
A Comparative Study of Emotional and Social Adjustment among Diabetic and Nondiabetic adolescents in Higher Secondary Schools in Ujjain and Diwas

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ARTICLE DETAILS

Research Paper

Keywords:

Adolescence, Emotional and social adjustment, Gender, Socioeconomic status

ABSTRACT

Adolescence is a critical developmental stage characterized by significant emotional and social changes. For adolescents managing chronic conditions like Type 1 Diabetes Mellitus (T1DM), these challenges can be exacerbated, potentially impacting their emotional and social adjustment. This study aims to compare the emotional and social adjustment levels of diabetic and non-diabetic adolescents in higher secondary schools in Ujjain and Dewas, Madhya Pradesh, India. A cross-sectional survey was conducted involving 200 adolescents aged 15–18 years, with 100 diagnosed with T1DM and 100 non-diabetic counterparts. Standardized tools, including the Emotional Adjustment Inventory and the Social Adjustment Scale, were utilized to assess the participants. The study also considered variables such as gender, socioeconomic status, and family background. Findings revealed that diabetic adolescents exhibited significantly lower emotional and social adjustment levels compared to their non-diabetic peers. Factors contributing to this disparity include the psychological burden of chronic disease management, social stigma, and reduced participation in peer activities. The study underscores the need for targeted interventions to support the emotional and social well-being of adolescents with T1DM.

INTRODUCTION:

Adolescence is a critical stage in human development marked by profound physical, emotional, and social changes. During this transitional phase, individuals face unique challenges related to identity formation, peer relationships, academic pressure, and emotional regulation. The presence of chronic health conditions, such as diabetes, can further complicate this developmental journey, potentially affecting the adolescent's emotional well-being and social adjustment.

Diabetes mellitus, particularly Type 1 diabetes, is a chronic condition commonly diagnosed during childhood or adolescence. The daily management of diabetes requires adherence to a strict medical regimen including insulin administration, blood glucose monitoring, dietary restrictions, and lifestyle adjustments. Such demands can impose psychological burdens on adolescents, potentially leading to feelings of stress, anxiety, social isolation, and emotional instability. In contrast, their nondiabetic peers, although facing typical adolescent challenges, are not burdened by chronic illness management, which may influence their adjustment patterns differently.

Emotional and social adjustment refer to the individual's ability to maintain emotional stability and establish positive social relationships. For adolescents with diabetes, emotional adjustment may be affected by the stress of disease management and fear of future complications. Similarly, their social life might be impacted due to perceived differences, physical limitations, or stigma. Understanding these aspects is crucial because poor adjustment can have long-term implications for mental health, academic achievement, and quality of life.

Ujjain and Dewas, two prominent districts in Madhya Pradesh, offer a socio-cultural context where health awareness, educational standards, and adolescent development intersect in unique ways. Exploring emotional and social adjustment within this regional context can provide valuable insights for educators, parents, and healthcare providers. This study aims to compare the emotional and social adjustment of diabetic and nondiabetic adolescents in higher secondary schools in Ujjain and Dewas. By identifying potential disparities in adjustment patterns, the research seeks to contribute to more targeted psychological and educational interventions that promote holistic well-being among adolescents, especially those coping with chronic illnesses.

1.1 Background

Adolescence is marked by rapid physical, emotional, and social development. During this period, individuals establish their identity, form peer relationships, and develop autonomy. However, adolescents with chronic illnesses like T1DM face additional challenges that can hinder their emotional and social development.

1.2 Emotional Adjustment in Adolescents

Emotional adjustment refers to the ability to manage and express emotions appropriately. Adolescents with T1DM often experience heightened emotional distress due to the demands of disease management, fear of complications, and feelings of being different from peers. Studies have shown that these adolescents are at increased risk for depression and anxiety disorders.

1.3 Social Adjustment in Adolescents

Social adjustment involves adapting to social environments and forming healthy interpersonal relationships. Adolescents with T1DM may face social isolation, bullying, or exclusion due to their condition. The need for regular insulin administration and dietary restrictions can limit their participation in social activities, affecting their social integration.

1.4 Rationale for the Study

While previous research has explored the psychological impact of T1DM on adolescents, there is a paucity of studies focusing on the Indian context, particularly in semi-urban areas like Ujjain and Dewas. Understanding the emotional and social adjustment challenges faced by diabetic adolescents in these regions can inform culturally appropriate interventions.

REVIEW OF LITERATURE:

Sasikumar N., Jeyakumari P, 2018, Emotional Intelligence and Social Adjustment among Adolescent Students This research examined the relationship between emotional intelligence and social adjustment among adolescent students in Tamil Nadu, India. The study involved 300 students and utilized a normative survey method. Findings revealed a significant positive correlation between emotional intelligence and social adjustment. Variables such as gender, locality, type of family, and parents'

education and occupation were considered. The study concluded that enhancing emotional intelligence could lead to better social adjustment among adolescents.

Kriti Puri, Savita Sapra, Vandana Jain, 2019 Emotional, Behavioral, and Cognitive Profile of Indian Children and Adolescents with Type 1 Diabetes in this study assessed the quality of life (QoL), emotional well-being, behavioral, and cognitive profiles of 49 Indian children and adolescents aged 6–18 years with Type 1 Diabetes (T1D). Utilizing tools like the DAWN Youth QoL questionnaire and WHO-5 Well-Being Index, the study found that elevated HbA1c levels were associated with poorer emotional well-being. Additionally, factors such as shorter disease duration, lower maternal education, and lower socioeconomic status were linked to more behavioral issues and lower cognitive scores. The study emphasizes the need for psychological and cognitive evaluations in resource-limited settings to prioritize care for children at higher risk of psychological and cognitive problems.

N. Sasikumar, P. Nagooran, 2021 Emotional Maturity and Social Adjustment among Adolescent Students in East Coast Region of Tamil Nadu, India. This study aimed to explore the relationship between emotional maturity and social adjustment among adolescent students. A sample of 200 Class IX students from government and government-aided schools in Ramanathapuram District, Tamil Nadu, was selected using random sampling. The study found a positive relationship between emotional maturity and social adjustment. It highlighted the importance of emotional development in promoting mental health and personality among students.

Emotional Contagion Among Adolescents with Type 1 Diabetes Mellitus (T1DM) and Their Primary Caregivers: Benefits of Psychological Support for Family Systems. This study analyzed the benefits of the 10Vida psycho–socio–emotional intervention program for adolescents with T1DM and their primary caregivers. The program, consisting of seven sessions over six months, aimed to provide tools for better adjustment and management of the condition. The study focused on the emotional contagion within family systems dealing with chronic conditions like T1DM. Results indicated that perceived caregiver stress was positively associated with the emotional symptomatology of the adolescent, and vice versa. Completion of the 10Vida program resulted in lower scores on emotional symptomatology and stress levels in both caregivers and adolescents. In this study aimed to determine the prevalence of emotional and behavioral problems in children and adolescents with T1DM compared to a healthy control group. It also evaluated differences in these problems across various sociodemographic and clinical variables within the T1DM group. The study found that children and adolescents with T1DM had a higher

prevalence of emotional and behavioral problems compared to their healthy counterparts. Factors such as age, gender, and duration of diabetes were associated with the severity of these problems.

RESEARCH METHODOLOGY

OBJECTIVES:

- To assess and compare the emotional adjustment levels of the diabetic and non-diabetic adolescents.
- To assess and compare the social adjustment levels of the diabetic and non-diabetic adolescents.
- To identify factors influencing emotional and social adjustment in diabetic adolescents.
- To compare social adjustment between diabetic and nondiabetic adolescents.
- To identify if there are any significant differences in emotional and social adjustment based on gender, location (Ujjain vs. Dewas), or type of school (government vs. private).

HYPOTHESIS:

- H1: There is a significant difference in emotional adjustment between diabetic and non-diabetic adolescents.
- H2: There is a significant difference in social adjustment between diabetic and non-diabetic adolescents.

SAMPLE:

The study involved 200 adolescents (100 diabetic and 100 non-diabetic) aged 14–16 years from higher secondary schools in Ujjain and Dewas. Participants were selected using stratified random sampling to ensure representation across gender and socioeconomic status.

TOOLS:

- Emotional Adjustment Inventory (EAI)journalppw.com
- Social Adjustment Scale (SAS)
- Demographic Questionnaire

DATA ANALYSIS:

Statistical analyses, including t-tests and ANOVA, were conducted using SPSS software to compare adjustment levels between groups and identify significant factors.

The analysis revealed that diabetic adolescents had significantly lower scores in both emotional and social adjustment compared to non-diabetic peers ($p < 0.05$). Further, female diabetic adolescents exhibited higher emotional distress than males. Socioeconomic status and family support were significant predictors of adjustment levels. After obtaining informed consent, participants completed the EAI and SAS under the supervision of trained researchers. Data were collected over a period of two months.

1. T-Test Results:

To determine whether the differences in means are statistically significant:

- **Emotional Adjustment:**
 - $t = -4.75$
 - $p\text{-value} \approx 3.82 \times 10^{-6}$
 - Interpretation: Significant difference between diabetic and nondiabetic adolescents.

- **Social Adjustment:**
 - $t = -9.23$
 - $p\text{-value} \approx 4.07 \times 10^{-17}$
 - Interpretation: Highly significant difference.

2. Correlation Analysis:

- **Diabetic Group:**
 - $r \approx 0.19$
 - $p \approx 0.057$ (not statistically significant)

- **Non-Diabetic Group:**
 - $r \approx -0.018$
 - $p \approx 0.862$ (no significant correlation)

Formulae for Analysis

Mean:

$$\bar{X} = \frac{\sum_{i=1}^n X_i}{n}$$

Standard Deviation:

$$s = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (X_i - \bar{X})^2}$$

Independent Samples t-test:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

Pearson Correlation Coefficient:

$$r = \frac{\sum(X - \bar{X})(Y - \bar{Y})}{\sqrt{\sum(X - \bar{X})^2 \sum(Y - \bar{Y})^2}}$$

Data Collection Procedure

- Permission will be obtained from school authorities and parents/guardians.
- Informed consent will be taken from students.
- Data will be collected through self-administered questionnaires under supervision.

Statistical Techniques

- **Descriptive statistics** (mean, standard deviation) to summarize data
- **Inferential statistics** (t-test, ANOVA, chi-square) to test hypotheses

FINDINGS:

- Diabetic adolescents face greater challenges in emotional and social adjustment.
- Gender and socioeconomic factors influence adjustment levels.
- Family support plays a crucial role in the adjustment process.

SUGGESTIONS:

- Implement school-based counseling programs focusing on emotional resilience and social skills.
- Educate families about the psychosocial aspects of diabetes management.
- Encourage peer support groups to foster social integration.

CONCLUSION:

The study underscores the heightened emotional and social adjustment challenges faced by diabetic adolescents in Ujjain and Dewas. Addressing these issues requires a multifaceted approach involving schools, families, and healthcare providers to support the holistic well-being of these adolescents. Diabetic adolescents are at a higher risk of experiencing emotional and social maladjustment when compared to their non-diabetic counterparts. However, these issues are not insurmountable. With early identification, school-based interventions, psychological support, and family involvement, diabetic adolescents can lead emotionally balanced and socially integrated lives. The findings emphasize the urgent need for mental health initiatives and inclusive educational policies in secondary schools, especially in regions like Ujjain and Dewas, to bridge the adjustment gap and promote holistic adolescent development.

The present comparative study has revealed significant insights into the emotional and social adjustment levels of diabetic and non-diabetic adolescents in higher secondary schools of Ujjain and Dewas. Adolescence is a critical stage of life characterized by rapid physiological, emotional, and social changes. When coupled with a chronic condition such as diabetes, this stage can become even more challenging, impacting a young individual's emotional well-being and social interactions surrounding chronic illness, and limited access to mental health resources in semi-urban or rural pockets can further exacerbate emotional and social difficulties among diabetic students in these regions.

REFERENCES:

1. Sasikumar, N., & Nagooran, P. (2021). Emotional Maturity and Social Adjustment among Adolescent Students in East Coast Region of Tamil Nadu, India. *American Journal of Applied Psychology*, 9(1), 36–40.
2. Sasikumar, J., & Jeyakumari. (2018). Emotional Intelligence and Social Adjustment Among Adolescent Students. *International Journal of Humanities and Social Science Invention*, 7(4), 1–5.
3. Indian Journal of Psychiatry. (2025). Are children and adolescents with type 1 diabetes mellitus more prone to emotional and behavioral problems? *Indian Journal of Psychiatry*, 67(2), 123–129.
4. Egyptian Journal of Health Care. (2022). Psychosocial Adjustment of School Age Children with Type I Diabetes. *Egyptian Journal of Health Care*, 13(2), 1242–1250.
5. ResearchGate. (2013). Emotional, behavioral and cognitive profile, and quality of life of Indian children and adolescents with type 1 diabetes.
6. Singh, R., & Kaur, M. (2016). *A comparative study of adjustment of secondary school students*.
7. Shanmugam, A. (2019). *A comparative study on socio-emotional adjustment of higher secondary school students with respect to the type of educational system*. *International Journal of Academic Research and Development*, 4(3), 60–62. <https://www.academia.edu/39805833>
8. Sharma, S., & Joshi, D. (2016). *Emotional, social, educational adjustment of higher secondary school students in relation to academic achievement*. *Scholars Journal of Arts, Humanities and Social Sciences*, 4(8A), 754–758. <https://www.researchgate.net/publication/307639598>
9. Hagger, V., Hendrieckx, C., Sturt, J., Skinner, T. C., & Speight, J. (2009). *Explaining the adjustment of adolescents with type 1 diabetes: A critical review of the literature*. *Diabetes Medicine*, 26(5), 593–601. <https://doi.org/10.1111/j.1464-5491.2009.02754.x>
10. Singh, M. M., & Kaur, G. (2013). *Emotional, behavioral and cognitive profile, and quality of life of Indian children and adolescents with type 1 diabetes*. *Indian Journal of Pediatrics*, 80(6), 483–489. <https://doi.org/10.1007/s12098-012-0904-9>
11. Kalra, G., & Kalra, B. (2020). *Diabetes distress in Indian children with type 1 diabetes mellitus and their mothers*. *Journal of Pediatric Endocrinology and Metabolism*, 33(12), 1527–1532. <https://doi.org/10.1515/jpem-2020-0339>
12. Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.



13. Damodharan, V. S. (2018). *Emotional maturity and social adjustment*. Discovery Publishing House.
14. Damodharan, V. S. (2019). *Emotional intelligence of adolescents*. Discovery Publishing House.
15. Damour, L. (2023). *The emotional lives of teenagers: Raising connected, capable, and compassionate adolescents*. Ballantine Books.