IMPACT OF CHRONIC AUTOIMMUNE DISEASES ON SELF EFFICACY

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ABSTRACT

Introduction: Chronic diseases affect millions of people worldwide and can have serious consequences on their physiology, social life, and mental health. The majority of autoimmune diseases are chronic, but many of them are treatable. Despite extensive research on the physical effects of chronic illnesses, the impact on a person's intrapersonal relationship has largely gone unnoticed. A person's relationship with self includes aspects such as self-esteem, self-image, and self-efficacy. A person's sense of self may be put to the test by a chronic illness, which may give rise to unpleasant feelings and compromise their general well-being. These detrimental effects may exacerbate the physical signs and symptoms of the illness, starting a dangerous cycle that may be challenging to break.

Objective: The purpose of this study is to point out the impact on self-efficacy of individuals with chronic autoimmune diseases like diabetes, rheumatoid arthritis, thyroid, PCOD, asthma, etc so that appropriate interventions may be created to enhance their quality of life.

Methodology: This study will involve a quantitative approach with a cross-sectional design. Data will be obtained from 20 subjects of the age demographic 15-50 years who will consensually fill out a Google form with close-ended questions. Cross-tabulation and trend analysis will be used to examine ad draw conclusions from the data. Some of the keywords in this study will include well-being, self-efficacy, impact, prolonged treatment, abilities, and diagnosis.

Discussion: the study outcomes will provide a clear contrast in the self-efficacy of individuals pre and post-diagnosis of their respective chronic autoimmune diseases. A person's overall well-being and relationship with self are inevitably impacted by their chronic illness which generates negativity and hence a further decline in their quality of life. It is crucial for healthcare professionals to comprehend this in order to develop efficient interventions to enhance their well-being.

INTRODUCTION

The immune system is the body's defence system against infection. Its intricate network of cells, organs, proteins, and tissues allows it to defend the body against bacteria, viruses, parasites, and other pathogens. Memory cells are types of white blood cells (B-lymphocytes and T-lymphocytes) that record every microbe the immune system has ever defeated. This means that if the microbe re-enters the body, it can recognize and destroy it quickly before it can multiply and make a person ill. A fully functional immune system can tell the difference between healthy tissue and foreign substances. If it detects an undesirable substance, it will launch an immune response, which is a complex attack designed to protect the body from invaders. It also detects and eliminates dead and faulty cells.

In autoimmune diseases, the immune system incorrectly targets healthy cells rather than pathogens or faulty cells. It can't tell the difference between healthy and unhealthy cells and tissue. Researchers and doctors aren't sure what causes autoimmune diseases. Genetics, diet, infections, and chemical exposure may all play a role. According to one theory, certain microorganisms (such as bacteria or viruses) or drugs may cause changes that confuse the immune system. This may occur more frequently in people who have genes that predispose them to autoimmune disorders. There are over 100 different types of autoimmune diseases known till date. Some of the common ones are diabetes, Rheumatoid arthritis (RA), Multiple sclerosis, Psoriasis/psoriatic arthritis, Systemic lupus erythematosus (SLE), Addison's disease, Graves' disease, Celiac disease, etc. Asthma, diabetes, cancer, and organ failure are all examples in children. The majority of autoimmune diseases are chronic, many of them are not treatable but can be controlled with medication. Autoimmune disorders can cause fluctuating symptoms. A chronic illness is defined as "a long-lasting condition that can be controlled but not cured" (University of Michigan Centre for Managing Chronic Disease, 2011). Chronic diseases are defined broadly as conditions that last 6 months or longer and require ongoing medical attention, limit daily

activities, or both. Chronic diseases may never go away and can cause destruction in the life of the patient in a variety of ways. Chronic illnesses have disease-specific symptoms, but they can also cause invisible symptoms such as pain, fatigue, and mood swings. Pain and exhaustion may become a regular part of their day. Along with the illness, the patient most likely has things they need to do to take care of themselves. Maintaining their health becomes a task that may also cause stress. Physical changes caused by the disease may have an impact on their appearance. These changes have the potential to turn a positive self-image into a negative one and give rise to self-doubt. They may withdraw from friends and social activities if they do not feel good about themselves. Depression and anxiety are common complaints among people with chronic conditions, but they are extremely treatable. However, some people have more difficulty adjusting and coping. Adjustment issues can arise at the time of diagnosis or later as a result of the chronic stress of living. Chronic illness can also have an impact on the ability to work. To deal with morning stiffness, decreased range of motion, and other physical limitations, they may need to change the way they work. People with it may face financial difficulties if they are unable to work.

Albert Bandura, a psychologist, defines self-efficacy as people's belief in their ability to control their functioning and events in their lives. An individual's self-efficacy refers to their confidence in their ability to carry out the behaviors required to produce a particular performance achievements (Bandura, 1977, 1986, 1997). The belief in one's capacity to exert control over one's own motivation, behavior, and social environment is known as self-efficacy. The goals for which people strive, the amount of effort put forward to achieve goals, and the likelihood of achieving particular levels of behavioral performance are all influenced by these cognitive self-evaluations. Self-efficacy beliefs, unlike traditional psychological constructs, are hypothesized to differ depending on the domain of functioning and the circumstances surrounding the occurrence of the behavior. Self-efficacy requires determination and

perseverance, as it aids in overcoming obstacles that would otherwise prevent one from utilizing one's innate abilities to achieve goals (Kolbe, K.2009).

HYPOTHESIS

Long-term treatment and medication use can have an impact on a person's physical and psychological well-being. Daily competition and collaboration with healthy people can cause self-doubt and a lack of confidence in one's potential. Patients of chronic autoimmune diseases might experience exhaustion or burnout and eventually give up on their desire to advance and develop in life. People with a chronic autoimmune disease would have the will to excel in their respective fields but due to their physical limitations, they may hold themselves back from attaining their potential.

METHODOLOGY

The General Self-Efficacy Scale (GSES) standardised test was included in the google form. The data will be examined and conclusions drawn using trend analysis and cross-tabulation.

QUESTIONNAIRE

General Self-Efficacy Scale (GSE)

	Not at all true	Hardly true	Moderately true	Exactly true
1. I can always manage to solve difficult problems if I try hard enough	☐	☐	☐	☐
2. If someone opposes me, I can find the means and ways to get what I want.	☐	☐	☐	☐
3. It is easy for me to stick to my aims and accomplish my goals.	☐	☐	☐	☐
4. I am confident that I could deal efficiently with unexpected events.	☐	☐	☐	☐
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	☐	☐	☐	☐
6. I can solve most problems if I invest the necessary effort.	☐	☐	☐	☐
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	☐	☐	☐	☐
8. When I am confronted with a problem, I can usually find several solutions.	☐	☐	☐	☐
9. If I am in trouble, I can usually think of a solution	☐	☐	☐	☐
10. I can usually handle whatever comes my way.	☐	☐	☐	☐

RELIABILITY

About the scale: The General Self-Efficacy Scale (GSE) was later created by Jerusalem and Schwarzer which was developed in German in 1979. It later was adapted into 26 other languages by a various number of co-authors and was originally twenty items but was reduced to 10 in 1981. The General Self-Efficacy Scale (GSE)'s primary objective is for participants to take the test and provide truthful responses to its 10 item questions. They determine their level of self-efficacy based on how highly they rate themselves. The scale, which is typically administered on an individual's behalf, consists of ten items and takes, on average, four minutes to complete. It is more of a questionnaire than a test. Answers to each question range from one to four, with one representing not at all true, two representing hardly true, three representing somewhat true, and four representing exactly true. Higher the test score, higher the self efficacy.

Internal reliability for GSE = Cronbach's alphas between .76 and .90

VALIDITY

Correlations exist between the General Self-Efficacy Scale and feelings of optimism and job satisfaction. For anxiety, burnout, stress, complaints about one's health, and depression, negative coefficients were discovered. Finding the sum of each item results in the final score.

SCORING

The total score is determined by adding the sum of all items. The total score for the GSE ranges between 10 and 40, with a higher score indicating greater self-efficacy.

	Not at all true	Hardly true	Moderately true	Exactly true
All questions	1	2	3	4

DEMOGRAPHIC DETAILS

Data is obtained from 20 subjects of the age demographic 15-50 years who will consensually fill out a Google form with close-ended questions. The subjects include both males and females suffering from a variety of chronic autoimmune diseases which include diabetes, ashtma, Rheumatoid arthiritis, vascularitis, etc
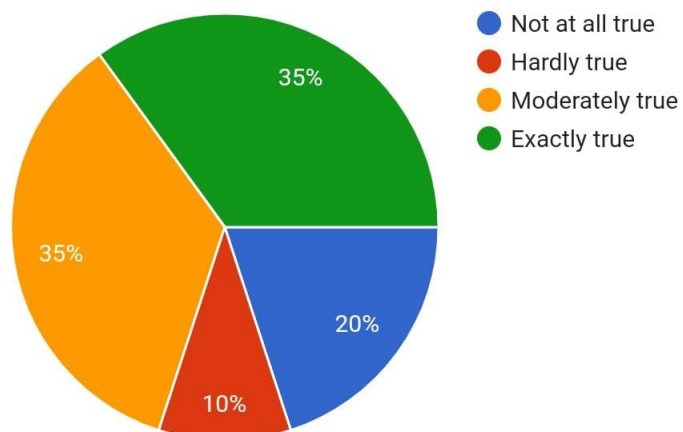
Age

Legend:
- 15-20
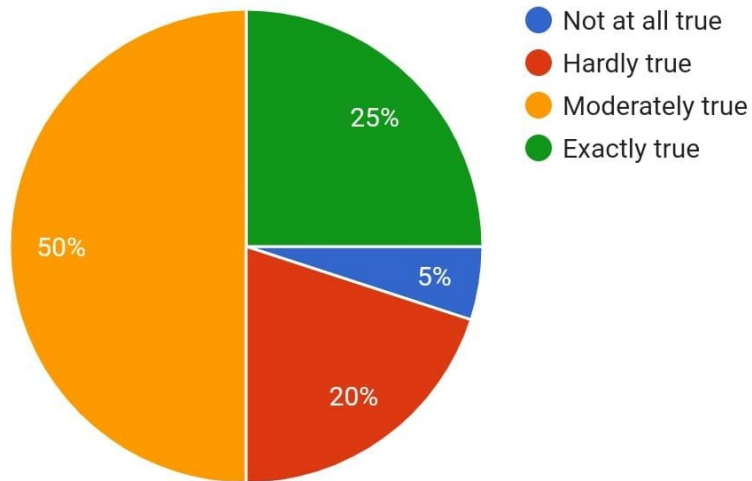- 20-25
- 25-30
- 30-35
- 35+

45.5%
27.3%
24.2%
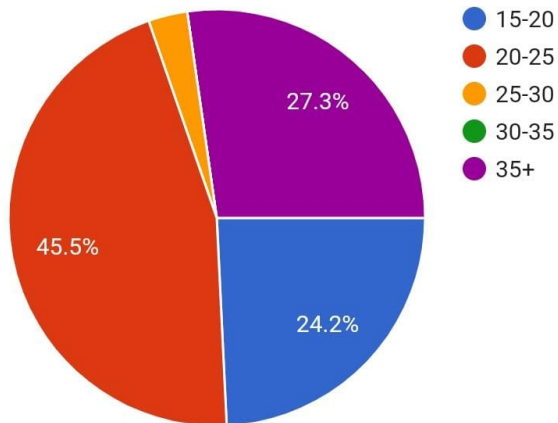
OBSERVATIONS

.I can always manage to solve difficult problems if I try hard enough

20 responses

Legend:
- Not at all true
- Hardly true
- Moderately true
- Exactly true

35%
35%
20%
10%

if someone opposes me, I can find the means and ways to get what I want.

20 responses

- Not at all true
- Hardly true
- Moderately true
- Exactly true

25%
5%
50%
20%

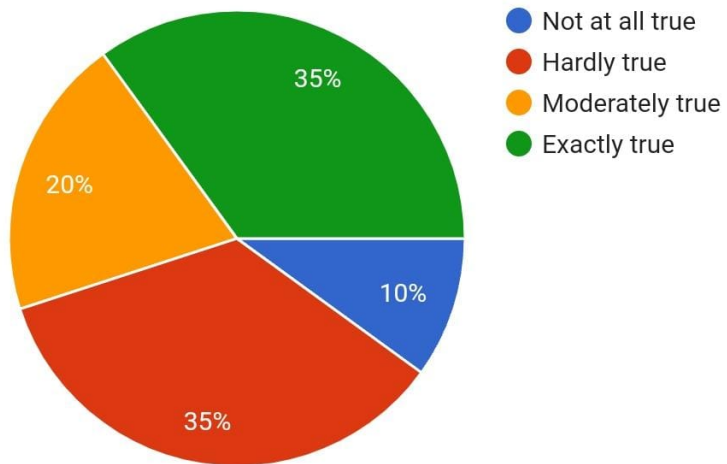## It is easy for me to stick to my aims and accomplish my goals. (Without trying really hard)

20 responses

- Not at all true
- Hardly true
- Moderately true
- Exactly true

30%
20%
35%
15%
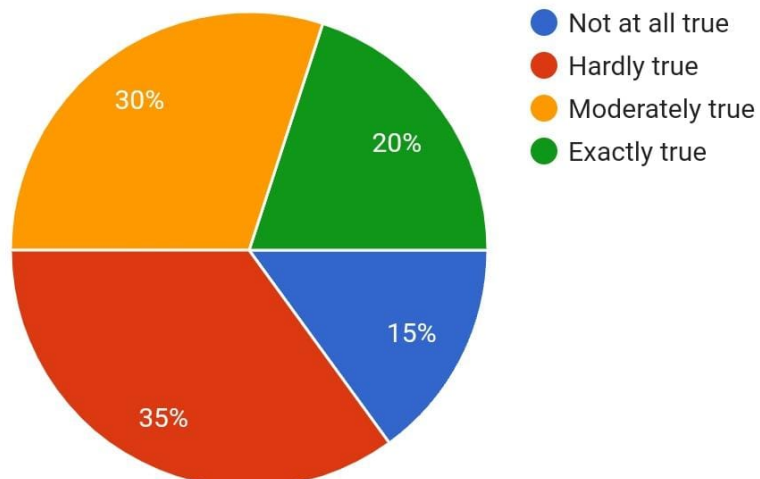
I am confident that I could deal efficiently with unexpected events.

20 responses

- Not at all true
- Hardly true
- Moderately true
- Exactly true

35%
20%
10%
35%

Thanks to my resourcefulness, I know how to handle unforeseen situations.

20 responses

- Not at all true
- Hardly true
- Moderately true
- Exactly true

30%
50%
20%
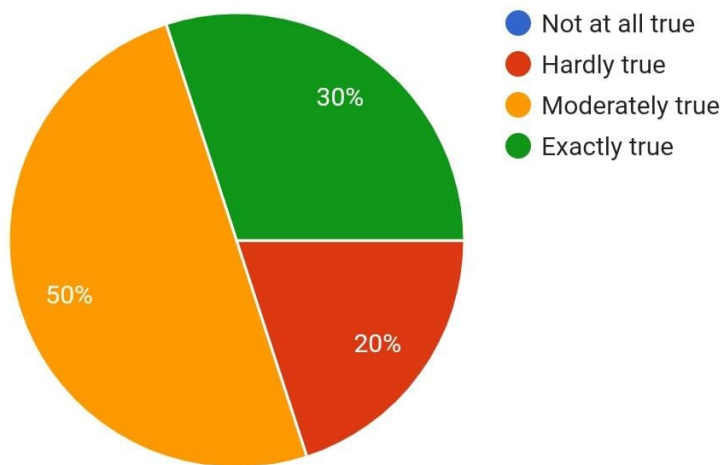
I can solve most problems if I invest the necessary effort.

20 responses

- Not at all true
- Hardly true
- Moderately true
- Exactly true

35%
5%
60%
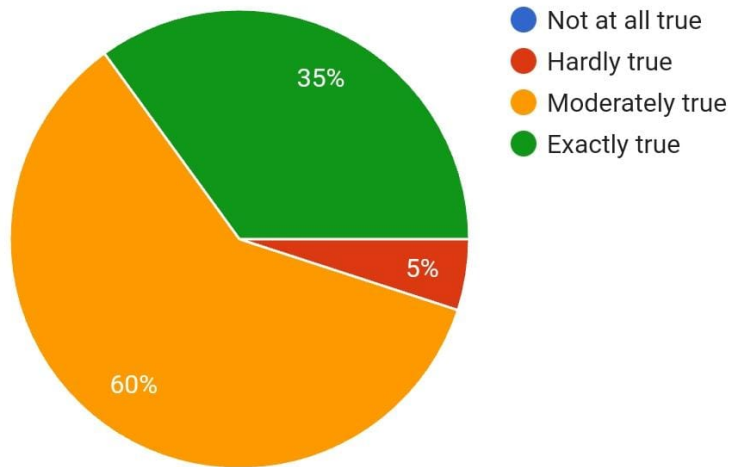
I can remain calm when facing difficulties because I can rely on my coping abilities.

20 responses

- Not at all true
- Hardly true
- Moderately true
- Exactly true

30%
35%
10%
25%
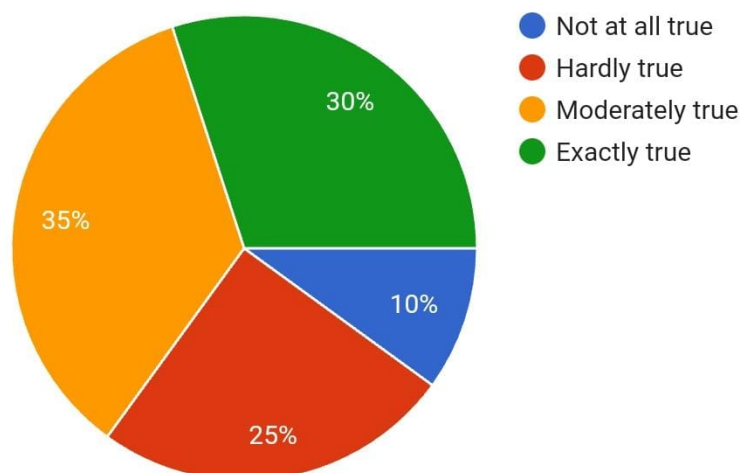
When I am confronted with a problem, I can usually find several solutions

20 responses

- ● Not at all true
- ● Hardly true
- ● Moderately true
- ● Exactly true

25%
55%
20%
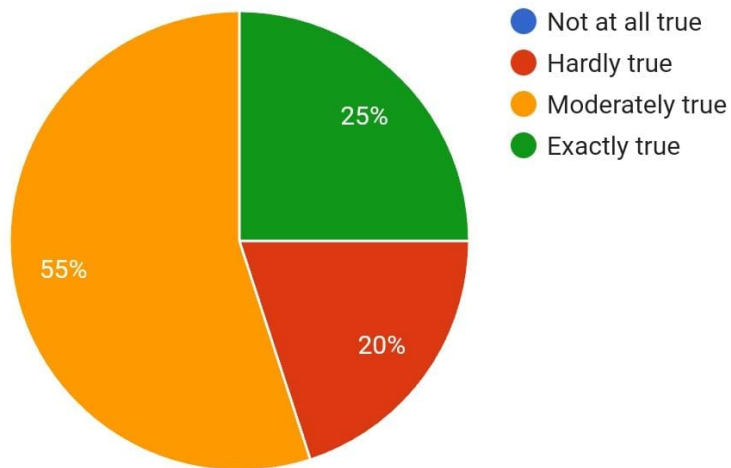
If I am in trouble, I can usually think of a solution

20 responses

- ● Not at all true
- ● Hardly true
- ● Moderately true
- ● Exactly true

40%
60%
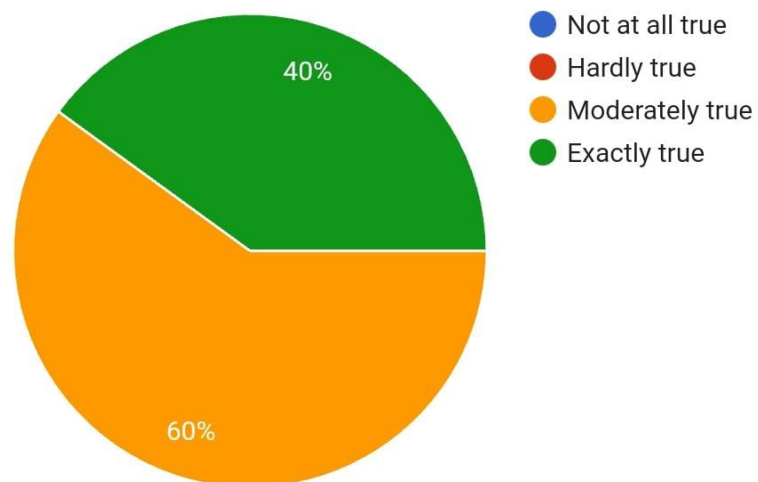
I can usually handle whatever comes my way. (Without putting any pressure on myself)

20 responses

- Not at all true
- Hardly true
- Moderately true
- Exactly true
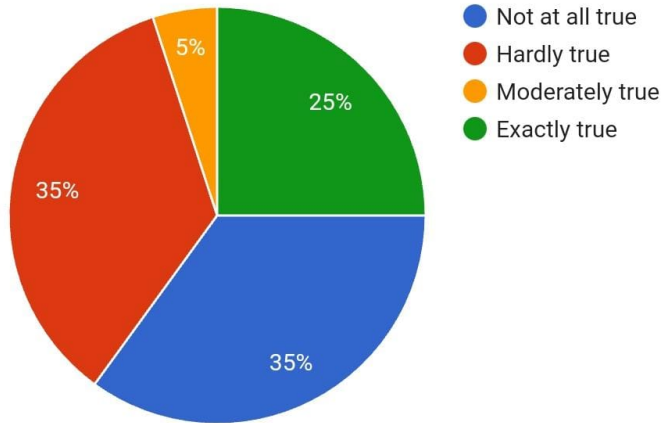
S No.	Age (in years)	Occupation	Disease	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total Score
1	20-25	Student	Thyroid	Exactly true	Exactly true	Moderately true	Exactly true	Exactly true	Moderately true	Moderately true	Exactly true	Exactly true	Exactly true	37
2	15-20	Student	chronic sinusitis, fibromyalgia	Moderately true	Moderately true	Not at all true	Hardly true	Hardly true	Moderately true	Not at all true	Moderately true	Moderately true	Not at all true	22
3	35+	Unemployed	Diabetes	Exactly true	Moderately true	Moderately true	Exactly true	Exactly true	Moderately true	Hardly true	Moderately true	Exactly true	Hardly true	32
4	35+	Employed	Takayasu's arteries	Moderately true	Moderately true	Hardly true	Hardly true	Moderately true	Moderately true	Moderately true	Moderately true	Moderately true	Moderately true	28
5	35+	Unemployed	Diabetes mellitus	Exactly true	Moderately true	Exactly true	Exactly true	Exactly true	Exactly true	Moderately true	Exactly true	Exactly true	Exactly true	38
6	15-20	Student	Thyroid	Not at all true	Exactly true	Exactly true	Moderately true	Moderately true	Exactly true	Exactly true	Exactly true	Moderately true	Hardly true	32
7	20-25	Student	Thyroid	Not at all true	Moderately true	Exactly true	Moderately true	Moderately true	Exactly true	Exactly true	Moderately true	Exactly true	Hardly true	31
8	15-20	Student		Moderately true	Not at all true	Not at all true	Moderately true	Hardly true	Moderately true	Hardly true	Moderately true	Moderately true	Not at all true	20
9	20-25	Student	Takayasu's arteries	Moderately true	Moderately true	Hardly true	Exactly true	Moderately true	Exactly true	Exactly true	Moderately true	Moderately true	Hardly true	31
10	35+	Freelancer		Exactly true	Exactly true	Exactly true	Exactly true	Exactly true	Exactly true	Exactly true	Exactly true	Exactly true	Exactly true	40
11	15-20	Student	Thyroid	Exactly true	Exactly true	Moderately true	Exactly true	Exactly true	Exactly true	Exactly true	Exactly true	Exactly true	Exactly true	38
12	35+	Self employed	Diabetes	Exactly true	Exactly true	Not at all true	Exactly true	Exactly true	Exactly true	Moderately true	Moderately true	Exactly true	Exactly true	38
13	20-25	Student	Alopecia	Exactly true	Hardly true	Hardly true	Exactly true	Moderately true	Exactly true	Hardly true	Exactly true	Hardly true	Hardly true	30
14	20-25	Self employed	Asthma	Not at all true	Hardly true	Hardly true	Not at all true	Moderately true	Hardly true	Hardly true	Hardly true	Moderately true	Not at all true	19
15	20-25	Self employed	Diabetes	Hardly true	Hardly true	Hardly true	Not at all true	Moderately true	Moderately true	Moderately true	Moderately true	Moderately true	Hardly true	24
16	35+	Unemployed	Asthma	Not at all true	Moderately true	Moderately true	Hardly true	Moderately true	Moderately true	Not at all true	Hardly true	Moderately true	Not at all true	22
17	20-25	Student	Diabetes	Moderately true	Moderately true	Hardly true	Hardly true	Moderaetely true	Moderately true	Moderately true	Hardly true	Moderately true	Not at all true	25
18	35+	Freelancer	Diabetes and thyroid	Moderately true	Hardly true	Hardly true	Hardly true	Moderately true	Moderately true	Hardly true	Moderately true	Moderately true	Not at all true	23
19	20-25	Student	Migraine	Moderately true	Moderately true	Hardly true	Hardly true	Moderately true	Moderately true	Moderately true	Hardly true	Moderately true	Not at all true	25
20	20-25	Student	PCOD	Hardly true	Moderately true	Moderately true	Hardly true	Hardly true	Moderately true	Moderately true	Moderately true	Moderately true	Hardly true	25

CALCULATION

Mean= Sum of subject's individual scores/Number of subjects

=580/20 = 29

DISCUSSION

From the observations and calculation of both individual scores and mean score for all individuals it can be seen that pateints of chronic autoimmune diseases find might think of themselves to be ineffecient in dealing with certain tasks.

An easily observable trend shows that while all particpants are able to think of a solution to their problems, maximum participants find it difficult to handle challenges coming their way without taking any pressure.

Most participants however do think that they might be able to solve their problems if they invest the necessary effort.

RESULT

As per Bandura's general self-efficacy test scale the mean self-efficacy level of participants suffering from chronic autoimmune diseases comes out to be 29 which is a moderate level of self-efficacy.

CONCLUSION

A GeneraL Self-Efficacy Scale score of 29 indicates a moderate level of self-efficacy. This means that the individual believes in their overall ability to deal with life's challenges, but may have some reservations or limitations in certain areas.

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