

# Explorative Study of the Impact of Self Confidence among Type 2 Diabetes of Hazaribag District

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## Abstract

The fear psychosis of diabetics such as cardiac panic attack, renal failure, diabetic retinopathy, blindness etc. not only demolishes one's self confidence but also distort one's healthy personality life. Pondering over these paramount important points this research was conducted to measure and analyses the impact of self confidence among diabetics. For this 200 samples from Hazaribag District were selected. Incidental cum purposive sampling technique was adopted. The samples were divided into two groups- diabetics and non-diabetics. Again the subjects were divided on the basis of gender- (No.50-male diabetic) (No .50-female diabetic) - (No.50- non diabetic male) - (No.50- non diabetic female.) Two scales namely Personal Data Sheet and Self Confidence Scale by Rekha Agnihotri were administered on these groups. Data was collected, tabulated and analyzed with the help of Mean, SDs and t.-ratio of acquired data. And it was found that t was not significant. So, it can be said that there is no difference in self-confidence between diabetics and non-diabetics. Several factor like age, well settled retirement, religiosity, and enjoying social life same as non-diabetics etc. All this essential factors enhances their self-confidence and were also found responsible for this finding.

**Keywords:** analysis; self-confidence; type 2 diabetes; non diabetics

## Introduction

### Self Confidence

The literal meaning of self-confidence is or reliance on one's powers. From this it can be deduced that self-confidence encompasses confidence in one's own abilities to perform a particular task successfully without doubt.

Self-confidence is considered one of the most influential motivators and regulators of behaviour in people's everyday lives (Bandura, 1986). A growing body of evidence suggests that one's perception of ability or self-confidence is the central mediating

construct of achievement strivings (e.g., Bandura, 1977; Ericsson et al., 1993; Harter, 1978; Kuhl, 1992; Nicholls, 1984).

Terms such as "self-confidence," "self-efficacy," "perceived ability," and "perceived competence" have been used to describe a person's perceived capability to accomplish a certain level of performance. Bandura (1977) uses the term "self-efficacy" to describe the belief one has in being able to execute a specific task successfully.

The personality pattern is a unified multidimensional structure in which the concept of self is the core or centre of gravity (Breckenridge and Vincent, 1965). Into this structure are integrated many pattern of response tendencies, known as 'traits' which are closely related to and influenced by the concept of self. Self-confidence is one such personality trait. The self is a composite of a person's thoughts and feelings, strivings and hopes, fears and fantasies, his view of what he is, what he has been, what he might become, and this attribute his personality to his worth. Self-confidence is a positive attitude of oneself to-wards one's self-concept. It is an attribute of perceived self. Self-confidence refers to a person's perceived ability to tackle situations successfully without leaning on others and to have a positive self-evaluation. In the words of Basavanna (1975), "In general terms, Self-confident refers to an individual's perceived ability to act effectively in a situation to overcome obstacles and to get things go all right." A Self-confident person perceives himself to be socially competent, emotionally mature, intellectually adequate, successful, satisfied, decisive, optimistic, independent self-reliant, self-assured, forward-moving fairly assertive and having leadership qualities.

"Self-concept" represents a composite view of oneself that is developed through evaluative experiences and social interactions. As Bandura (1986) has noted, however, a person's self-conceptions become more varied across activities with increasing experience. Thus, global measures of self-concept will not predict the intra-individual variability in a performance situation as well as self-confidence perceptions that vary across activities and circumstances. Rather, global measures of self-concept are helpful to understanding one's total outlook toward life. However, it should be noted that people's self-concepts have also been shown to be malleable in certain situations (Markus and Kunda, 1986).

"Self-esteem" is another global construct related to self-confidence and self-concept and pertains to one's personal perception of worthiness. Although self-confidence and self-esteem may be related, individuals can have one without necessarily having the other. Certain individuals may not have high self-confidence for a given activity, but still "like themselves"; by contrast, there are others who may regard themselves as highly competent at a given activity but do not have corresponding feelings of self-esteem.

## **Theoretical Perspective**

Self-efficacy theory was developed within the framework of a social cognitive theory (Bandura, 1986). Bandura poses self-confidence as a common cognitive mechanism for mediating people's motivation, thought patterns, emotional reactions, and behaviour. The theory was originally proposed to account for the different results achieved by the diverse methods used in clinical psychology for treating anxiety. It has since been expanded and applied to other domains of psychosocial functioning, including motivation, cognitive skill acquisition, career choice and development, health and exercise behavior, and motor performance.

## **Diabetes**

Diabetes is possible to become one of the most widespread medically, scientifically challenging and economically taxing significant diseases of the 21st century. And globally the developed nations and many of the developing nations are becoming subject in its epidemic proportions.

## **India and global scenario of diabetes**

The numbers of diabetic patients are speedily mounting all over the world, but the trends are different for both developed and developing countries. At some places growth rate is faster than the others. According to recent estimates, approximately 285 million people worldwide (6.6%) in the 20-79 year age group will have diabetics in 2010 and by 2030, 438 million people (7.8%) of the adult population, is expected to have diabetes. (1) The largest increases will take place in the regions dominated by developing economies. A survey conducted by World Health Organization shows that the largest number of diabetic patients in the world is in India; hence India has been accorded the status of "Diabetic Capital" of the world. In 1995 every 7<sup>th</sup> diabetic person in the world was an Indian and by 2025 every 5<sup>th</sup> diabetic person will be an Indian. In 1995 the number of diabetic patients in India was 1.94 Crore's and by 2025 this number will swell up to 5.70 Crore's the number of diabetic patients is rapidly increasing in India but what is more worrying is the factor that the younger age group is being more affected. At present 30%of the diabetic patients are in the age group of 20to 40 years.

This ubiquitous condition will have an ever-increasing impact on all aspects of medicine and public health Diabetes is the paradigm of a condition that necessitates a multidisciplinary and holistic approach to its care management and control of treatment. Primary care physicians, hospital physicians, surgeons, nurses, dieticians, psychologists and ophthalmologists etc. are all drawn into this process.

Diabetes mellitus is a chronic medical illness presenting a potential risk for multiple life-threatening medical complications, including blindness, kidney failure; wounds refusing to heal can cause amputation of body organs, heart disease, and stroke. Empirical literature suggests that tight metabolic control achieved through the adequate execution of self-care behaviours on the part of diabetic patients can

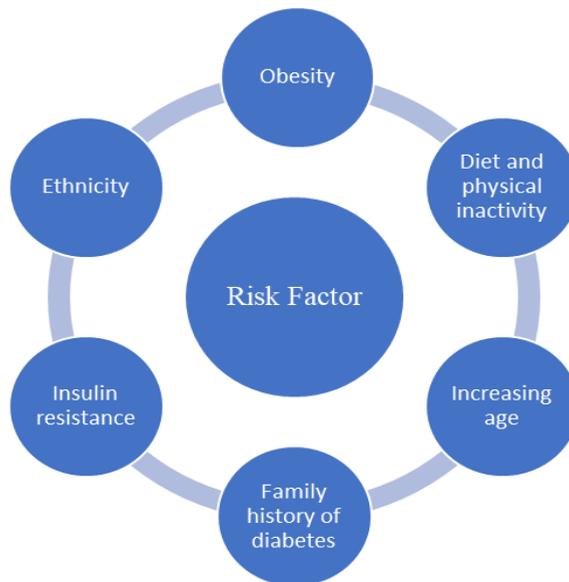
significantly reduce the risk of developing such complications. Consequently, gaining a greater understanding of factors that determine diabetes, self-care practices are of vital importance.

There are three etiologically distinctive types of diabetes, type 1 and type 2 and Gestational diabetes mellitus. Other specific types of diabetes also exist.

### **Warning signs of diabetes**

Frequent urination , Excessive thirst , Increased hunger , Weight loss , Tiredness , Lack of interest and concentration , Vomiting and stomach pain (often mistaken as the flu) , A tingling sensation or numbness in the hands or feet , Blurred vision , Frequent infections , Slow-healing wounds

### **Risk factors**



### **Management of diabetes**

Today, there is no cure for diabetes, but effective treatment exists. Good diabetes control means keeping your blood sugar levels as close to normal as possible. This can be achieved by a combination of the following:

#### **Physical Activity**

a goal of at least 30 minutes of moderate physical activity per day (e.g. brisk walking, swimming, cycling, dancing) on most days of the week.

## **Body weight**

Weight loss improves insulin resistance, blood glucose and high lipid levels in the short term, and reduces blood pressure. It is important to reach and maintain a healthy weight.

## **Healthy Eating**

Avoid food stuffs containing high volume of sugar and saturated fats, and limiting alcohol consumption.

**Avoid tobacco:** tobacco use is associated with more complications in people with diabetes.

## **Monitoring for complications**

Monitoring and early detection of complications is an essential part of good diabetes care. This includes regular foot and eye checks, controlling blood pressure and blood glucose, and assessing risks for cardiovascular and kidney disease.

## **Literature Review**

### **Self Confidence and Diabetes**

Self-confidence beliefs, defined as people's judgments of their capability to perform specific tasks, are a product of a complex process of self-persuasion that relies on cognitive processing of diverse sources of confidence information (Bandura, 1990).

*Self-confidence is the person's fire urge for optimism in the adversity of the circumstances in order to maintain the equilibrium of his rational mind without getting distracted by the negative forces. (Author)*

### **Psychological approaches and theories and their implementation specific in health scenario and Health Psychology of an Individual**

Self-efficacy theory was developed within the framework of a social cognitive theory (Bandura, 1986). Bandura poses self-confidence as a common cognitive mechanism for mediating people's motivation, thought patterns, emotional reactions, and behaviour. The theory was originally proposed to account for the different results achieved by the diverse methods used in clinical psychology for treating anxiety. It has since been expanded and applied to other domains of psychosocial functioning, including motivation, cognitive skill acquisition, career choice and development, health and exercise behaviour, and motor performance. (For reviews on specific domains, see Feltz, 1988b; Lent and Hackett, 1987; McAuley, 1992; O'Leary, 1985; Schunk, 1984a). The theory has also been found to be equally predictive cross-culturally (Earley, 1993; Matsui, 1987; Matsui and Onglatco, 1991).

Some studies that have investigated the influence of physiological or emotional states on self-confidence are equivocal (Feltz, 1982, 1988a; Feltz and Mugno, 1983; Juneau et al., 1986; Kavanagh and Hausfeld, 1986). For diving tasks, Feltz (1988a) found that

perceived autonomic arousal, rather than actual physiological arousal, significantly predicted confidence judgments. Juneau et al. (1986) found that individuals who focused on their physical stamina as they mastered increasing workloads on a treadmill judged their cardiac confidence as more robust than those who focused on the negative signs. For strength tasks, however, Kavanagh and Hausfeld (1986) found that induced moods (happiness or sadness), as measured by self-reports, did not alter confidence expectations in any consistent manner. Bandura (1988) has argued that it is people's perceived coping confidence that is more indicative of capability than their perception of their physiological arousal condition. If people believe that they cannot cope with a potential threat, they experience disruptive arousal, which may further lower their confidence judgments that they can perform successfully. Evidence for this argument comes from research that has shown that it is not the frightful cognitions they that account for anxiety symptoms, but the perceived self-confidence to control them (Kent, 1987; Kent and Gibbons, 1987).

Evidence for the effectiveness of self-confidence as an influential mechanism in human agency comes from a number of diverse lines of research in various domains of psychosocial functioning, including achievement motivation (Bandura and Cervone, 1983; Schunk, 1984a), career choice and development (Betz and Hackett, 1981), health and exercise behavior (DiClemente, 1981; McAuley and Jacobson, 1991), anxiety disorders (Bandura et al., 1982) and sport and motor performance (Feltz, 1982).

There are various psychological features that affect health behaviour. It should be realized that psychological and physical well-being are interdependent. It would be important to identify the significant psychological features because it is possible to influence them. This, in turn, would enhance health behaviour and health status. In the case of diabetes, for example, psychological features may influence metabolic control either directly via neurohormonal mechanisms or indirectly through motivation and the ability to adhere to self-care practices (Helz & Templeton 1990).

Different Psychological models have been developed, which are used to explore health behaviour in more specific form. In this research work self –efficacy theory of Bandura and other Health Psychology of thoughts are mentioned with the relevance of Diabetics and overall health point of issue of a person.

### **Self-efficacy**

The theory of self-efficacy was developed within the framework of a social learning theory, in which health is considered to be determined by behavioural, cognitive, physiological and environmental factors (Bandura 1977a). The perception of self-efficacy is crucial for human behaviour, for determining the beginning and maintenance of behaviour and for its persistence. People avoid activities that they perceive as more than they can cope with, but engage in activities that they believe they can manage. The magnitude, strength and generality of self-efficacy perceptions may vary. In other words, tasks are ordered by difficulty level (magnitude), certainty

of the ability to cope may differ (strength), and expectations may be specific to particular activities or generalized to other situations (generality). The performance of activities necessitates not only a high self-efficacy perception, but also appropriate incentives and skills. (Bandura 1977b). Self-efficacy determines the amount of expended effort and persistence when there are obstacles or aversive experiences (Bandura 1982).

Perception of self-efficacy develop on the basis of enactive attainments, vicarious experience, verbal persuasion, and physiological states related to emotional arousal. Enactive attainments, which are based on one's own experiences, are the most important determinant (Bandura 1982). Vicarious experience implies observing others and comparing oneself with other people, while verbal persuasion consist of convincing an individual by assuring him/her that he/she is able to do the behavior in question. Stressful and taxing situations cause emotional arousal, which affects the physiological state. Individuals feel somatic symptoms, which may alter the level of self-efficacy. Finally, information from all these sources is cognitively processed by the individual, and a judgement of the self-efficacy concerning a specific behaviour is formed. The perception of self-efficacy develops in the course of life: family and peers are the first important agents for developing self-efficacy, cognitive efficacy is cultivated at school, and the transition from childhood to adulthood is regarded to imply a growth of self-efficacy. Adulthood involves many demands on firm sense of self-efficacy, such as partnerships, relationships, parenthood and career. By middle age, self-perceptions have become stabilized, but self-efficacy still has to be reappraised in new situations. Especially with advancing age, when the physical capacities, sensory functions and intellectual facility diminish, self-efficacy needs to be reappraised. (Bandura 1981).

### **Self-esteem**

Self-esteem is defined as a personal, subjective judgement of worthiness, which is expressed in one's attitudes towards oneself and is conveyed to others. The level of self-esteem is related to the subject's style of adapting to environmental demands. Coopersmith (1967). An individual with high self-esteem respects himself, considers himself to be at least equal to others, recognizes his own limitations and expects to grow and improve (Rosenberg 1965), whereas an individual with low self-esteem feels helpless and inadequate (Coopersmith 1967). General self-esteem is considered a relatively stable feature, and self-appraisals are thought to be relatively constant, because people need psychological consistency (Lecky 1945). Self-esteem evidently changes over age (Macgregor *et al.* 1997), while it is lowest around the age of 12-13, and after the age of 14 it continues to improve until early adulthood (Rosenberg 1986). Adolescent males have been shown to have better self-esteem than females of the same age, particularly concerning the quality of physical attractiveness (Rosenberg 1986), and persons in the upper and middle social classes have been found to have higher self-esteem than those in the lower social groups

(Macgregor & Balding 1991). There is situational variance in self-evaluations, and self-esteem might be different in different areas (Coopersmith 1967). On the whole, the theory of self-esteem is well-known, and it has been used to analyse many different health behaviours.

A diabetic patient's self-esteem may be essential for encouraging psychological well-being, which, in turn, influences metabolic control (Bradley & Gamsu 1994). Low self-esteem has been found to contribute to depression in adults with diabetes (Bailey 1996).

Lawrance & McLeroy (1986) have concluded that the extent to which self-efficacy can be generalized between different health problems is an important outcome of health education. Previously, dental self-efficacy has been found to relate to oral hygiene practices and dental visiting (McCaul *et al.* 1985, Tedesco *et al.* 1994, Stewart *et al.* 1997) and, correspondingly, diabetes self-efficacy to diabetes self-care (Hurley & Shea 1992,

Coopersmith (1967) pointed out that the level of self-esteem is related to the way of adaptation to environmental demands, and that high self-esteem gives self-confidence in one's own ability to cope in difficult situations, which may lead to better self-care. And further, success in self-care strengthens self-esteem. This effectiveness of self-esteem should be recognized by health care professionals, because they can promote their patients' self-esteem during checkups. For this purpose, health care professionals should respect individuals and their privacy, be nonjudgmental, recognize the patients' life circumstances, and empower the patients to manage with diabetes and to solve their problems effectively (Bradley & Gamsu 1994).

## **Research methodology**

### **Aims**

To measure the impact of type 2 diabetes on self-confidence

To compare the impact of self-confidence between type 2 diabetes and non-diabetes

### **Hypothesis**

Diabetic patients will have lack of self-confidence then non-diabetic subjects. (Self-confidence is dependent upon several factors like high ego-strength, high social adjustment, high ambition and high performance. Any type of slowness in this factor affects self-confidence. Their self-confidence level is lowered than normal subjects. A disease person cannot make self-confidence stronger than normal subjects. That is why it is hypothesized that the diabetic patients will have lack of self-confidence in comparison with non-diabetic subjects.)

Scant research has been conducted on how people process multidimensional confidence information and the heuristics they use in weighting and integrating these sources of information in forming their confidence judgments (Bandura, 1986).

It was humble attempt of the researcher to invent how psychosocial factors play a key part in the recovery and rehabilitation process during illness.

### Methodology

**Sample:** 200 Samples were selected

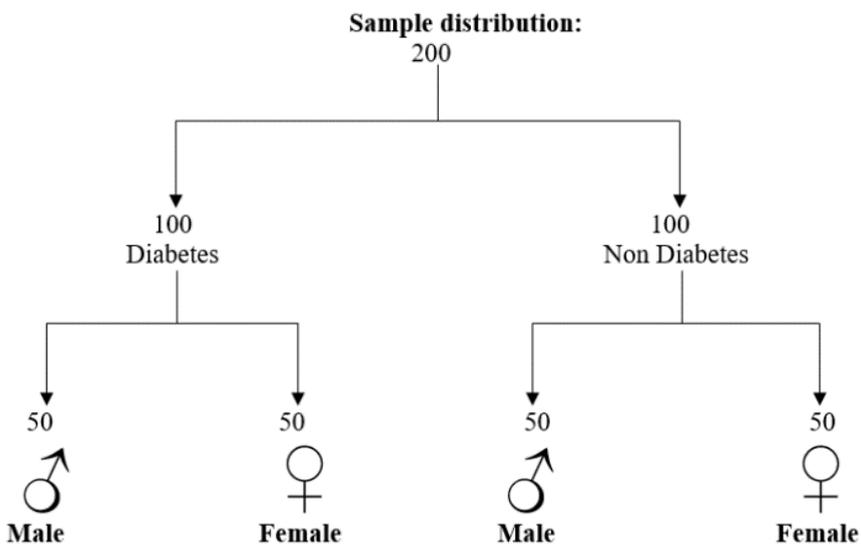
### Sample area

The sample area was Hazaribag district of Jharkhand in India

### Sample Selection

Incidental cum purposive sampling techniques was adopted because it was the most suitable method to the nature of research problem.

### Sample distribution

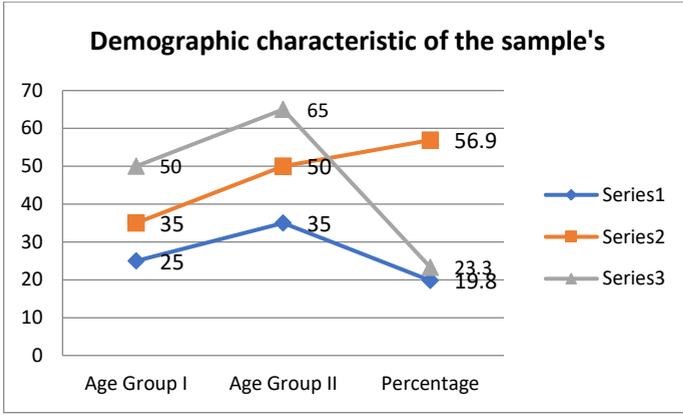


### Demographic characteristic of the samples

The sample was selected from various age groups. The age of the sample has represented in table 1.1.

**Table-1.1**

S No.	Age group	Percentage
1	25-35	19.8
2	35-50	56.9
3	50-65	23.3



The above figure shows that more than half of the subjects were of middle age that is 35-50. Less number of employees was of old age (that is 19.8).

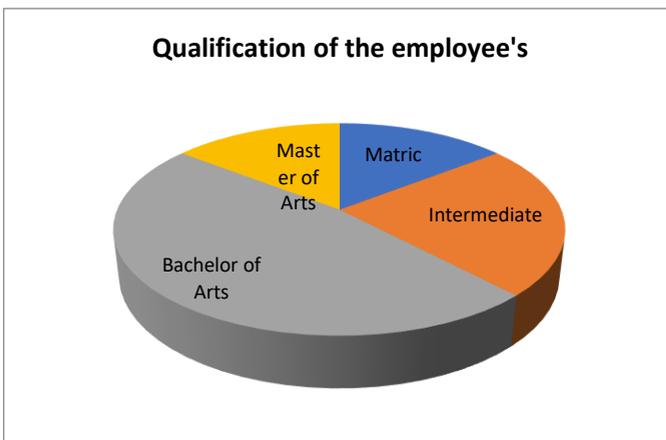
**Qualification of the sample:**

Subjects have different qualification. Some have master degree; some have graduation; some have intermediate degree and some had matriculation degree. This has represented in table 1.2.

**Table-1.2**

**(Qualification of the employees)**

Matric	Intermediate	Bachelor of Arts	Master of Arts
14.5%	23.4%	47.6%	14.5%



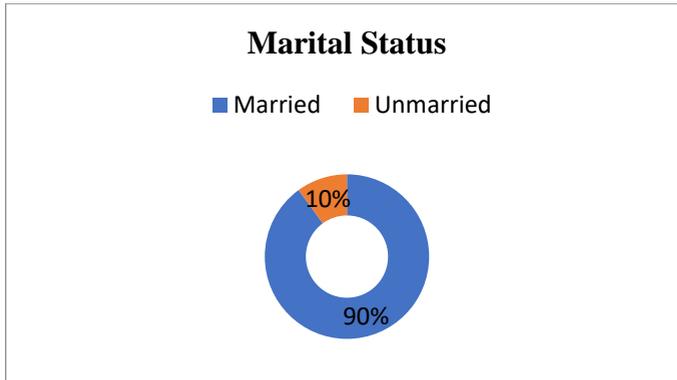
The above table shows that maximum numbers of employees were Graduate (that is 47.65)

### **Employment of the subjects:**

Samples have different type of employment – Clerk, Supervisor, Engineer, Doctor, Bank Manager, etc.

### **Marital status of the sample**

Most of the subjects were married.



The above figure indicates that 90% of the employees were married.

### **Tools used**

Pondering over above aims and objectives of the research two tools were used.

#### **1. Personal Data Sheet (PDS):**

The PDS was used to get some information about demographic variables like, name, sex, qualification, history of diabetes, name of medicine and the like. This scale was prepared by the researcher himself.

#### **Self-Confidence Inventory:**

##### **Self Confidence**

Self-confidence was assessed by Agnihotri's Self Confidence Inventory (ASCI) developed by Dr. Rekha Agnihotry.

Agnihotri's Self Confidence Inventory (ASCI) consists of 56 questions which includes items for the assessment of self-confidence.

The author has given the following classification criteria:

Raw score	Explanation
7and below	Very high Self-confidence
8-19	High Self-confidence

20-32	Average Self-confidence
33-44	Low Self-confidence
45 and above	Very low Self-confidence

### **Scoring:**

The inventory can be scored by hand. A score of one is awarded for a response indicative of lack of Self-Confidence, i.e. for making cross (X) to wrong' response to item nos. 2,7,23,31,40,41,43,44,45,53,54,55 and for making cross (X) to right' response to the rest of the items. Thus each item has a maximum score of "1" and minimum of "0" and response value of which extend from 0 - 56. Hence the lower the score, the higher would be the level of Self-Confidence and vice-versa.

### **Data Collection**

After deciding sample its location and its method of selection this researcher visited Dr. I.K. Sinha (Medical Officer I.C. DVC Hazaribag who is especially specialised for treating diabetes. The researcher contacted diabetic patients and took their confidence and consent immediately. Some patients filled the questionnaire same day and some took them to their home promising to return in next visit. In this way, the administered scale of the samples was procured and scoring was done in accordance with the manual, then data was collected and interpreted in light of standard statistical techniques.

### **Findings and discussion**

The hypothesis of this work was (diabetic patients will have low level of self-confidence than non-diabetic). To verify this hypothesis two tools were used. One was personal data sheet. Which was prepared by researcher himself and the second tool was inventory used to measure the self-confidence of the subjects. It has been developed by Rekha Agnihotry. These two scales were administered on 200 samples. This was divided into two groups diabetic and non-diabetic. These two groups two were divided. Again into two groups on the basis of gender male and female. This two scales were administered on these groups and data was collected and tabulated in table no.-1.3 , and demonstrated in Bar Graph of 1.3 , 1.4 & 1.5.

Pondering over this table 1.3, it is observed that it has three comparisons. The 1<sup>st</sup> comparison is between male diabetic and non-diabetic male. The 2<sup>nd</sup> comparison is between female diabetic and non-diabetic female. The 3<sup>rd</sup> comparison is between total diabetic and non-diabetic.

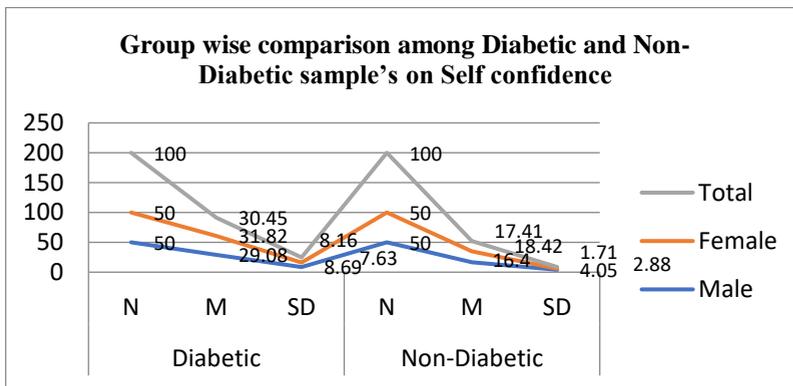
**Table no. - 1.3**

**(N, M, SD and t - ratio of diabetic and non - diabetic samples on Self-confidence)**

Group	Diabetic			Non-Diabetic			t	/p
	N	M	SD	N	M	SD		
Male	50	29.08	8.69	50	16.40	4.05	1.73	NS*
Female	50	31.82	7.63	50	18.42	1.71	1.99	NS*
Total	100	30.45	8.16	100	17.41	2.88	1.86	NS*

\* NS = Not Significant

**Group wise comparison among Diabetic and Non-Diabetic sample's on Self-confidence.**



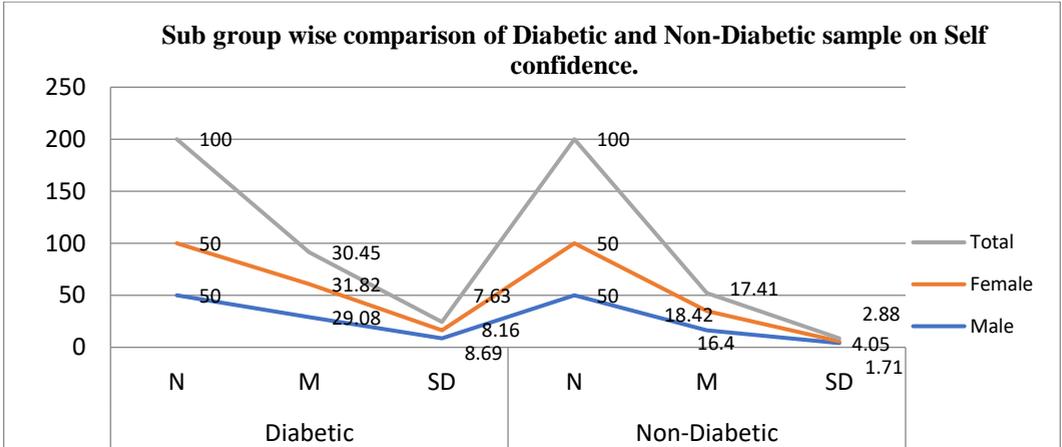
Comparison 1<sup>st</sup> shows that the 't' ratio between male diabetic and non-diabetic is 1.73. It is not significant on any level. It means male diabetic and non-diabetic do not vary on self-confidence. It can be said that male diabetic and male non-diabetic are not different on self-confidence.

**Table No. - 1.4**

**(N, M, SD and t - ratio of diabetic and non - diabetic samples on Self-confidence)**

Group	Diabetic			Non-Diabetic			t	/p
	N	M	SD	N	M	SD		
Male	50	29.08	8.69	50	16.40	4.05	1.73	NS*
Female	50	31.82	7.63	50	18.42	1.71	1.99	NS*
Total	100	30.45	8.16	100	17.41	2.88	1.86	NS*

\* NS = Not Significant



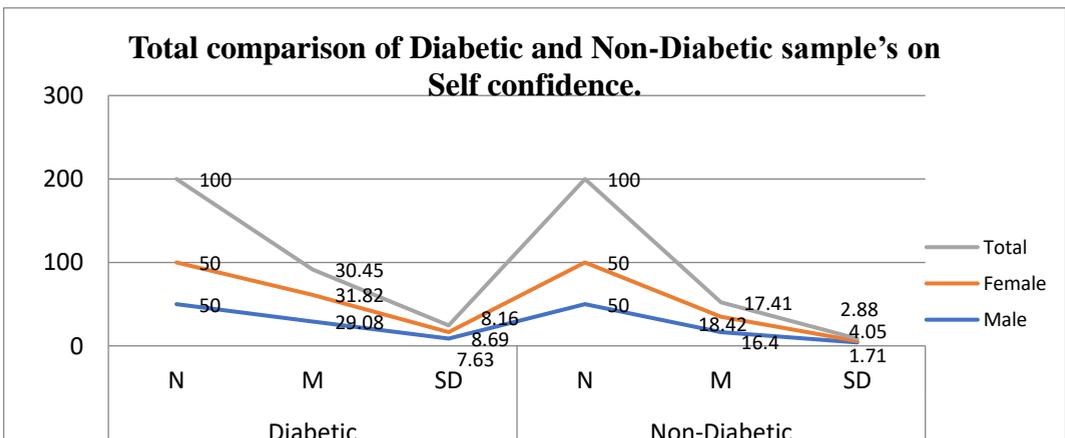
Considering second comparison, it is observed that the ‘t’ ratio between female diabetic and female non-diabetic is 1.99. Which is not significant on any level, it means both subgroups do not vary on self confidence. It means female diabetic and female non-diabetic is not different on self confidence.

**Table No.- 1.5**

**(N, M, SD and t – ratio of diabetic and non – diabetic samples on Self-confidence)**

Group	Diabetic			Non-Diabetic			t	p / $\angle$
	N	M	SD	N	M	SD		
Male	50	29.08	8.69	50	16.40	4.05	1.73	Ns*
Female	50	31.82	7.63	50	18.42	1.71	1.99	NS*
Total	100	30.45	8.16	100	17.41	2.88	1.86	NS*

\* NS = Not Significant



Considering 3<sup>rd</sup> comparison, it is found that the 't' ratio between total diabetic and non-diabetic is 1.86. Which is neither significant neither on .05 level nor .01 level. It means both groups do not vary on self-confidence. In another wards, it can be said that both group are not different on self-confidence.

Considering these three comparisons and the 't' ratio, it is observed that no 't' ratio is significant neither group wise nor non-group wise. It means diabetic and non-diabetic sample are not different on self-confidence. Thus the hypothesis which says that diabetic patients will have lack of self-confidence than non-diabetic is not accepted and null hypothesis will be accepted. So, it can be says that are not different on self-confidence.

### **Researcher's rationale about the research**

Lacking of self-confidence is the biggest hurdle in recovery aspect of an individual, other psychological and psychosocial aspect like anxiety, depressions and questions, when i will recover?, how long it will take? Etc. All this paramount important issues of Diabetes and health behavioural issues are mentioned in this study to examine health behavioural issues from different perception. Every school of thoughts, models and theories mentioned in this research work is accepted and applicable and also earlier used to analyses health behaviour and health importance and the perspectives of both diabetes and in general health care concern.

### **Concluding remarks**

#### **Self Confidence and Diabetes**

One of the measure aims of this research work was to measure the impact of diabetes on self-confidence. Two scales - Personal Data Sheet and Self Confidence scale by Rekha Agnihotri were used. These two scales were administered on 200 samples in which, 100 are diabetic and 100 are non-diabetic. Score was obtained and analysed with the help of mean, SD and t. It is found that t was not significant on any level. So, it was concluded that diabetic and non-diabetic samples did not differed on self-confidence. In other words, it can say that diabetes has no impact on self-confidence, due to several factors. One of the major factors is personal life of the subjects. The subjects have happy married life, well settled life, free from economic tension. These did not lower their self-confidence. The second major factor behind finding is better social life. Diabetic patients did not lack behind social life in comparison to normal subjects. Both enjoyed same social life. So, diabetes did not lack behind in self-confidence, since the subjects were older, this also built their self-confidence stronger. They did not fear with the side effects of diabetes like heart failure, renal failure,

diabetic retinopathy, blindness, etc. They were contented with their longer span of life. This finding makes their self-confidence stronger.

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