



# Relation between Academic Progress and Mental Health

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**ABSTRACT:** The main aim of this research is to timely diagnose and study reasons behind low academic performance and select effective methods for students to handle emotional, negative stress, which is a deterring factor in academic delay and dropout rate in middle and high school level.

The questionnaire that high school students could answer easily on KNOW YOURSELF and data was collected on the frequency, a student took medical aid or any other external help (i.e. outside family system) in regard to mental health.

The data revealed significant relation between academic progress and mental health and vice a versa in both genders existed. This has given rise to behavioral problems which calls for parents and school based intervention.

**KEYWORDS:** Mental health, academic progress, behavior problems, school based interventions.

## I. INTRODUCTION

According to WHO mental health is an integral and essential component of health. The WHO constitution states. "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." An important implication of this definition is that mental health is more than absence of mental disorders or disabilities.

There may be innumerable methods to measure academic progress of a student but it is a matter of concern that there is insufficient knowledge about how mental health influences or is influenced by academic progress. Low efficacy affects achievements, ambitions, coping in different life situations and motivation. This research work concentrates basically on how **structural, psychological and sociological** factors affect academic performance of a student's mental health and vice a versa.

Many factors are known to impact mental health of a student; experiences of education, their achievement and their behavior, their aspirations, impact of their parents (educated or uneducated), their diet, sleep habits, peers and friends, the academic target level set by the curriculum, learning style and time spent.

The objective of the study was to qualitatively test whether these factors are, indeed affecting the aspirations of a student. This information is for 'vital' understanding of mental health of adolescent students. The data gathered through the questionnaire about day to day activities is through empirical understanding. The range of the questionnaire KNOW YOURSELF is on a five point scale; no problem, very mild problem, mild problem, moderate problem, severe problem. After the completion was over, no incentives were given to the respondents.

## II. OBJECTIVE

This research aims to make this contribution by reuniting different fields of research:-

- I. Adolescent learns to cope with normal stresses of life.
- II. Readiness for constructive and productive work which contributes to the community.
- III. To protect and try to restore, mental health of individual and of community by large.
- VI. To strengthen information systems, evidence and research for mental health.
- V. To investigate possible predictors for future research that is needed to be implemented.

**\*Observational learning** is learning that occurs through observing the behavior of others. It is a form of social learning which takes various forms, based on various processes. In humans, this form of learning seems to not need reinforcement to occur, but instead, requires a social model such as a parent, sibling, friend, or teacher with surroundings. Particularly in childhood, a model is someone of authority or higher status in an environment.



### III. MATERIAL AND METHOD

After reviewing the concerned research, hypothesis framed for testing in this Research are:

**Criterionvariable:** Students' academic progress in relation to mentalhealth

**Predictorvariable:**

1. STRUCTURAL
2. PSYCHOLOGICAL
3. SOCIOLOGICAL

**Demographicvariable:**

- 1.GENDER
2. LOCALE

**H1 The Structural Factor and its various dimensions would emerge as predictor of students' academic progress, (1. Brain chemical messengers- Biogenic Amine /Endorphin System)**

**H2 The Psychological Factor and its various dimensions would emerge as predictor of students (1. Readiness to learn, 2. Attitude and aptitude, 3.Motivation and aspirations, 4.Memory, 5. Mental health)**

**H3 The Sociological Factor and its various dimensions would emerge as predictor of students' academic progress, (1.Family environment, 2. Less interaction between teacher and student (school), 3. Teachers' behaviour, 4. Social environment, 5. Less participation in extra activities, 6. Reinforcements and punishments, 8. Guidance)**

**2.1. There are three Happy Messengers:** Serotonin, ordrenalin and dopamine. These are the brain chemicals that begin to malfunction when stress levels become more than a person can handle.The human brain is thought to have hundreds of these different types of neurotransmitters and biological theories suggest that a person can become more susceptible of developing panic disorder symptoms if one or more of these neurotransmitters do not remain balanced.

When an individual perceives an experience, one reacts and he adopts what one researcher called the "fight or flightresponse".

**2.2. Self-efficacy:** Self-efficacy affects every area of human endeavor. By determining the beliefs a person holds regarding their power to affect situations, it strongly influences both the power a person actually has to face challenges competently and the choices a person is most likely to make. These effects are particularly apparent, and compelling, with regard to behaviors affectinghealth.

**2.3. Modeling, or "vicarious experience":** When we see someone succeeding, our own self-efficacy increases; where we see people failing, our self-efficacy decreases. This process is most effectual when we see ourselves as similar to themodel.

**2.4. Social persuasion:** Social persuasion generally manifests as directencouragement or discouragement from another person. Discouragement is generally more effective at decreasing a person's self-efficacy than encouragement is at increasingit.

**2.5 Physiological factors:** In stressful situations, people commonly exhibit signs of distress: shakes, aches and pains, fatigue, fear, nausea, etc. Perceptions of these responses in oneself can markedly alter self-efficacy. It is one's belief in the implications of physiological response that alters self- efficacy, rather than the physiological response itself.

**2.6. Family:** Families are the primary socializing agent of young people. Whether young people develop successfully depends substantially on whether families provide the physical and psychological conditions children need to acquire developmental competencies.ResearchonfamilyinteractionsbyPattersonandcolleaguesoverthepast

40 yearshas shown that harsh and inconsistent parenting practices contribute to aggressive and uncooperative behavior and that positive involvement with children and positive reinforcement of desirable behavior contribute to cooperative and prosocial behavior (e.g., Patterson and Cobb.1971; Patterson,1976,1982).

**2.7. School:** Payne - "All education proceeds by the participation of the race." He regarded school as a social institution which purifies and idealizes the existing social institution. An adolescent's time in school is not merely academic; they are developing socially, physically andemotionally.

**2.8. Relation between academic progress and mental health:** The first sign of adolescent mental illness or emotional distress can emerge in a school environment. It is well known that mental health issues such as anxiety, depression, and family problems are often the root causes of poor academic performance, disciplinary issues, and truancy. WHO opined that schools are to be viewed as a potential resource for the recognition of children and adolescents in need of formal diagnosis and treatment. The school-based model is potentially more flexible and can be implemented more easily in resource poor areas too. But school-based consultation services model are not well developed across the world.



This gap leads to failure to reach out to children who otherwise need help to avoid many of the problems associated with school dropout and other negative consequences due to mental health problems. So if the teachers are provided with sensitization training to understand adolescent development, adolescent developmental challenges, mental health problems and disorders, and primary skills in proactive adolescent counseling, they can do the early identification and primary intervention in the school campus itself. There is no standard system to address the developmental and behavioral issues of adolescents in the school environment. Considering this gap, the aim of the present study was to describe the working of a new model for adolescent school mental health programme, in Tatanagar over a period of 1 year from 2018 to 2019.

1. **Study design:** This is a retrospective record-based descriptive study. It aims at filling the gap between academic progress and mental health.
2. **Study setting:** Jharkhand is the part of India and Tatanagar is its important city. Students of the private and government aided school belong to middle socioeconomic class and lower strata of middle socioeconomic class. Majority of the population earns their livelihood by small jobs (service) or self owned small business.
3. **Inclusion criteria:** Students of government and government aided high school (8th to 10th class) and higher secondary school (11th and 12th class) under District Singhbhum, Tatanagar.
4. **Exclusion criteria:** Students from below eighth standard, were excluded from the study population.
5. **Participants' age:** Age group of 12- 18 yrs (adolescent) were focused. Grades of students of grades ix-x and xi-xii were chosen.

#### IV. SAMPLE AND PARTICIPANT CHARACTERISTICS:

1. **Sample size:** The number of participants in the qualitative study (n=355). Further principals /selected teachers were involved in the study. Participation of parents and history taking of family psychopathology was done.
2. **Gender:** Both male (225) and female (130) were included as a part of the study.

**3.1. Tools:** A prepared intake performa was used for detailed evaluation of each child. International Classification of Disease-10, Classification of Mental and behavioral disorders – Diagnostic Criteria for Research (ICD-10, DCR) was used to diagnose student's mental health.

A two days' workshop for the principals /teachers was conducted. The teachers were trained to provide mental health care and assistance to adolescent students. History of family psychopathology was taken and intervention was shown. There was an active participation shown between teachers and most of the parents.

**3.2. Data interpretation:** the questionnaire was prepared to look into the lifestyle of the students in relation to their day to day habits.

A total of 2 high schools and 2 higher secondary schools participated in the process.

Two workshops of two days duration each were conducted for these selected teachers during the academic year and they were designated as primary counselors.

At the outset the aims and objectives of the project and responsibilities of the participants were explained in detail to them. The topics in the training workshop included adolescent developmental psychology, developmental challenges, development of life skills, and scientific teaching-learning methodology for teachers, a brief overview on the mental health problems and disorders including conduct disorder, learning disability and scholastic backwardness and emerging new issues, if any.

**Empirical knowledge was used for the workshop.** Students with scholastic backwardness, behavioral problems, examination fear, and other similar concerns were referred. For strengthening this referral system one day, sensitization workshops were conducted during the year at various levels, with the active participation of the headmaster/principal, all class teachers and parent teachers association.

Each student so referred with problem behavior was evaluated by using a prepared intake performa. As part of primary intervention, the parents of the children with problems were summoned to school and sessions on the state of the child and psycho education were held by the primary counselor. Issues like scheduling of learning activity, creating a child-friendly learning atmosphere, and similar issues were discussed.

History of family psychopathology was noted during the detailed interview with the parents. The clinical diagnosis was done as per ICD- 10, DCR guidelines. They were provided with psychosocial interventions like cognitive behavioral therapy, cognitive problem solving skill therapy, and so on. The parents were given family therapy for issues of alcoholism, quarrelsome, and domestic violence. Parent management therapy was given for families of children with conduct disorder. Schools were informed regarding the condition of the student with suggestions regarding the monitoring of the children in the school.

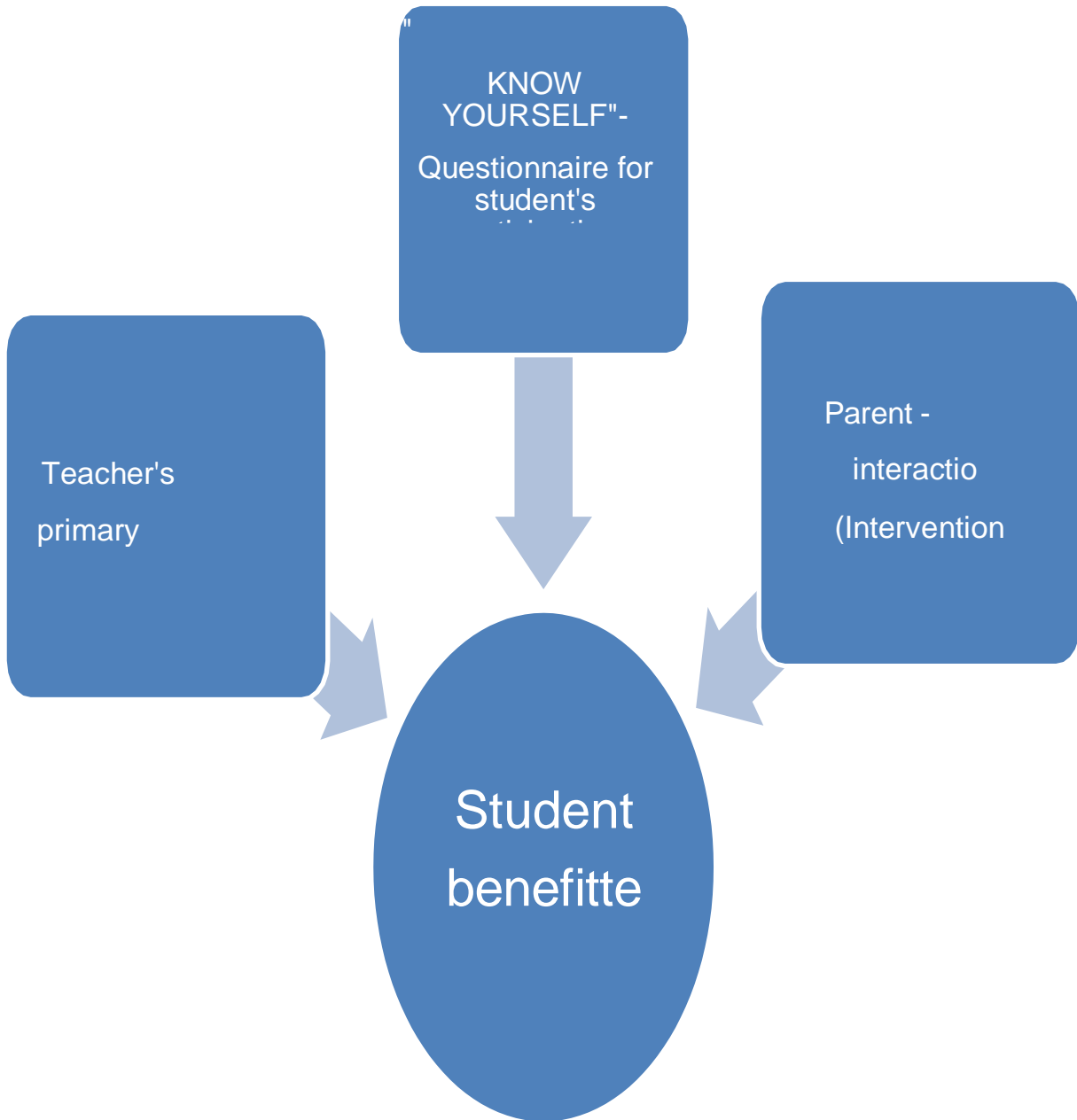


Figure 1

### 1. THE QUESTIONNAIRE

The survey consists of 25 close – ended questions and instruments that assess the students’ health; well-being, lifestyle; sleep hours; relationship with parents, teachers, peers and friends. Issues specific to studying as well as mental health were charted in the survey, with an emphasis on psychosocial issues. This questionnaire was designed on empirical data.

### V. ANALYSIS

The total number of adolescents who were referred to during the period was 355, See (Table 1). Boys dominated in the sample (63.4%). Majority of students (55%) belonged to middle adolescent category in the age group of 15–16 years. In the assessed population, 64.8% belonged to APL family. History of family psychopathology was present among 48.7% of the sample. The main family psychopathology noticed alcoholism (23.1%), quarrelsome family (17.3%), domestic violence (14.9%), and families abandoned by father (11.3%) see (Figure2).



Variable		Frequency (n)	Percentage(%)
Sex	Male	225	63.4
	Female	130	36.6
Age Group	Early adolescence (12-14 yrs)	89	25
	Middle adolescence (15-16 yrs)	195	55
	Late adolescence (17-18 yrs)	71	20
Socio economic status	Above poverty line	230	64.8
	Below poverty line	125	35.2
Family psycho pathology	Present	173	48.7
	Absent	182	51.3

Table 1: Common family problems for which referral was made (n = 355)

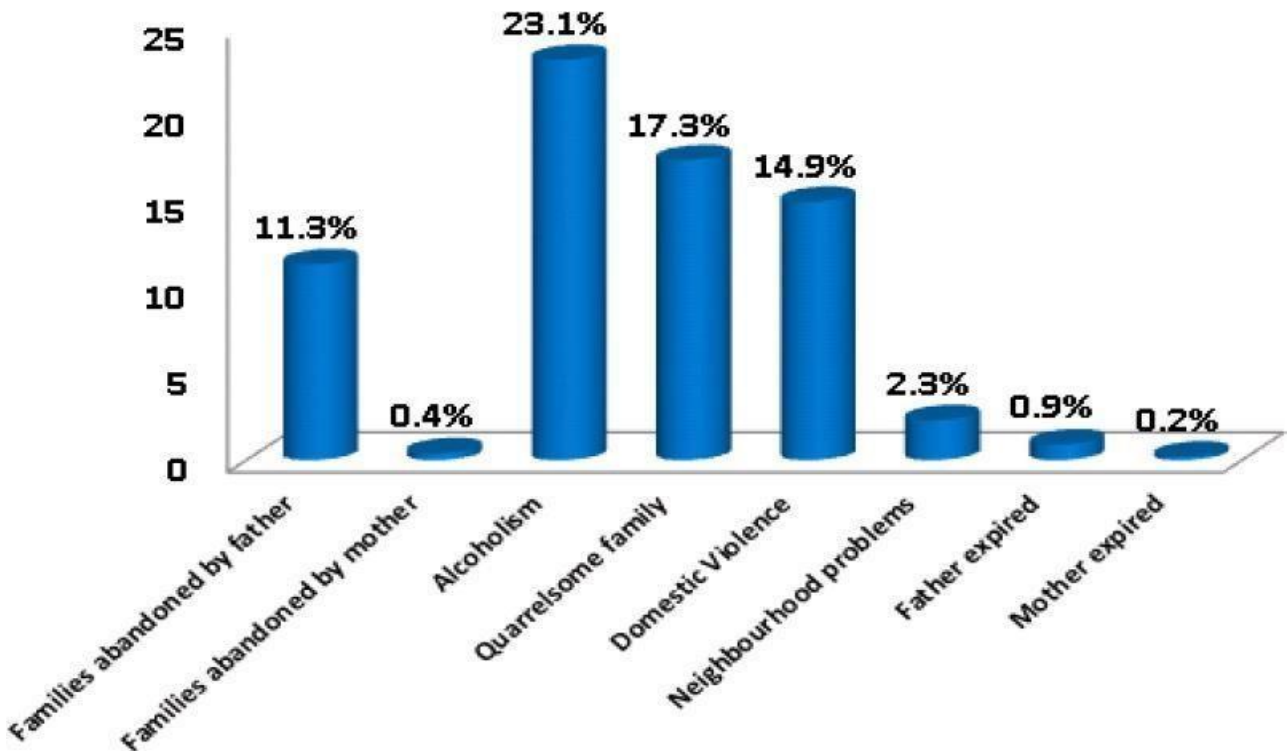


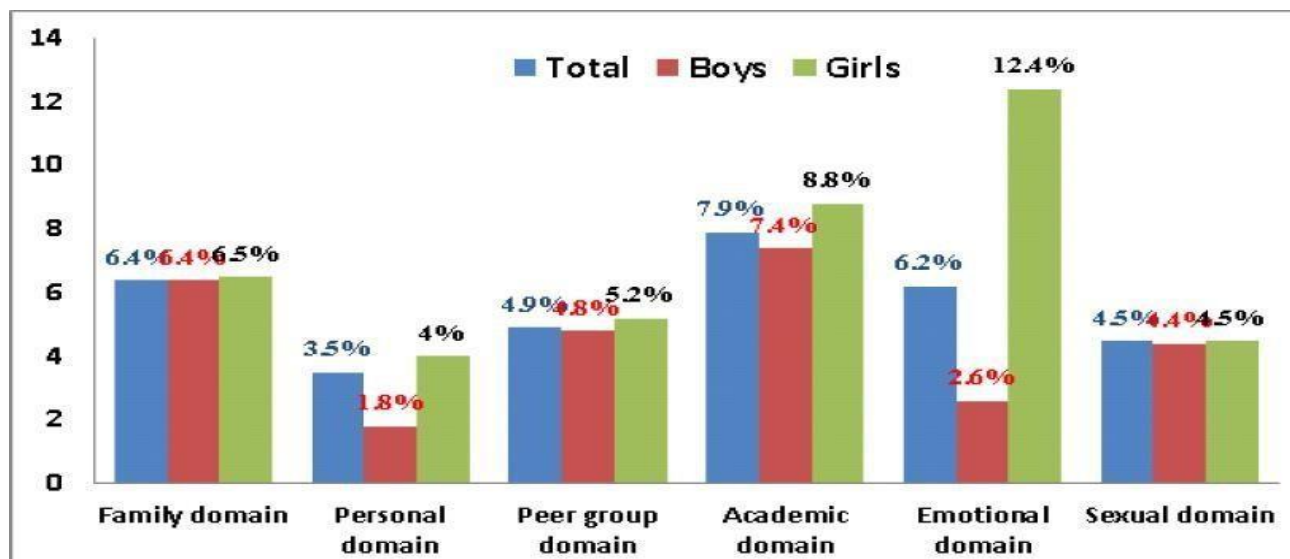
Figure 2

Per ICD 10 DCR, These are minor psychological issues.

S.No.	Diagnosis 2	TOTAL		BOYS		GIRLS		C <sup>2</sup>	r	Significant/not
		No.	%	No.	%	No.	%			
1.	Conduct Disorder	129	36.33	103	45.77	26	20.0	159.2	0.000	S
2.	Oppositional Defiant Disorder	11	3.09	6	2.67	5	3.84	3.9	0.048	S
3.	Hyperkinetic Disorder	17	4.78	11	4.81	6	4.61	0.003	0.955	NS
4.	Specific Learning Disability	32	9.02	20	8.89	12	9.24	0.001	0.974	NS
5.	Somatiform Disorder	15	4.22	5	2.23	10	7.69	44.6	0.000	S
6.	Depression	21	5.92	9	4.0	12	9.25	25.3	0.000	S
7.	Adjustment Disorder	13	3.67	6	2.68	7	5.38	14.5	0.000	S
8.	Mental Retardation	9	2.54	5	2.23	4	3.09	1.2	0.273	NS
9.	Generalized Anxiety Disorder	8	2.26	5	2.23	3	2.30	0.586	0.444	NS
10.	Phobia	6	1.69	2	0.90	4	3.09	7.5	0.006	S
11.	Obsessive Compulsive Disorder	3	0.85	1	0.45	2	1.54	4.9	0.026	S
12.	Bipolar disorder	5	1.41	4	1.80	1	0.76	0.025	0.074	NS
13.	Psychosis	4	1.12	2	0.89	2	1.54	0.011	0.915	NS
14.	Adolescent developmental challenges*	70	19.72	38	16.89	32	24.69	20.8	0.000	S
15.	Miscellaneous	12	3.38	8	3.56	4	3.07	1.2	0.278	NS
16.	Total	355	100	225	100	130	100			

Significant ( $p < 0.05$ ); NS: Not Significant, \*Adolescent developmental challenges are not a diagnostic category as

The most common three diagnoses made were conduct disorder (36.4%), specific learning disability (9%), and depression (5.8%), see (Table 2). Other problems noticed were given in the table. Adolescent developmental challenges were present among 19.7%, see (Table 2) .



Predominance of the boys in the sample could be due to the fact that the majority of the school population referred had behavioral disorders; behavioral disorders being more common among boys, see (Table 2). Among the population 55% belonged to the middle adolescent group, see (Table 1).





The adolescents in the middle stage usually have to face more developmental challenges. As mentioned earlier, majority of the sampled population belonged to APL class (Table 1). The awareness about adolescent mental disorders and its implications are more among the middle class population. So the service utilization was more among them. The environmental factors also play a significant role in the causation of mental health disorders among children and adolescents.

The common adolescent mental disorder noted was conduct disorder (36.3%) (Table-2). Generally conduct disordered children are subjected to all kinds of punishments including severe corporal one in family and school, especially in the Indian scenario. The parents, family, and teachers coming in proximity with those children are also under stress and anxiety. Conduct disorder was more among the boys than girls (3.9:1) (Table-2). It is a male dominated disorder. Among them, 55% were adolescent onset type of conduct disorder with gang behavior and socialized aggression.

## VI. CONCLUSION

At present only a counselor is usually available in the school but the school teachers were not trained in this regard, they should be taken into confidence or made to involve in intervention. There is no consultation-liaison work between teachers and counselor in the school. Also expert interventions were not ensured as a part of the schools. These issues are effectively circumvented in the research. The most frequently mentioned barrier was stigma. In addition, almost half of the studies cited issues related to confidentiality and trust. Over one-third of studies referred to difficulties with identifying symptoms, concern about the characteristics of the provider, and reliance on self as perceived barriers to help-seeking.

### 6.1 Limitations

#### 1. The burden and prevalence of mental disorders

Depression and anxiety are highly prevalent mental disorders with estimates indicating they affect up to almost one fifth of the population worldwide. Prevalence of mental disorders is greatest among younger people aged 14-24 years than at any other stage of the lifespan. They are also common in childhood and adolescence with 14% of those aged between 14 and 17 years affected. This high susceptibility in adolescents and young adults to developing a mental disorder is coupled with a strong reluctance to seek professional help.

#### 2. Proposed reasons for not seeking help

Structural and personal determinants of help-seeking are yet another factor which acts as a barrier. The individual factors, such as personal beliefs, internalized gender norms, coping skills, self-efficacy, and perceived stigma interact with structural factors including the national health system, accessibility and affordability of services, and social support.

Moreover, currently no review has systematically identified and synthesized the literature which asks young people themselves what they perceive are the barriers and facilitators to help-seeking. This systematic review seeks to address this gap.

### 6.2 Advantages of the Research

The sensitivity of the school education system about developmental psychology of adolescents and the unique behavior of adolescents were addressed in the research.

3. Inadequacy of the service delivery system in identification and intervention of developmental, behavioral, and emotional disorders of adolescents at school level itself can be addressed by a sustainable system, mainly with primary and secondary intervention.

4. The barriers to service utilization and social stigma can be minimized by involvement of teachers as the primary counselor, managing them in the school itself with increased acceptability and ensured accessibility, availability, and privacy to the students and their parents.

5. Expert intervention should also be assured. Addressing the new emerging issues and initiating helpful resources at initial level of the problem is the core initiative of the research.



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