

A COMPARATIVE STUDY ON ADJUSTMENT OF DIABETIC AND NON-DIABETIC TEACHERS

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ABSTRACT:

This descriptive study aimed to assess the psychosocial adaptation of teachers with and without diabetes. The study included a sample of teachers with diabetes from educational institutions in Nagpur city, with a total of 50 diabetic and 50 non-diabetic teachers identified based on initial information collected from the respective institutions and schools. Data were gathered using an Information Form specifically designed for diabetic and non-diabetic teachers by the researcher, drawing upon a review of relevant literature. The Psychosocial Adjustment to Illness Scale was also employed to measure the average psychosocial adaptation scores for both groups of teachers. The findings revealed that certain factors significantly influenced the psychosocial adaptation of diabetic teachers, including their orientation towards healthcare, their vocational environment, and their psychological distress. Among diabetic teachers, 17.00% were classified as well-adjusted, 61.50% as moderately adjusted, and 21.50% as poorly adjusted. Furthermore, it was observed that the overall psychosocial adaptation of diabetic individuals improved with higher levels of social support, across various areas such as orientation to healthcare, domestic environment, extended family relationships, social environment, and psychological distress. In conclusion, this study indicated that diabetic teachers, on average, displayed a moderate level of psychosocial adaptation compared to their non-diabetic counterparts.

Keywords: Diabetes; psychosocial adjustment; support.

INTRODUCTION

Diabetes stands as a prominent chronic disease, primarily due to its high incidence and associated complications. The modern-day rise in socioeconomic status has ushered in changes in lifestyles, resulting in a significant global surge in the prevalence of type II diabetes.

In 2011, the prevalence of diabetes in the adult population between the ages of 20 and 79 years was recorded at 8.30%, with a projected increase to 9.90% by the year 2030. According to data from the International Diabetes Federation in 2010, the prevalence of diabetes in the same age group ranged from 7.40% to 8%, when standardized according to the global population distribution, and specifically for type II diabetes, it stood at 7.2%. In the realm of chronic illnesses, the adjustment of teachers to diabetes holds significant importance, given its high prevalence and the need for ongoing management. Psychosocial adaptation to diabetes encompasses various facets, including adjustment to healthcare, vocational settings, familial dynamics, intimate relationships, extended

family interactions, social surroundings, and psychological stressors. The extent of adjustment to diabetes is influenced by an array of factors specific to the condition, its treatment, and individual characteristics. These factors comprise personal traits, the duration of diabetes, the age at which diabetes was diagnosed, as well as the teachers' perceptions of health and illness, age, gender, and other relevant variables.

While non-compliance with dietary restrictions and insulin use is sometimes observed in individuals diagnosed with diabetes at a young age, older teachers tend to adopt a more serious approach to managing diabetes, often resulting in improved diabetes management and enhanced psychosocial adjustment. Challenges in psychosocial adjustment among diabetic teachers arise from the risk of chronic or acute complications, fluctuating blood sugar levels, and the need to juggle various aspects of diabetes management, such as diet, exercise, and medication. Furthermore, the physiological changes brought about by diabetes can have adverse effects on the mental well-being and social lives of teachers. Additionally, heightened levels of depression and anxiety are commonly seen among diabetic patients, often stemming from factors like negative impacts on intimate relationships, difficulty in maintaining blood sugar control, the emergence of diabetes-related complications, and the stress associated with managing the disease alongside work-related pressures. The presence of depressive symptoms can undermine cognitive and emotional adjustment to diabetes.

In the context of chronic illnesses, the role of family and the surrounding environment in aiding individuals to cope with and adapt to their condition cannot be overstated. The importance of social support becomes particularly pronounced during the initial diagnosis and when complications arise. Patients within families characterized by harmonious relationships, cooperation, minimal conflicts, and an absence of role conflicts tend to adapt more effectively to their illness. In contrast, individuals within families marked by excessive protectiveness, anxiety, control, and directive behavior often encounter obstacles in their adjustment process.

Diabetes stands as a chronic ailment that not only gives rise to physiological complications but also presents mental and cognitive challenges, demanding time and effort to effectively manage. In addition to the potential for psychosocial adjustment issues stemming from the development of chronic or acute complications and erratic blood sugar levels, the inability to adapt psychosocially to this condition may result in inadequate self-care behaviors, consequently elevating the risk of complications.

Numerous individuals play pivotal roles in furnishing information, administering treatment, monitoring, and fostering self-care practices in diabetic teachers. Understanding the psychosocial adaptation of diabetic teachers serves as a valuable compass for ensuring optimal disease management and preventing or delaying potential complications. This study is dedicated to exploring the adjustment of both diabetic and non-diabetic teachers to their respective health conditions.

QUESTIONS OF THE STUDY

1. What is the level of psychosocial adjustment of diabetic & non-diabetic teachers?
2. What is the level of significant difference of psychosocial adjustment of diabetic & non-diabetic teachers?

METHODOLOGY

This study was conducted as a descriptive and correlation investigation with the objective of assessing the psychosocial adaptation of both diabetic and non-diabetic teachers in response to their respective health conditions. The study encompassed the educational institutions and schools within Nagpur city. The study sample comprised 100 diabetic and 100 non-diabetic teachers employed in various educational institutions and schools within the specified area. Data collection was carried out through the utilization of the Information Form designed for diabetic and non-diabetic teachers, a tool developed by the researcher after an extensive review of the existing literature. Additionally, the Psychosocial Adjustment to Illness Scale and the Multidimensional Scale of Perceived Social Support were employed in the data-gathering process.

DATA ANALYSIS

Data were analyzed using the descriptive statistical methods frequency, percentage, average & 't' test etc. and conclude the result of this study.

Table no. 1.1
Level of Frequency distribution of Adjustment of Diabetic and Non-diabetic teachers

Level	Diabetic Teachers			Non-Diabetic Teachers		
	Male	Female	Total	Male	Female	Total
High	17.241%	16.667%	17.00%	19.00%	16.00%	17.50%
Moderate	62.069%	60.714%	61.50%	74.00%	76.00%	75.00%
Low	20.689%	22.619%	21.50%	7.00%	8.00%	7.50%
Total	100	100	100	100	100	100

From the Above table shown that, level of frequency distribution of Adjustment for Diabetic and non-Diabetic teacher, 17.241% Diabetic male Teachers, 16.667% Diabetic Female teachers & 17.00% total Diabetic teachers belongs to high level of Adjustment. On the other hand 19.00% Non-Diabetic male teachers, 16.00% non-Diabetic female teachers and 17.50% total non-Diabetic teachers belongs to high level of Adjustment.

The moderate level of Adjustment of Diabetic teachers indicated that, the 62.069% male Diabetic teachers, 60.714% female Diabetic teachers and 61.50% all Diabetic teachers belongs to moderate level of Adjustment. On the other hand 74.00% non-Diabetic male teachers, 76.00% non-Diabetic female teachers and 75.00% non-Diabetic all teachers belongs to moderate level of Adjustment.

The low level of Adjustment of Diabetic teachers indicated that, the 20.689% male Diabetic teachers, 22.619% female Diabetic teachers and 21.50% all Diabetic teachers are belongs to moderate level of Adjustment. On the other hand 07.00% non-Diabetic male teachers, 08.00% non-Diabetic female teachers and 7.50% non-Diabetic all teachers belongs to low level of Adjustment.

The majority of Diabetic teachers (83.00%) having Moderate and Low level of Adjustment where as Non-Diabetic teachers (92.50%) having High and Moderate level of Adjustment. Most of the non-Diabetic teachers are

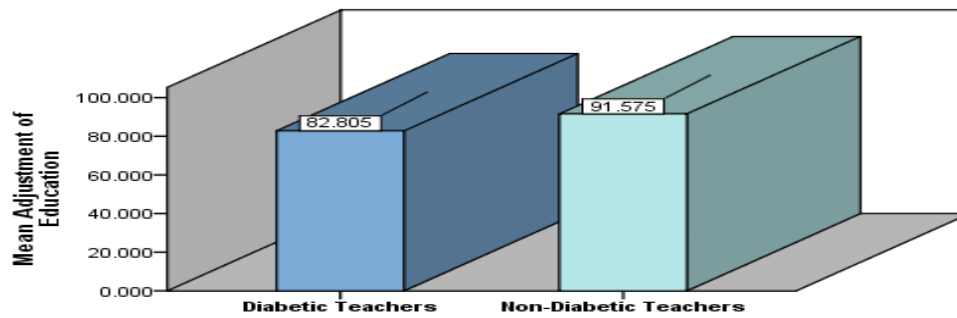
belongs to Moderate level of Adjustment compared to Diabetic teacher level of Adjustment. On the other hand most of the Diabetic teachers belongs to low level of Adjustment compared to non-Diabetic teachers level of Adjustment.

Table no. 1.2
Adjustment level of diabetic and non-diabetic teachers

Component of Adjustment	Diabetic Teachers			Non-Diabetic Teachers			Statistic		
	N	M	SD	N	M	SD	Df	SE. dm	't' Value
Adjustment of Education	50	82.805	28.824	50	91.575	20.618	98	2.505	3.500*
Soc, Psy & Phy Adjustment	50	103.105	35.979	50	114.080	25.777	98	3.129	3.507*
Adjustment of Professional Relation	50	49.545	25.518	50	55.800	25.319	98	2.541	2.461**
Personal Adjustment	50	94.040	32.687	50	104.205	23.519	98	2.847	3.570*
Work Place & Economic Adjustment	50	36.145	18.198	50	41.150	17.553	98	1.787	2.799*
Total	50	365.640	108.76	50	406.810	79.842	98	9.540	4.315**

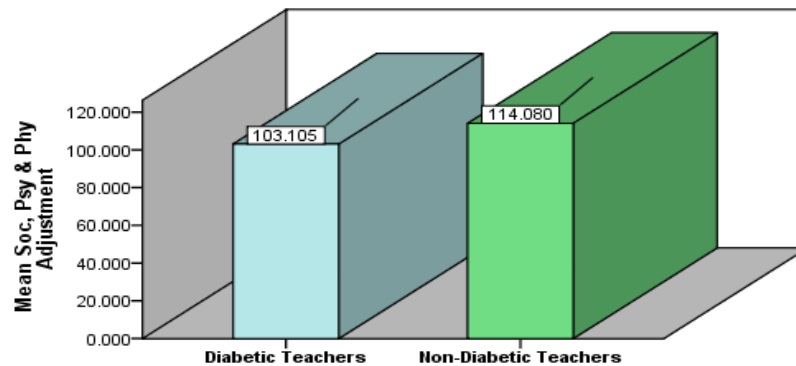
* 0.01 Level of Significance ** 0.05 Level of Significance

From the above table shown that, the significant mean difference between the teachers adjustment and their component of Educational Adjustment, Social, Psychological and physical adjustment, Adjustment of professional relation, personal adjustment, Work place & Economic adjustment and overall adjustment for the component of social behavior of Diabetic and Non-Diabetic Teachers. The Diabetic Teachers mean score of Educational Adjustment is 82.805 & SD is 28.824, and Non-Diabetic Teachers mean score of Educational Adjustment is 91.575 & SD is 20.618 respectively. Compare the mean score of Educational Adjustment for Diabetic and Non-Diabetic Teacher and calculated the SE.dm is 2.505 and calculated 't' value is 3.500, on 98 df table value is 1.96 on 0.05 level of significance and 2.58 for 0.01 level of significance. Hence the calculated 't' value is greater than the table value on 0.01 level of significance. It is concluded that the mean score of Educational Adjustment for Non-Diabetic Teachers is significantly effective compared to Diabetic Teachers. It means that, Non-Diabetic Teacher Educational Adjustment is better compared to Diabetic Teacher Educational Adjustment for the component of emotional social behavior. Mean Difference of Diabetic and Non-Diabetic Teachers for Educational Adjustment shown in below graph.



Graph no. 1.2 Mean Plots of Educational Adjustment of Diabetic and Non-Diabetic Teachers.

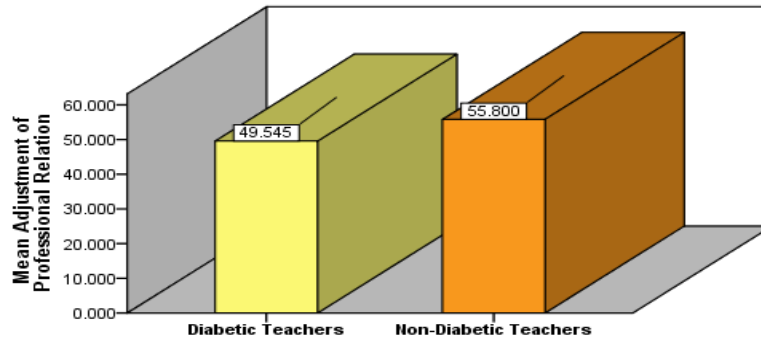
The Diabetic Teachers mean score of Social, Psychological & Physical Adjustment is 103.105 & SD is 35.979, and Non-Diabetic Teachers mean score of Social, Psychological & Physical Adjustment is 114.080 & SD is 25.777 respectively. Compare the mean score of Social, Psychological & Physical Adjustment for Diabetic and Non-Diabetic Teacher and calculated the SE.dm is 3.129 and calculated ‘t’ value is 3.507, on 98 df table value is 1.96 on 0.05 level of significance and 2.58 for 0.01 level of significance. Hence the calculated ‘t’ value is greater than the table value on 0.01 level of significance. It is concluded that the mean score of Social, Psychological & Physical Adjustment for Non-Diabetic Teachers is significantly effective compared to Diabetic Teachers. It means that, Non-Diabetic Teacher Social, Psychological & Physical Adjustment is better compare to Diabetic Teacher Social, Psychological & Physical Adjustment for the component of emotional social behavior. Mean Difference of Diabetic and Non-Diabetic Teachers for Social, Psychological & Physical Adjustment shown in below graph.



Graph no. 1.3 Mean Plots of Social, Psychological & Physical Adjustment of Diabetic and Non-Diabetic Teachers.

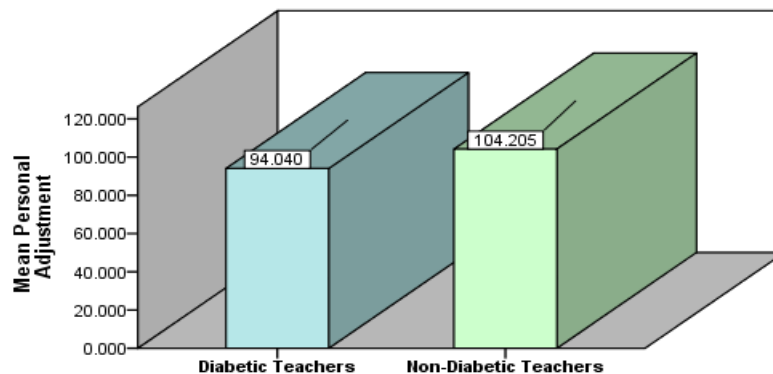
The Diabetic Teachers mean score of Adjustment of professional relation is 49.545 & SD is 25.518, and Non-Diabetic Teachers mean score of Adjustment of professional relation is 55.800 & SD is 25.319 respectively. Compare the mean score of Adjustment of professional relation for Diabetic and Non-Diabetic Teacher and calculated the SE.dm is 2.541 and calculated ‘t’ value is 2.461, on 98 df table value is 1.96 on 0.05 level of significance and 2.58 for 0.01 level of significance. Hence the calculated ‘t’ value is greater than the table value on 0.05 level of significance. It is concluded that the mean score of Adjustment of Professional Relation for Non-Diabetic Teachers is significantly effective compared to Diabetic Teachers. It means that, Non-Diabetic Teacher Adjustment of Professional Relation is better compared to Diabetic Teacher Adjustment of Professional Relation for the component of their emotional social behavior. Mean Difference of Diabetic and Non-Diabetic Teachers

for Adjustment of Professional Relation shown in below graph.



Graph no. 1.4 Mean Plots of Adjustment of Professional Relation Adjustment of Diabetic and Non-Diabetic Teachers.

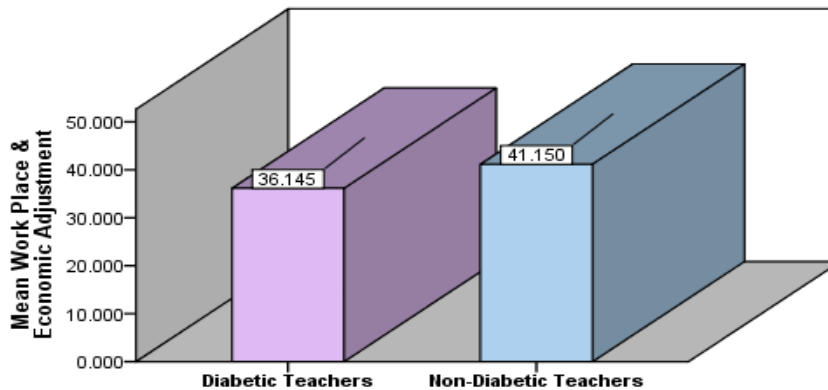
The Diabetic Teachers mean score of Personal Adjustment is 94.040 & SD is 32.687, and Non-Diabetic Teachers mean score of Personal Adjustment is 104.205 & SD is 23.519 respectively. Compare the mean score of Personal Adjustment for Diabetic and Non-Diabetic Teacher and calculated the SE.dm is 2.847 and calculated ‘t’ value is 3.570, on 98 df table value is 1.96 on 0.05 level of significance and 2.58 for 0.01 level of significance. Hence the calculated ‘t’ value is greater than the table value on 0.01 level of significance. It is concluded that the mean score of Personal Adjustment for Non-Diabetic Teachers is significantly effective compared to Diabetic Teachers. It means that, Non-Diabetic Teacher Personal Adjustment is better compare to Diabetic Teacher Personal Adjustment for the component of emotional social behavior. Mean Difference of Diabetic and Non-Diabetic Teachers for Personal Adjustment shown in below graph.



Graph no. 1.4 Mean Plots of Personal Adjustment of Diabetic and Non-Diabetic Teachers.

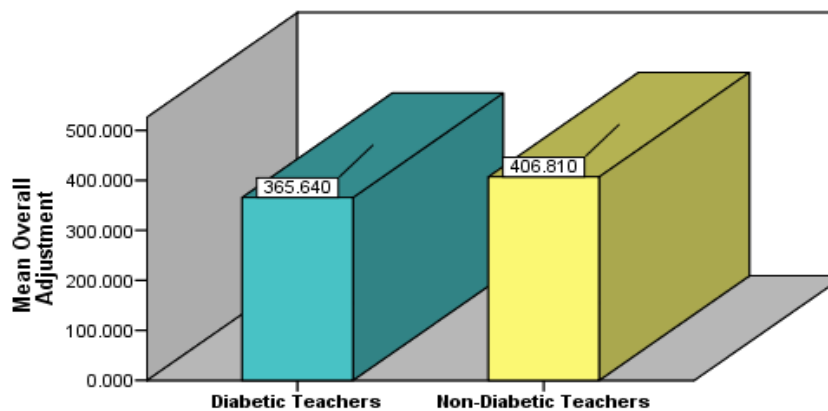
The Diabetic Teachers mean score of Work Place & Economic Adjustment is 36.145 & SD is 18.198, and Non-Diabetic Teachers mean score of Work Place & Economic Adjustment is 41.150 & SD is 17.553 respectively. Compare the mean score of Work Place & Economic Adjustment for Diabetic and Non-Diabetic Teacher and calculated the SE.dm is 1.787 and calculated ‘t’ value is 2.799, on 98 df table value is 1.96 on 0.05 level of significance and 2.58 for 0.01 level of significance. Hence the calculated ‘t’ value is greater than the table value on 0.01 level of significance. It is concluded that the mean score of Work Place & Economic Adjustment for Non-Diabetic Teachers is significantly effective compared to Diabetic Teachers. It means that, Non-Diabetic Teacher Work Place & Economic Adjustment is better compared to Diabetic Teacher Work Place & Economic

Adjustment for the component of their emotional social behavior. Mean Difference of Diabetic and Non-Diabetic Teachers for Work Place & Economic Adjustment shown in below graph.



Graph no. 1.5 Mean Plots of Work Place & Economic Adjustment of Diabetic and Non-Diabetic Teachers.

The Diabetic Teachers mean score of Overall Adjustment is 365.640 & SD is 108.768, and Non-Diabetic Teachers mean score of Overall Adjustment is 406.810 & SD is 79.842 respectively. Compare the mean score of Overall Adjustment for Diabetic and Non-Diabetic Teacher and calculated the SE.dm is 9.540 and calculated ‘t’ value is 4.315, on 98 df table value is 1.96 on 0.05 level of significance and 2.58 for 0.01 level of significance. Hence the calculated ‘t’ value is greater than the table value on 0.01 level of significance. It is concluded that the mean score of Overall Adjustment for Non-Diabetic Teachers is significantly effective compared to Diabetic Teachers. It means that, Non-Diabetic Teacher Overall Adjustment is better compared to Diabetic Teacher Overall Adjustment for the component of emotional social behavior. Mean Difference of Diabetic and Non-Diabetic Teachers for Overall Adjustment shown in below graph.



Graph no. 1.6 Mean Plots of Overall Adjustment of Education of Diabetic and Non-Diabetic Teachers.

Diabetes Mellitus has significant effect on the diabetic Teacher Adjustment i.e. Educational Adjustment, Social, Psychological and Physical Adjustment, Adjustment of Professional Relation, Personal Adjustment, Work Place & Economic Adjustment and Overall Adjustment. The non-Diabetic Teacher Adjustment is effective compared to Diabetic Teacher.

CONCLUSION AND IMPLEMENTATION

Given the observed low levels of psychosocial adjustment among diabetic teachers, it is strongly recommended to implement several key strategies. These include conducting more frequent assessments of the psychosocial adjustment of diabetic teachers, particularly those identified as being at risk. Furthermore, ensuring their regular attendance for medical check-ups at educational institutions is advisable.

Education and counseling tailored to the specific needs of diabetic teachers should also be integrated into their roles, recognizing that factors influencing psychosocial adjustment and the areas affected may vary from one teacher to another. Emphasizing the significance of diet and regular exercise in diabetes programs is another crucial step. Teachers should be addressed comprehensively, considering the bio-psychosocial aspects of their condition, and educational programs should be structured to incorporate psychosocial adjustment components.

Given that teachers who receive social support tend to exhibit better psychosocial adjustment, it is highly recommended to identify and utilize sources of social support for diabetic teachers as a means of bolstering their adjustment to the disease. Additionally, family and other sources of social support should be actively involved in the treatment, education, and monitoring processes of diabetic teachers

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