Self-Confidence Level of the Students with Diabesity in Relation to Their Academic Achievement

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Abstract:

Self-confidence is a feeling of trust of one's own powers and abilities. Education plays a vital role in the human resource development. Students' academic achievement is determined by so many factors, among them self-confidence is one. Nowadays students are facing so many health related problems, among them diabetes and obesity are so important. The present study is conducted to know the self-confidence level of the students with diabesity (Diabetic with Obesity) in relation to their academic achievement. The objectives of the study are to know the self-confidence level of the students with diabesity, to compare the self-confidence level of the students with diabesity according to their gender and residential place, to know the relationship between self-confidence and academic achievement of the students with diabesity and to compare the academic achievement of the students with diabesity according to their gender and residential place. This study has been conducted on a sample of 100 students with diabesity of B.A.Part II General, under University of Calcutta. Dr. Rekha Gupta's Self-Confidence Inventory (2013) has been used to know the self-confidence level of the students with diabesity. Descriptive Survey research method has been used for the study. Findings of the study reveal that significant levels of self-confidence has been noted, there has no significant differences of self-confidence according to gender and residential place of the students with diabesity. A moderate positive correlation has been found between self-confidence and academic achievement and no significant differences of academic achievement has been noted on the basis of gender and residential place of the students with diabesity.

Keywords: Self-confidence, Students with Diabesity, Academic Achievement

INTRODUCTION:

Health is wealth. It is not possible to achieve happiness, peace and success in life without good health. 1 in 6 people or around 1.2 billion people of the world's total population are adolescents i.e. 10-19 years

age group (WHO, 2018). In 21st century adolescent students are suffering from many physical and mental healths related problems, among them Diabetes Mellitus and Obesity are notable.

Diabetes mellitus is commonly known as diabetes. It is a chronic, metabolic disease that causes abnormal high blood sugar. There are two types of diabetes-Type 1(Insulin dependent) and Type 2 (Non-insulin dependent).

According to Cambridge Advanced Learner's Dictionary & Thesaurus obesity is 'the fact of being extremely fat, in a way that is dangerous for health'. It is a disease characterized by excessive body fat and defined by a person's body mass index (B.M.I). A person who has B.M.I. over 30 considered as Obese. Obesity increases certain diseases like high blood pressure, high cholesterol, heart disease, stroke and also diabetes.

Presently a new word 'Diabesity' has merged in medical science. Obesity with increased diabetes called diabesity. In the last decade 1 billion people of the world are affected by this disease. The term diabesity coined by C. Everett Koop (1994). Diabesity is diabetes + obesity, because of the intimate and strong relationship between obesity and diabetes Type 2 diabetes is closely associated with excess weight and obesity (Chris Kresser, 2010). An estimated 80% of Diabetes is related to Obesity (John B. Dixon and Paul E.O'Brien, 2002). Doctors as well as different experts treated obesity as the mother of all the diseases. They describe obesity and diabetes as twin diseases.

Self-confidence is one of the important factors of the students' success. When students lose their self-confidence, they also lose motivation in learning. It is an inner voice to do something. It is the key to enter the house of success. Dalai Lama (Tibetan Buddhism leader) said 'With the realization of one's own potential and self-confidence in one's ability one can build a better world.'

Review of Related Literature:

Sar, A.H., Avcu, R. and Ishiklar, A. (2010) investigated on analyzing undergraduate students' self confidence levels in terms of some variables. General purpose of this paper was to analyze undergraduate students' self confidence levels in terms of gender and departments. 168 students of Aksaray University were selected as sample of the study. Self-confidence Questionnaire was used as data collection material. t-test and One-way ANOVA techniques were used for analyzing the data. Findings of the study revealed that university students self-confidence levels showed significant difference in terms of gender and departments. Both variables affected the self - confidence levels of students notably.

Al-Hebaish, S.M. (2012) in his study on the Correlation between General Self-Confidence and Academic Achievement in the Oral Presentation Course, found a positive, significant correlation between general self-confidence and academic achievement. The study was particularly aimed at investigating the correlation between general self-confidence and academic achievement in the oral presentation course. Participants of the study were 53 undergraduate female English majors, from Taibah University. Data was collected through a General Self-Confidence Questionnaire (GSCQ) and final evaluation grades in the Oral Presentation course. SPSS was used for analyzing data. Those students, who scored high in General Self-Confidence Questionnaire (GSCQ), also had high scores in the oral achievement test.

Tripathy, M., & Srivastava, S. K. (2012) in their work to Study the Effect of Academic Achievement on the Level of Self – confidence, wanted to know the relationship between the self-confidence & academic achievement. Total no. of 100 samples was selected through Quota sampling technique from the Dev Sanskriti Vishwavidyalaya, Haridwar, (Uttarakhand). It was selected from two groups- 50 from high academic achievement and 50 from low academic achievement and they were again divided into two subgroups of 25 males and 25 females. To measure the Self-Confidence researchers used ASCI (Agnihotri's Self-Confidence Inventory). The result showed that there was significant relationship between academic achievement and the level of self-confidence of adolescents, i.e. Students with high academic achievement showed higher level of self-confidence than low academic achiever students.

Malik, U. and Yougesh, (2014) conducted a study on Effect of Self-Confidence on Academic Achievement among Senior Secondary School Students Education. A sample of 200 students from 11th class of Rohtak city was selected through random sampling technique. Agnihotri's Self Confidence Inventory (ASCI) was used to measure self confidence of school students. The data was analyzed statistically by using mean, S.D. & t-test and the study revealed that there was significant difference among academic achievement of 11th class students with high and low self-confidence.

Verma, R.K. and Kumari, S. (2016) had conducted on a sample of 300 students of Ludhiana (Punjab) to study the academic achievement of children at elementary stage in relation to their self-confidence. Multi stage random sampling technique was used. The data was analyzed statistically by using mean, S.D., t-test and correlation (r). Findings of the study revealed that significant relationship exists between self-confidence and academic achievement of elementary school students. No significant difference was found in the self-confidence of male and female elementary school students. It was also found that there exists difference in the academic achievement of elementary school students with high and low self-confidence.

Sharma, V.K. (2017) in his study Impact of Perceived Academic Achievement on Self-Confidence in Undergraduate University Students showed that high academic achievers had more self-confidence than low academic achievers. The study was conducted on a sample of 100 university going students (age group of 17-21 years) Sample were collected from Dev Sanskriti University, Haridwar (UK). Agnihotri's Self-Confidence Inventory (ASCI) constructed by Dr. Rekha Agnihotri was used as a tool. The study follows Ex post Facto Research Design to draw interface regarding relationship between study variables. To test the hypothesis independent sample t-test was applied. Result showed that there was statistically significant difference on self-confidence between students having high academic record and students having low academic record.

Verma, E. (2017) had studied on Self- confidence among university students: An empirical study. The main concern of this paper was to study the self confidence among university students in relation to their gender, locality and stream. The investigator tried to see difference in self confidence of university students in relation to their gender, locality and stream and interactional effect in self confidence among students in relation to their gender and locality. Standardized tool of self confidence by M. Basavana was used. The data were collected from University of Jammu by using simple random sampling technique. The statistical techniques used for data analysis was one-way and two-way ANOVA. The findings of the study revealed that there was significant difference in self confidence of university students in relation to their streams.

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All the studies have been done on the sample of normal people instead of students with diabesity.

Now diabetes and obesity are increasing in an incredible rate among the adolescent. Under these circumstances, it is important to know the self-confidence level and its relation to academic achievement of the under graduate students with diabesity. For this reason the study has been conducted.

Statement of the problem:

The present study aims to know the self-confidence level of the students with diabesity and analyzing the relationship between the self-confidence and academic achievement of students with diabesity of B.A. Part II general .Thus, the problem is entitled as 'Self-confidence Level of the Students with Diabesity in Relation to Their Academic Achievement'.

OBJECTIVES OF STUDY:

The objectives of the study are-

1. To know the self-confidence level of the students with diabesity.

2. To know whether the level of self-confidence differs according to the gender of the students with diabesity.

3. To know whether the level of self-confidence differs according to the residential place of the students with diabesity.

4. To know the relationship between self-confidence and academic achievement of the students with diabesity.

5. To know whether academic achievement will differ according to the gender of the students with diabesity.

6. To know whether academic achievement will differ according to the residential place of the students with diabesity

HYPOTHESES:

Keeping a view on the objectives, the following null hypotheses has been formulated-

H$_O$1: There is no significant level of self-confidence among the students with diabesity.

H$_O$2: There is no significant difference of self-confidence between Male and Female student with diabesity.

H$_O$3: There is no significant difference of self-confidence between rural and urban students with diabesity.

H$_O$4: There is no significant relationship between self-confidence and academic achievement of the students with diabesity.

H$_O$5: There is no significant difference of academic achievement between Male and Female student with diabesity.

H$_O$6: There is no significant difference of academic achievement between rural and urban students with diabesity.

Operational definition of the terms:

Self-confidence: Self-confidence is a feeling of trust of one's own powers and abilities. It is an inner belief by which person or students do something, make decisions and give their own opinions.

Students with Diabesity: Diabesity is diabetes caused by overweight or obesity. In case of students with diabesity obesity and diabetes remain in a same student. Under graduate students with type 2 diabetes are mentioned in this study.

Academic Achievement: Academic Achievement commonly measured by examinations or continuous assessment. Here academic achievement the total marks of B.A. Part I General Examination.

METHODOLOGY:

Research Design:

Survey research design of descriptive research method has been used for the study.

Sample:

A Sample of 100 students with Diabesity (Diabetic with obesity) has selected from different general degree colleges under the University of Calcutta. The study covers only the students of Part II general course (Qualifying Part I Examination) of Howrah and Kolkata districts. Purposive sampling technique has adopted for the study. The sample has categorized under two groups i.e. Gender (Male-Female) and Residential place (Rural-Urban). The details of the samples are given below-

Table 1: Distribution of the sample

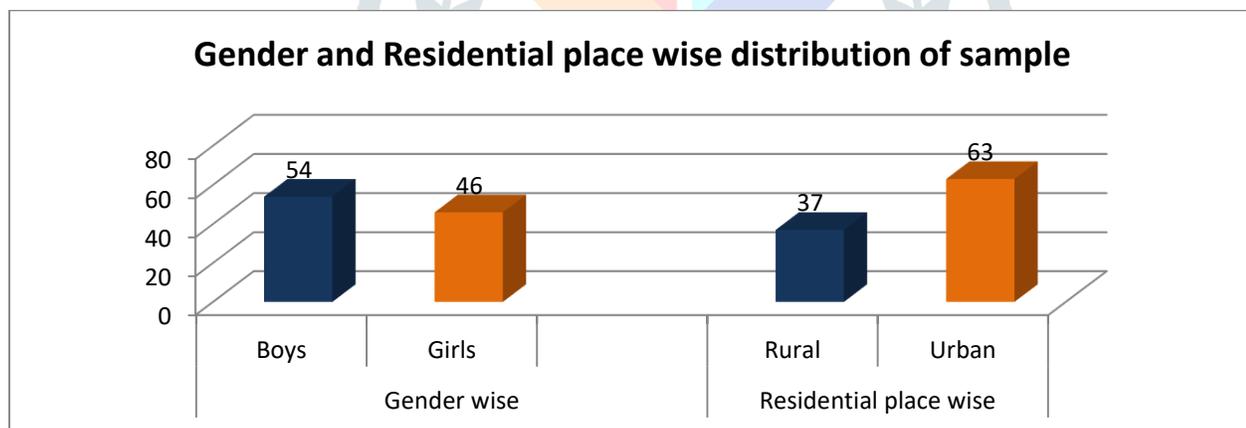| Category		No. of students with diabesity	Total
Gender wise	Male	54	100
	Female	46	
Residential place wise	Rural	37	100
	Urban	63	

Figure 1: Gender and Residential place wise distribution of sample

Tool Used:

Dr. Rekha Gupta's Self-confidence Inventory (2013) has been used to know the self-confidence level of the students with diabesity. The inventory has 56 items. Each item has two options 'Right' and 'Wrong'. The total scores of the respondents are converted into Z scores, after that Z score wise Grade and self-confidence levels are calculated. The high score indicated low elf-confidence and vice-versa. The Inventory has 7 levels of self-confidence (Extremely Low, Highly Low, Above Average Low, Average/Moderate, Above Average High, Very High and Extremely High). Reliability of the tool is measured by test-retest method.

Variables:

In this study, three types of variables are used. They are-

- *Dependent Variable:* Academic Achievement
- *Independent Variable:* Self-confidence
- *Categorical Variables:*
  - Gender: Male-Female
  - Residential Place: Rural- Urban

Statistical Techniques:

Data has been analyzed by using T test and Coefficient of Correlation.

FINDINGS:

H$_o$1: There is no significant level of self-confidence among the students with diabesity.

Table 2: Self-confidence levels of the students with diabesity

Grade	Level of significance	Total no. of students
A	Extremely Low	0(0%)
B	Highly Low	5(5%)
C	Above Average Low	23(23%)
D	Average/Moderate	49(49%)
E	Above Average High	15(15%)
F	Very High	7(7%)
G	Extremely High	1(%)
Total		**100**(100%)

Table no. 2 shows that according to self-confidence level among 100 students with diabesity no one is in grade 'A' that means no student is in Extremely Low level, 5(5%) students with diabesity are in grade 'B' i.e. Highly Low level, 23(23%) students with diabesity belong to grade 'C' i.e. Above Average Low level, most of the students with diabesity 49(49%) are in grade 'D' i.e. Average/Moderate level, 15(15%) students with diabesity belong to Above Average High level i.e. grade 'E', 7(7%) students with diabesity are in grade 'F' i.e. Very High level, and lastly, 1(%) student with diabesity belongs to grade 'G' i.e. Extremely High level. So the H$_o$1 is rejected, it may be concluded that there exists significant level of Self-confidence of the students with diabesity.

Levels of self-confidence of the students with diabesity
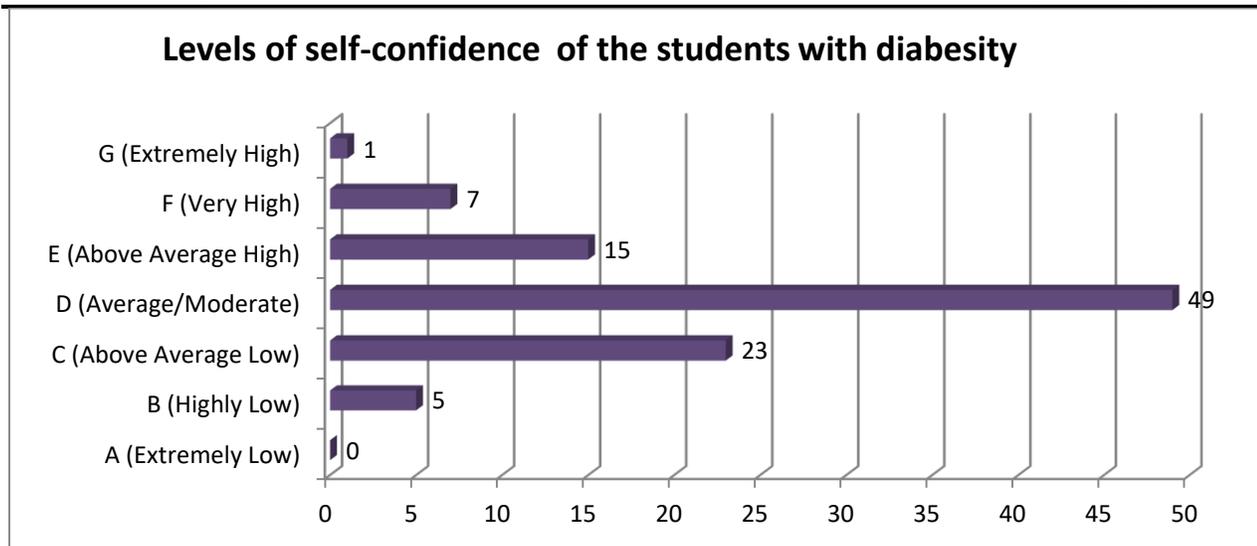
Figure 2: Overall status of self-confidence of the students with diabesity

H$_O$2: There is no significant difference of self-confidence between Male and Female student with diabesity.

Table 3: t value of self-confidence based on gender of the students with diabesity

Gender	No. of sample	Mean	SD	df	t
Male	54	0.005	0.859	98	0.11
Female	46	-0.012	0.691		

Note: SD= Standard Deviation, df= Degrees of freedom, t=Calculated value of t

Calculated value of t = 0.11

Critical values of t at 0.05 level=1.99 and 0.01 level= 2.63

Table 3 shows that, t value of self-confidence of Male and Female students with diabesity is 0.11. As it is a two tailed test the critical values for df 98 at 0.05 level is 1.99 and 0.01 level is 2.63 but calculated value of t is smaller than the critical values. So, H$_O$2 is accepted at both levels, it may be concluded that there is no significant difference of self-confidence between Male and Female student with diabesity.

Ho3: There is no significant difference of self-confidence between rural and urban students with diabesity.

Table 4: t value of self-confidence based on residential place of the students with diabesity

Residential Place	No. of sample	Mean	SD	df	t
Rural	37	-0.022	0.820	98	-0.19
Urban	63	0.009	0.765		

Note: SD= Standard Deviation, df= Degrees of freedom, t=Calculated value of t

Calculated value of t = -0.19

Critical values of t at 0.05 level=1.99 and 0.01 level=2.63

Table 4 shows that, t value of self-confidence of rural and urban students with diabesity is -0.19. As it is a two tailed test the critical values for df 98 at 0.05 level is 1.99 and 0.01 level is 2.63 but calculated value of t is smaller than the critical values. So, H_O3 is accepted at both levels, it may be concluded that there is no significant difference of self-confidence between rural and urban students with diabesity.

H$_O$4: There is no significant relationship between self-confidence and academic achievement of the students with diabesity.

Table 5: Co-efficient of correlation (r) between self-confidence and academic achievement of the students with diabesity

	Co-efficient of correlation (r)	
	Self-confidence	*Academic Achievement*
Self-confidence	1	0.70
Academic Achievement	0.70	1

Table no. 5 shows that the coefficient of correlation (r) of self-confidence and academic achievement is +0.70. So a moderate positive correlation is found which means there is a tendency for high self-confidence scores go with high academic achievement scores (and vice versa). As it is a two tailed test the critical value for df 98 at 0.05 level is 0.205 and 0.01 level is 0.267 but calculated value of r is larger than critical values. So H$_O$4 is rejected at both the levels, it may be concluded that there exists a significant relationship between self-confidence and academic achievement of the students with diabesity.

Ho5: There is no significant difference of academic achievement between Male and Female student with diabesity.

Table 6: t value of academic achievement based on gender of the students with diabesity

Gender	No. of sample	Mean	SD	df	t
Male	54	-0.09	1.02	98	-0.92
Female	46	0.10	0.97		

Note: SD= Standard Deviation, df= Degrees of freedom, t=Calculated value of t

Calculated value of t = -0.92

Critical values of t at 0.05 level=1.99 and 0.01 level=2.63

Table 6 shows that, t value of academic achievement of Male and Female students with diabesity is -0.92. As it is a two tailed test the critical value for df 98 at 0.05 level is 1.99 and 0.01 level was 2.63 but calculated value of t was smaller than the critical values. So, H$_O$5 accepted at both levels, it may be

concluded that there is no significant difference of academic achievement between Male and Female student with diabesity.

Ho6: There is no significant difference of academic achievement between rural and urban students with diabesity.

Table 7: t value of academic achievement based on residential place of the students with diabesity

Residential Place	No. of sample	Mean	SD	df	t
Rural	37	0.10	0.93	98	0.73
Urban	63	-0.06	1.04		

Note: SD= Standard Deviation, df= Degrees of freedom, t=Calculated value of t

Calculated value of t = 0.73

Critical value of t at 0.05 level=1.99 and 0.01 level=2.63

Table 7 shows that, t value of academic achievement of rural and urban students with diabesity is 0.73. As it is a two tailed test the critical value for df 98 at 0.05 level is 1.99 and 0.01 level was 2.63 but calculated value of t is smaller than the critical values. So, H_O6 accepted at both levels, it may be concluded that there is no significant difference of academic achievement between rural and urban students with diabesity.

DISCUSSION:

1. According to the self-confidence level no student with diabesity belongs to extremely low level. It is very good sign for the students but it is very disappointing that only 1(1%) student with diabesity is in extremely high self-confidence level.

2. The scores of self-confidence inventory reveal that according to the gender and residential place, no discrepancy found among the Male & Female and also the students from rural & urban. Most of the students belong to average/ moderate level of self-confidence. It is good instance for the society that there is no gender and residential place wise discrimination in terms of their self-confidence level. The study of Tripathy & Srivastava(2012) also reveals that.

3. The finding of the study also shows a positive correlation between self-confidence and academic achievement. That means high self-confidence results high academic achievement of the students with diabesity. Al-Hebaish (2012) also finds similar result to his study.

4. The study also indicates that significant differences are not found of academic achievement according to gender and residential place. Verma, R.K. and Kumari, S. (2016) also find same result in case of gender.

Limitations of the study:

1. The study covers only B.A. Part II general students under University of Calcutta. Sample size of the study is very small that is 100. This study is being carried out again with large sample size.

2. This study is limited to only the students of 18-20 years age group of humanities. Further study may be done on the students of the other educational streams of higher age group of the other university.

3. This study has been conducted on only one factor (self-confidence) related to academic achievement but some other factors that affect the academic achievement of the students may be included for further study.

Educational implications:

A high level of self-confidence increases the performance or academic achievement level of the students. The present study also indicates that there is a positive relation between self-confidence and academic achievement of the students with diabesity. So it is very important to develop the self-confidence among the students with diabesity as they are facing so many problems for their health and obesity condition in their personal and social life. Educational institutions and teachers have a great role in this field. Teachers should identify the students those who have high self-confidence and those who have not. They should help to nurture the self-confidence of the students. Here are the some strategies that may be taken by the teachers-

- Can offer praise and acknowledgment for the responses of the students with diabesity,
- Give the students the opportunity to choose which activity they want to learn,
- All the time teachers express the positive attitude to the students with diabesity,
- Encourage the students to do better according to their level,
- Arrange different co-curricular activities,
- Change the environment of the institution
- Uplift self-confidence level through individual counseling

It can be concluded that though self-confidence is a small term but it has a great impact on human life. Academic performance or achievement is influenced by so many factors like- mental ability of the child,

physical and mental health of the students, family and socio-economic condition of the students, school environment related factors etc. but among such factors self-confidence is regarded one of the important factor. Arthur Ashe (American tennis player) rightly said in this context, 'One important key to success is self-confidence. An important key to self-confidence is preparation.' So teachers, family members and students himself/herself should try to develop the self-confidence for their better success in life.

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