



# **Emotional Intelligence and Stress Tolerance of Diabetic Physical Exercising and Diabetic Nonphysical Exercising Peoples on Critics**

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## **Author's contribution**

*The sole author designed, analysed, interpreted and prepared the manuscript.*

## **Article Information**

DOI: 10.9734/JPRI/2021/v33i39B32178

### **Editor(s):**

(1) Dr. Rafik Karaman, Al-Quds University, Palestine.

### **Reviewers:**

(1) N. J. Raju, Mettu University, Ethiopia.

(2) Djefafilia Rabiaa, Research Center Scientific and Technical in Analyzes Physical, Algeria.

Complete Peer review History: <https://www.sdiarticle4.com/review-history/71227>

**Short Research Article**

**Received 20 May 2021**  
**Accepted 29 July 2021**  
**Published 31 July 2021**

## **ABSTRACT**

**Aim:** This study is an attempt to analyze and interpret diabetic nonphysical exercising and diabetic physical exercising people on the psychological aspect of emotional intelligence.

**Place and Duration of Study:** Chidambaram, Cuddalore district, Tamilnadu, India. 1 year.

**Methodology:** For this study a normative survive method was used to collect data from diabetic physical exercising and diabetic nonphysical exercising people from Chidambaram, Cuddalore district, Tamilnadu, India. This investigate is an attempt to analyse and interpret diabetic physical exercising and diabetic nonphysical exercising people on the psychological aspect of EI. The problem of this study is a comparison of on EI of diabetic physical exercising and diabetic nonphysical exercising peoples. The sample in the present study was limited to 60 nondiabetic and 60 diabetic people.

**Results:** The result shows that the 'r' value obtained from the variable emotional stability and self-development on the sample of 60 on stress tolerance of diabetic physical exercising group was identified as 0.34 and 0.35 which was significant at 0.01 this shows that here remained a positive relationship between stress tolerance with emotional stability, Stress tolerance with self-development. When emotional stability increases stress tolerance increases when self-development develops stress tolerance increases. The diabetic non-physical exercising and diabetic physical exercising group significantly differ in their stress tolerance, comparatively, the

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mean value of 73.81 for diabetic physical exercising people with the mean value of 71.79 diabetic nonphysical exercising people is less. Hence it is proved that diabetic physical exercising people have more stress tolerance than diabetic nonphysical exercising people. This indicates that comparatively diabetic physical exercising people can withstand when deprived and tolerate critics of others because diabetic physical exercising people are more stress-tolerant when compared to diabetic nonphysical exercising people. The result of the diabetic physical exercising group's 'r' value obtained from the variable EI on the sample of 60 on stress tolerant was identified as 0.25 which was significant at 0.05.

**Conclusion:** There was a positive relationship between stress tolerance with EI which specifies that when EI increases stress tolerance increases for diabetic physical exercising person's vice versa.

*Keywords: Emotional intelligence; stress tolerance; diabetic physical exercising and diabetic nonphysical exercising peoples.*

## ABBREVIATION

*EI* : Emotional Intelligence

## 1. INTRODUCTION

Diabetic Mellitus is caused due to endocrine disorder which leads to hyperglycemia because of insulin deficit, which later leads to an accumulation of glucose in the blood. Two major types of diabetics are Type1 and type2 diabetics. Type1 is an autoimmune disease and Type2 is noninsulin depended Mellitus. Indians are prone to develop at the early age of 10 to 15 years; cause of diabetes is due to physical inactiveness, sedentary lifestyle and lack of physical exercise. polyuria, polydipsia, polyphagia, weight loss and asthenia are the indication of diabetics. Psychological association with diabetics' lot of social, psychological study has been carried on how to manage with diabetics and how to recover them from diabetics; the concept of mental wellbeing is an integral part of diabetic management. Compare with general population depression is double the time more, patients treated with insulin are less aware of hypoglycaemic symptom are at a risk of developing an extreme fear of hypos, chartered by disproportionate anxiety with avoiding behaviours, following negative effect on the glycemic control. The capability of individuals to identify his particular emotions and those of others is defined as EI , distinct among diverse moods and tag all properly, custom the emotional information to director intellectual and behaviour manage and to adjust feelings to acclimatize to the surroundings or accomplish individual goals [1,2]. EI defined the aptitude, capacity or skill or in event of the trait EI model, a self-perceived ability to find, assesses and

manage the emotion of one's self or others and of the group [3]. Goleman advanced ten fundamentals of E.I and they are self awareness, empathy, self-motivation, emotional-stability, maintain -relationship, truthfulness, self-development, value orientation, commitment, altruistic - behaviour.

## 2. METHODOLOGY

For this study a normative survive method was used to collect data from diabetic physical exercising and diabetic nonphysical exercising people from Chidambaram, Cuddalore district, Tamilnadu, India. This investigate is an attempt to analyse and interpret diabetic physical exercising and diabetic nonphysical exercising people on the psychological aspect of EI. The problem of this study is a comparison of an EI of diabetic physical exercising and diabetic nonphysical exercising peoples. The sample in the present study was limited to 60 nondiabetic and 60 diabetic people.

Anukool [4]. Hyde, Sanjyot Dethé and Upinder Dhar tool are used for measuring EI developed. This scale consists of 34 items with each having 5 substitute choices, this scale has 10. The investigator made home and institutional visits and the data were collected. The instruction is given the manual strictly adhered. Before analysing the data, personal information obtained from the subjects for EI was recorded and presented. The collected data were statistically analysed by t-test was used for the comparison of means of the two sets of scores are significant or insignificant. Additionally, the correlation was implemented to analyse the relationship between the two variables. There were several indications of relationship. In this study Persons rank order correlation was used. The correlation between

different variables is found out by the method of product-moment correlation.

### 3. RESULTS

Table 1 shows the various dimensional scores for emotional dimensional intelligence, such as self-awareness, empathy, self-motivation, emotional stability, managing the relationship, integrity, self-development, value orientation, commitment, and altruistic which collectively accesses the EI. Since the critical value of F is 4.00 for (1 and 118) and the obtained R-ratio value of 14.08, 52.96, 3.30, 5.02, 75.45, 26.57, 7.58, 35.96, 33.75, for Self-awareness, Emotional stability, Managing relationship,

integrity, value orientation, commitment, altruistic is larger than critical value so it is decided that there is a substantial change among the diabetic physical exercising and diabetic nonphysical exercising group in all the dimensions except in the self-development because the obtained value of -1.40 is lesser than the critical value, so there was not at all significant difference found among the diabetic physical exercising and diabetic nonphysical exercising group in the dimension of self-development. And overall, in EI, the obtained r ratio of 3.80 was greater than the critical value so there was a significant difference found between the diabetic physical exercising and diabetic nonphysical exercising group on EI.

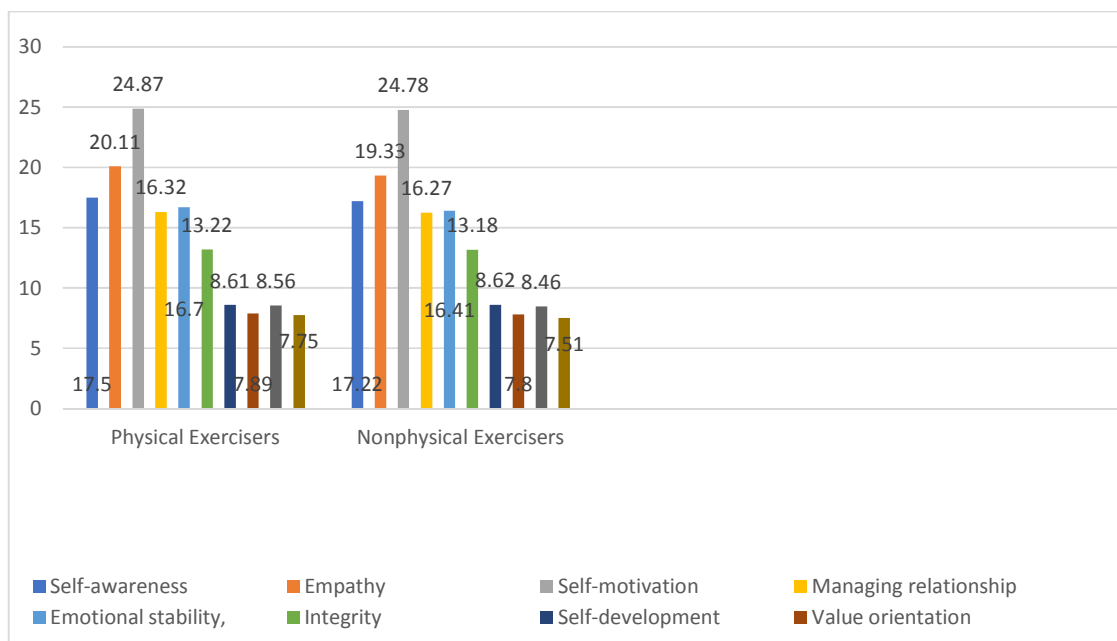
**Table 1. Presentation the Information and the Outcome of Diabetics Physical Exercising and Diabetic Nonphysical Exercising for Various Dimensions of EI**

Variables	Diabetic	Number	Mean	Standard deviation	'r' - Value	Significant
Self-awareness	Physical Exercisers	60	17.57	0.06	14.08*	0.00
	Nonphysical Exercising	60	17.22	0.17		
Empathy	Physical Exercisers	60	20.11	0.58	52.96*	0.00
	Diabetic	60	19.33	0.17		
Self-motivation	Physical Exercisers	60	24.87	0.19	3.30*	0.02
	Nonphysical Exercisers	60	24.78	0.02		
Emotional stability	Physical Exercisers	60	16.32	0.01	5.02*	0.00
	Nonphysical Exercisers	60	16.27	0.75		
Managing relationship	Physical Exercisers	60	16.70	0.01	75.45*	0.00
	Nonphysical Exercisers	60	16.41	0.02		
Integrity	Physical Exercisers	60	13.22	0.04	26.57*	0.00
	Nonphysical Exercisers	60	13.18	0.08		
Self-development	Physical Exercisers	60	8.61	0.61	-1.40	0.30
	Nonphysical Exercisers	60	8.62	0.33		
Value orientation	Physical Exercisers	60	7.89	0.10	7.58*	0.00
	Nonphysical Exercisers	60	7.80	0.88		
Commitment	Physical Exercisers	60	8.56	0.01	35.96*	0.00
	Nonphysical Exercisers	60	8.46	0.01		

Variables	Diabetic	Number	Mean	Standard deviation	'r' - Value	Significant
Altruistic behaviour	Physical Exercisers	60	7.75	0.02	33.75*	0.00
	nonphysical Exercisers	60	7.51	0.04		
EI	Physical Exercisers	60	142.00	0.11	3.80*	0.00
	Nonphysical Exercisers	60	139.42	5.17		

**Table 2. Showing the result on the basis of diabetic physical exercising and diabetics nonphysical exercising people for the variable stress tolerance**

Stress Tolerance	Diabetics	Mean	S.D	t. Value	LS
Stress Tolerance	Physical Exercisers	73.81,	0.61	25.86*	0.05
	NonPhysical Exercisers	71.79	0.17		



**Fig. 1. Presentation the mean value of diabetics physical exercising and diabetic nonphysical exercising peoples**

Diabetic physical exercising and diabetic nonphysical exercising group significantly differs in their stress tolerance, because the t- value of 25.86 is significant in 0.05 level. The mean value of 73.81 for diabetic physical exercising people and the mean value of 71.79 for diabetic nonphysical exercising people was less. This indicates that diabetic physical exercising people have more stress tolerance than diabetic nonphysical exercising people. This also indicates that Comparatively diabetic physical

exercising people can withstand when deprived and tolerate critics of others because non diabetic physical exercising people are more stress-tolerant compared to diabetic nonphysical exercising people.

Correlation between various dimensions of EI on stress tolerance of diabetic physical exercising people Correlation under this study was estimated with Pearson's Product moment method Correlation between various dimensions

of EI on stress tolerance of diabetic physical exercising people is shown in Table 3.

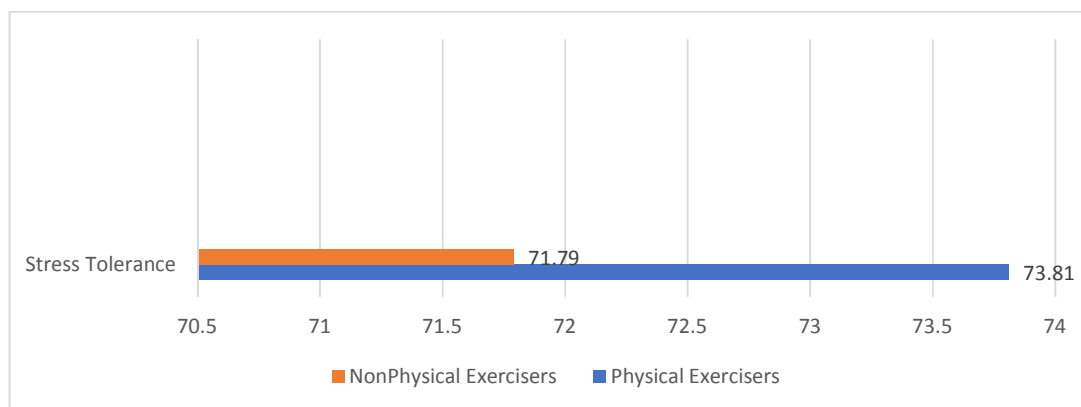
The result of from (Table 3) shows that the 'r' value obtained from the variable emotional stability and self-development on the sample of 60 on stress tolerance was identified as 0.34 and 0.35 which was significant at 0.01 this shows that there was a positive relationship between stress tolerance and emotional stability with Stress tolerance and self-development. This show that when emotional stability increases stress tolerance increases, Self-development occurred stress tolerance increases.

The 'r' values of 0.04 self-awareness, 0.56 empathy, 0.10 self-motivation, 0.40 managing relationship, 0.01, integrity, 0.009 value

orientation,0.20 commitment,0.20altruism, and 0.007 EI are found to be statistically insignificant so this reveals that above mentioned dimensions do not have any relationship with stress tolerance in diabetic nonphysical exercising people.

Table 4 showing the Correlation results of non-diabetic physical exercising people for various dimensions of EI and Stress tolerance.

The result of from (Table 4) shows that the 'r' value obtained from the variable EI on the sample of 60 on stress tolerance was identified as 0.25 which was significant at 0.05 this shows that there was a positive relationship between stress tolerance and EI This show that when EI increases stress tolerance increases for diabetic physical exercising people vice versa.



**Fig. 2. Showing the mean value of diabetic physical exercising and diabetics nonphysical exercising people for the variable stress tolerance**

**Table 3. Showing the Correlation results of diabetic nonphysical exercising people for various dimensions of EI and Stress tolerance**

		Stress Tolerance
1	Self-awareness	0.04
2	Empathy	0.56
3	Self-motivation	0.10
4	Emotional stability	0.34**
5	Managing relationship	0.40
6	Integrity	0.01
7	Self-development	0.35**
8	Value orientation	0.009
9	Commitment	0.20
10	Altruistic behaviour	0.20
11	EI	.007

\*\* Correlation Coefficient is significant at 0.01 level.

**Table 4. Showing the Correlation results of diabetic physical exercising people for various dimensions of EI and Stress tolerance**

		<b>Stress Tolerance</b>
1	Self-awareness	0.04
2	Empathy	0.07
3	Self-motivation	0.18
4	Emotional stability	0.10
5	Managing relationship	0.11
6	Integrity	0.07
7	Self-development	0.17
8	Value orientation	0.17
9	Commitment	0.05
10	Altruistic behaviour	0.10
11	EI	0.25*

\* Correlation Coefficient is significant at 0.05 level.

#### 4. DISCUSSION

The results of this study showed the score of EI is connected with apparent stress in the experimented subjects that stated that those folks having higher level of EI had higher levels of stress tolerance [5-6]. Findings of current study in line with the findings, with, which confirmed that people who are EI professed had better stress tolerance [7,8,9]. Ample of studies reported that physical Exercise is the best way to be projected on the EI once equated to gender, over-all mood, over-all health and psychological health. Correspondingly, the subscales of adaptable and using emotion were found expressively dissimilar once associated with physical activity group studies supported the relationship between the level of EI and [10]. Exercise training generally causes positive psychological and communal adjustments.

Al Sudani et al. [11] one more study uncovered the detail that has been associated with avoidance, task-oriented coping, social changes with EI is possible through physical exercise [12]. WHO found more vicarious behaviour in persons through higher physical exercise levels. Though, this research is in line with the results concerning the managing relation [13]. Consistent physical activity shown development in psychological wellbeing and self-esteem in diabetic patients [14]. Exercise helps in changing the mood. In line with (NCHPAD) [15]. Humans who participate or practice regular physical activity will not be easily depressed. Physical exercise is the determine way to upsurge stress tolerance and assistances to uphold a sense of emotional wellbeing [7]. In line with diabetes daily.com (2007) overall health that is mental, physical and social wellbeing can be developed through physical exercises.

#### 5. CONCLUSION

There was a positive relationship between stress tolerance with EI which specifies that when EI increases stress tolerance increases for diabetic physical exercising person's vice versa Physical exercises has increased the EI [16]. Stress is one of the primary causes for most of the ailments. So, it is very essential to practice minimum of 45 minutes of exercise which keeps away from stress and ailments.

#### CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the authors.

#### ETHICAL APPROVAL

It is not applicable.

#### COMPETING INTERESTS

Author has declared that no competing interests exist.

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