Do you have to pay attention to your feelings to be influenced by them?. *Personality and Social Psychology Bulletin*, *26*(6), 698-711.

Giedd, J. N. (2008). The teen brain: insights from neuroimaging. *Journal of adolescent health*, *42*(4), 335-343.

Grieve, R., & Mahar, D. (2013). Can social intelligence be measured? Psychometric properties of the Tromsø Social Intelligence Scale–English version. *The Irish Journal of Psychology*, *34*(1), 1-12.

Hall, J. A., Andrzejewski, S. A., & Yopchick, J. E. (2015). Psychosocial correlates of interpersonal sensitivity: A meta-analysis. *Journal of Nonverbal Behavior*, *39*(2), 105-121.

Heath, N. L., & Ross, S. (2000). Prevalence and expression of depressive symptomatology in students with and without learning disabilities. *Learning Disability Quarterly*, *23*(1), 24-36.

Hooper, S. R., & Williams, E. A. (2005). Attention deficit hyperactivity disorder and learning disabilities. In *Attention deficit hyperactivity disorder: From genes to patients* (pp. 215-254). Totowa, NJ: Humana Press.

Jafarlou, F., Ahadi, M., & Jarollahi, F. (2021). Eye movement patterns in Iranian dyslexic children compared to non-dyslexic children. *Auris Nasus Larynx*, *48*(4), 594-600.

Kang, J. I., Namkoong, K., Yoo, S. W., Jhung, K., & Kim, S. J. (2012). Abnormalities of emotional awareness and perception in patients with obsessive–compulsive disorder. *Journal of affective disorders*, *141*(2-3), 286-293.

Kealy, D., Seidler, Z. E., Rice, S. M., Cox, D. W., Oliffe, J. L., Ogrodniczuk, J. S., & Kim, D. (2021). Reduced emotional awareness and distress concealment: A pathway to loneliness for young men seeking mental health care. *Frontiers in Psychology*, 2445.

Khan T, Bhat S (2017), Social Intelligence, Life Satisfaction and Depressive Symptoms among Adult Women, *International Journal of Indian Psychology*, Volume 4, Issue 3, ISSN:2348-5396 (e), ISSN:2349-3429 (p), DIP:18.01.044/20170403

Kohli, A., Sharma, S., & Padhy, S. K. (2018). Specific learning disabilities: Issues that remain unanswered. *Indian journal of psychological medicine*, *40*(5), 399-405.

Lee, F. S., Heimer, H., Giedd, N., Lein, E. S., Šestan, N., Weinberger, D. R., & Casey, B. J. (2014). Adolescent mental health - Opportunity and obligation. Science, 346(6209), 547–549.

Lepore, S. J., & Kliewer, W. (2019). Social intelligence attenuates association between peer victimization and depressive symptoms among adolescents. *Psychology of violence*, *9*(6), 644.

Lyon, G. R., Shaywitz, S. E., & Shaywitz, B. A. (2003). A definition of dyslexia. *Annals of dyslexia*, *53*, 1-14.

Maag, J. W., & Reid, R. (2006). Depression among students with learning disabilities: Assessing the risk. *Journal of learning disabilities*, *39*(1), 3-10.

Mammarella, I. C., Ghisi, M., Bomba, M., Bottesi, G., Caviola, S., Broggi, F., & Nacinovich, R. (2016). Anxiety and depression in children with nonverbal learning disabilities, reading disabilities, or typical development. *Journal of learning disabilities*, *49*(2), 130-139.

Mankus, A. M., Boden, M. T., & Thompson, R. J. (2016). Sources of variation in emotional awareness: Age, gender, and socioeconomic status. *Personality and Individual Differences*, *89*, 28-33.

Margalit, M., & Zak, I. (1984). Anxiety and self-concept of learning-disabled children. *Journal of Learning Disabilities*, *17*(9), 537-539.

Margari, L., Buttiglione, M., Craig, F., Cristella, A., de Giambattista, C., Matera, E., ... & Simone, M. (2013). Neuropsychopathological comorbidities in learning disorders. *BMC neurology*, *13*(1), 1-6.

Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between emotional intelligence and health. *Personality and Individual Differences*, *49*(6), 554-564.

Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, *27*(4), 267-298.

Mennin, D. S. (2004). Emotion regulation therapy for generalized anxiety disorder. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, *11*(1), 17-29.

Nelson, J. M., & Harwood, H. (2011). Learning disabilities and anxiety: A meta-analysis. *Journal of learning disabilities*, *44*(1), 3-17.

Paus, T., Keshavan, M., & Giedd, J. N. (2008). Why do many psychiatric disorders emerge during adolescence? Nature Reviews Neuroscience, 9, 947–957.

Pourjali, F., & Zarnaghash, M. (2010). Relationships between assertiveness and the power of saying no with mental health among undergraduate student. *Procedia-Social and Behavioral Sciences*, *9*, 137-141.

Rodin, G. M. (1991). Somatization: A perspective from self-psychology. *Journal of the American Academy of Psychoanalysis*, *19*(3), 367-384.

Rueth, J. E., Lohaus, A., & Vierhaus, M. (2018). The German version of the Emotion Awareness Questionnaire for children and adolescents: Associations with emotion regulation and psychosocial adjustment. *Journal of Personality Assessment*.

Sahu, A., Patil, V., Sagar, R., & Bhargava, R. (2019). Psychiatric comorbidities in children with specific learning disorder-mixed type: A cross-sectional study. *Journal of Neurosciences in Rural Practice*, *10*(04), 617-622.

Sainio, P. J., Eklund, K. M., Ahonen, T. P., & Kiuru, N. H. (2019). The role of learning difficulties in adolescents' academic emotions and academic achievement. *Journal of learning disabilities*, *52*(4), 287-298.

Salik, S., Sadiq, M., & Masroor, U. (2022). Specific Learning Disorder (SLD) and aassociated psychosocial difficulties in emerging adolescents: an exploratory study. *Pakistan Journal of Social Research*, *4*(04), 366-374.

Sendzik, L., Ö. Schäfer, J., C. Samson, A., Naumann, E., & Tuschen-Caffier, B. (2017). Emotional awareness in depressive and anxiety symptoms in youth: A meta-analytic review. *Journal of youth and adolescence*, *46*, 687-700.

Silman, F., & Dogan, T. (2013). Social intelligence as a predictor of loneliness in the workplace. *The Spanish journal of psychology, 16*, E36.

Taylor, G. J., Bagby, R. M., & Parker, J. D. (2006). The 20-item Toronto Alexithymia Scale: IV. Reliability and factorial validity in different languages and cultures. *Journal of Psychosomatic Research, 60*(5), 587-588.

Thamby, A., Desai, G., Mehta, U. M., & Chaturvedi, S. K. (2019). Deficits in theory of mind and emotional awareness in somatoform disorders. *Indian Journal of Psychological Medicine, 41*(4), 368-374.

Vidyadharan, V., & Tharayil, H. M. (2019). Learning disorder or learning disability: Time to rethink. *Indian Journal of Psychological Medicine*, *41*(3), 276-278.

Visser, L., Kalmar, J., Linkersdörfer, J., Görgen, R., Rothe, J., Hasselhorn, M., & Schulte-Körne, G. (2020). Comorbidities between specific learning disorders and psychopathology in elementary school children in Germany. *Frontiers in psychiatry*, *11*, 292.

Wong, B. Y., & Wong, R. (1980). Role-taking skills in normal achieving and learning-disabled children. *Learning Disability Quarterly*, *3*(2), 11-18.

Wright, P. G., & Pihl, R. O. (1981). Relationship between locus of control and irrational beliefs. *Psychological Reports, 48*(1), 181-18

APPENDICES

National Institute for Empowerment of Persons with Multiple Disability (NIEPMD)

Ministry of Social Justice and Empowerment, Govt. of. India

Muttukadu, ECR Road, Chennai – 603 112

NIEPMD PHONE NO. 044-27472113 E- mail: harishmamuralikumar@gmail.com

PREDICTIVE ROLE OF EMOTIONAL AWARENESS AND SOCIAL INTELLIGENCE ON THE PSYCHOLOGICAL SYMPTOMATOLOGY AMONG THE STUDENTS WITH SPECIFIC LEARNING DISABILITIES (SLD).

Researcher: Ms. Harishma. M. K Guide: Mr. Johny. E. V

Study Information Sheet

This study is aimed to measure the emotional awareness and social intelligence of students with SLD, which may cause psychological symptoms.

Who will be the participants?

Your Son/daughter will participate in this study

Does this study involve any expenses?

No, it does not have any fees.

Is it legally enforceable?

No, this is not a legally binding document. It is a research document.

Will there be any negative consequences if I participate?

No, the participation in this study will not lead to any negative consequences

Voluntary Participation: Allowing your son/daughter to participate in this study is completely voluntary and you can refuse them from participating anytime.

Withdraw from the study: You are free to choose whether you want your son/daughter to be a part of this study. Saying "NO" will not affect your relationship with the researcher or the institute and your son/daughter will be receiving standard treatment.

Confidentiality: The personal information given by your son/daughter will be kept confidential. Only members of the research team will know your name and details. Their (your son/daughter) name will not appear in any report or publication. However, the overall results of the study will be published in the research journals.

Undertaking by the researcher: Your assent to let your son/daughter participate in the above research by Ms. Harishma. M. K and Mr. Johny.E.V, Department of Clinical Psychology, NIEPMD, Chennai is sought. You have the right to refuse the assent or withdraw your son/daughter from participating in this study during any part of the research without giving any reason. In such an event, your son/daughter will still receive the best possible treatment, without prejudice. If you have any doubts about the research, please feel free to clarify the same. Even during the research, you are free to contact either the researcher (Ms. Harishma.M.K) or (Mr.Johny.E.V) The information provided by you will be kept strictly confidential.

Assent to participate in the research study	YES/NO

I confirm that I have had an adequate explanation and have clearly understood the information sheet of the study and have had the opportunity to ask question.	
I understand that the participation of my son/daughter is voluntary and that they are free to withdraw from the study at any time without giving a reason, without their treatment being affected.	
I understand that all personal information my son/daughter shared will be kept confidential and will not be shared with anyone other than those involved in the research study.	
I agree to allow my son/daughter to take part in the study voluntarily	
I have received a copy of the study information sheet and assent form	

Name of the Parent: Signature:

Date:

Consent to participate in the research study	YES /NO

I confirm that I have had an adequate explanation and have clearly understood the information sheet of the study and have had the opportunity to ask questions.	
I understand that my participation is voluntary and that I am free to withdraw from the study at any time without giving a reason, without my treatment being affected.	
I understand that all personal information I shared will be kept confidential and will not be shared with anyone other than those involved in the research study.	
I agree to take part in the above study voluntarily.	
I have received a copy of the study information sheet and consent form	

Name of the Client: Signature Date:

Name of the researcher: Signature Date:

Emotional Awareness Questionnaire:
Responses: Not true, Sometimes true,
True

Questions	Responses
1.I'm often confused or puzzled about what I am feeling	
2. I find it difficult to explain to a friend how I feel	
3. Other people don't need to know how I am feeling	

4. When I am scared or nervous, I feel something in my tummy	
5. It is important to know how my friend are feeling	
6. When I am angry or upset, I try to understand why	
7. It is difficult to know whether I feel sad or angry or something else	
8. I find it hard to talk to anyone about how I feel	
9. When I am upset about something, I often keep it to myself	
10. When I feel upset, I can also feel it in my body	
11. I don't want to know how my friends are feeling	
12. My feelings help me to understand what has happened	
13. I never know exactly what kind of feeling I am having	
14. I can easily explain to a friend how I feel inside	
15. When I am angry or upset, I try to hide this	
16. I don't feel anything in my body when I am scared or nervous	
17. If a friend is upset, I try to understand why	
18. When I have a problem, it helps me when I know how I feel about it	
19. When I am upset, I don't know if I am sad, scared or angry	
20. When I am upset, I try not to show it	
21. My body feels different when I am upset about something	
22. I don't care about how my friends are feeling inside	
23. It is important to understand how I am feeling	
24. Sometimes, I feel upset and I have no idea why	
25. When I am feeling bad, it is no one else's business	
26. When I am sad, my body feels weak	
27. I usually know how my friends are feeling	

28. I always want to know why I feel bad about something	
29. I often don't know why I am angry	
30. I don't know when something will upset me or not	

Tromso Social Intelligence Scale- Response: 1- Describes me extremely poorly to 7- Describes me extremely well

Statements	**Responses**
1.I can predict other people's behaviour	
2. I often feel that it is difficult to understand others' choices	
3. I know how my actions will make others feel	
4. I often feel uncertain around new people who I don't know	
5. People often surprise me with the things they do	
6. I understand other people's feelings	
7. I fit in easily in social situations	
8. Other people become angry with me without me being able to explain why	
9. I understand others' wishes	
10. I am good at entering new situations and meeting people for the first time	
11.It seems as though people are often angry or irritated with me when I say what I think	
12. I have a hard time getting along with other people	
13. I find people unpredictable	
14. I can often understand what others are trying to accomplish without the need for them to say anything	
15. It takes a long time for me to get to know others well	

16. I have often hurt others without realizing it	
17. I can predict how others will react to my behaviour	
18. I am good at getting on good terms with new people	
19. I can often understand what others really mean through their expression, body language, etc.	
20. I frequently have problems finding good conversation topics	
21. I am often surprised by others' reactions to what I do.	

Brief Symptoms Inventory- Response: 0- Not at all; 1- A little bit; 2 – Moderately; 3 – Quite a bit; 4- Extremely; R – refused (past 7 days)

Symptoms			**Response**
1.Nervousness or shakiness inside		28. Feeling afraid to travel on buses, subways, or trains	
2. Faintness or dizziness		29. Trouble getting your breath	
3. The idea that someone else can control your thoughts		30. Hot or cold spells	
4. Feeling others are to blame for most of your troubles		31. Having to avoid certain things, places, or activities because they frighten you	
5. Trouble remembering things		32. Your mind going blank	
6. Feeling easily annoyed or irritated		33. Numbness or tingling in parts of your body	
7. Pains in the heart or chest		34. The idea that you should be punished for your sins	

8. Feeling afraid in open spaces		35. Feeling hopeless about the future	
9. Thoughts of ending your life		36. Trouble concentrating	
10. Feeling that most people cannot be trusted		37. Feeling weak in parts of your body	
11. Poor appetite		38. Feeling tense or keyed up	
12. Suddenly scared for no reason		39. Thoughts of death or dying	
13. Temper outbursts that you could not control		40. Having urges to beat, injure, or harm someone	
14. Feeling lonely even when you are with people		41. Having urges to break or smash things	
15. Feeling blocked in getting things done		42. Feeling very self-conscious with others	
16. Feeling lonely		43. Feeling uneasy in crowds	
17. Feeling blue		44. Never feeling close to another person	
18. Feeling no interest in things		45. Spells of terror or panic	
19. Feeling fearful		46. Getting into frequent arguments	
20. Your feelings being easily hurt		47. Feeling nervous when you are left alone	
21. Feelings that people are unfriendly or dislike you		48. Others not giving you proper credit for your achievements	

22. Feeling inferior to others		49. Feeling so restless you couldn't sit still	
23. Nausea or upset stomach		50. Feelings of worthlessness	
24. Feeling that you are watched or talked about by others		51. Feeling that people will take advantage of you if you let them	
25. Trouble falling asleep		52. Feelings of guilt	
26. Having to check and double check what you do		53. The idea that something is wrong with your mind	
27. Difficulty making decisions			

Details

Name of the student (if you wish to share)	:
Age	:
Date of birth	:
Gender	:
Education	:
Religion	:
Languages known	:
Father's education	:
Father's occupation	:
Mother's education	:
Mother's occupation	:
Number of family members	:
Siblings	:
Sisters -	
Brothers -	
Birth order	:
Residence	:

Document Information

Analyzed document	Dissertation - compiled.docx (D174519453)
Submitted	9/25/2023 7:45:00 AM
Submitted by	HARISHMA M K
Submitter email	harishmamuralikumar@gmail.com
Similarity	7%
Analysis address	harishmamuralikumar.mgrmu@analysis.urkund.com

Sources included in the report

SA	**01 Introduction and Review - Sinto P Anto.pdf** Document 01 Introduction and Review - Sinto P Anto.pdf (D18634176)	4
W	URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8395748/ Fetched: 11/11/2021 8:25:53 PM	1
W	URL: https://psyarxiv.com/m4e9d/download?format=pdf Fetched: 1/11/2023 4:07:23 PM	1
W	URL: https://files.eric.ed.gov/fulltext/EJ1162073.pdf Fetched: 1/19/2021 12:13:08 PM	3
SA	**SELF-ESTEEM, COPING, AND ACHIEVEMENT MOTIVATION AS A CORRELATE OF PSYCHOLOGICAL DISTRESS AMONG SEXUALLY ABUSED AND NON-ABUSED ADOLESCENTS.docx** Document SELF-ESTEEM, COPING, AND ACHIEVEMENT MOTIVATION AS A CORRELATE OF PSYCHOLOGICAL DISTRESS AMONG SEXUALLY ABUSED AND NON-ABUSED ADOLESCENTS.docx (D27663846)	4
SA	**THESIS FINAL.docx** Document THESIS FINAL.docx (D173027034)	3
W	URL: https://www.sciencedirect.com/science/article/abs/pii/S0191886908002894 Fetched: 1/26/2023 1:09:52 PM	1
SA	**researchpracticum_khakenberg_s4273338.docx** Document researchpracticum_khakenberg_s4273338.docx (D140254666)	2
SA	**B.A_Psychology_Maninder_205606015_AkalUniversity.docx** Document B.A_Psychology_Maninder_205606015_AkalUniversity.docx (D169103612)	3
SA	**SIMILARITY CHECK.docx** Document SIMILARITY CHECK.docx (D134452952)	1