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Sensation Seeking, Perceived Stress And Impulsivity Among Smokers And Non-Smokers: A Comparative Study

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Abstract : In the current scenario of the world the availability of substances such as alcohol or cigarettes and getting our hands on the same is not a big task. Everywhere it is available, and we can acquire those with minimum effort. Most of the time people who start consuming these have no concrete reason as to what the need was to start it. To satiate the urge of trying new things can appeal exciting and substance use is considered one the most frequently used method to overcome this satiation of sensation. Though not everyone seeks to explore the domain substance to experience the thrill, so there might be an underlying reason as to why some people choose this path and others do not. The aim of the study was to To study sensation seeking, perceived stress and impulsivity among smokers and non-smokers. A sample of 100 people were collected between the age of 21-26 (50 male and 50 female) and were asked to fill the sensation seeking scale, perceived stress scale and Barrett Impulsiveness scale. The data was analysed using the Pearson correlation coefficient to find the correlation if present between the variables using the SPSS data software. Results showed that there is a weak negative correlation between sensation seeking and perceived stress among smokers and non-smokers, it showed a weak positive correlation between sensation seeking and impulsiveness among smokers and non-smokers. It was also seen that there is a weak positive correlation between perceived stress and impulsiveness among smokers and non-smokers and the variable sensation seeking and perceived stress only predict 3.9 % in impulsiveness. At the end it can be concluded that there is not much difference between the sensation seeking, perceived stress and impulsiveness among smokers and non-smokers and there might be other factors that might make a difference between those who chose to smoke and those who do not.

Key words: Sensation Seeking, Perceived Stress, Impulsivity, Smokers, Non- Smokers

INTRODUCTION

The world is developing in every aspect. With the latest trends, people look forward to adapting or adjusting to it. Whether it is the selfie trend or the reels, change is the only constant these days. According to a news release after the Covid-19 pandemic unfortunately the use of hallucinogens and other stimulants have increased too by young adults. Factors on why they start smoking in the first place vary from “for the fun” to “peer pressure” or to “appear cool”, another reason is to relieve stress. No matter what the reason, the harm done by it remains the same.

Sensation Seeking

Sensation seeking is a psychological construct that refers to an individual's tendency to seek out novel, intense, and exciting experiences. It has been a subject of interest for psychologists for several decades, and one of the most influential theories in this area was proposed by Marvin Zuckerman in the 1970s. Low sensation seekers are individuals who have a preference for activities that are safe, predictable, and familiar. They tend to avoid activities that involve risk or excitement and seek activities that are relatively calm and soothing. People who are low sensation seekers are content with a quiet and stable lifestyle and are not drawn to thrill-seeking or risky behavior. Then there are moderate sensation seekers. Moderate sensation seekers are individuals who seek moderate levels of arousal and stimulation in their everyday life. Unlike high sensation seekers, who actively seek out new and

intense experiences, moderate sensation seekers prefer a balance of stimulation and relaxation. High sensation seekers are individuals who actively seek out novel, complex, and intense experiences. They have a strong desire to explore the unknown, take risks, and push boundaries. They are driven by the need for excitement and adventure, and they are willing to try new things to satisfy this need.

Stress

The most common experience that people go through is stress. According to American Psychological Association stress can be defined as "a physiological or psychological response to the internal or external response to internal or external stressors" It involves the changes to affecting they feeling and behaving aspect as well. Stress can be triggering or aggravating factor for many disease or pathological conditions as well (Yaribeygi., A et al 2017). Stress is also defined as "non- specific response that can be resulted from variety of different type of stimuli (H. Selye 1936). Stress occurs when people perceive demands from external situations beyond their coping capacity (Lazarus & Folkman 1984). A very famous theory (H. Selye 1936) talks about the physiological changes that a person goes through when the body is under stress. It is called a General Adaptation Syndrome also known as GAS model. It includes three stages in total the alarm stage, the resistance stage and the exhaustion stage.

Impulsiveness

Impulsivity is often defined as — "a predisposition toward rapid, unplanned reactions to internal or external stimuli without regard to negative consequences of these reactions to themselves or others" (Moeller et al. 2001). According to APA "describing or displaying behavior characterized by little or no forethought, reflection, or consideration of the consequences of an action, particularly one that involves taking risks". It's important to note that these types of impulsivities are not mutually exclusive and can often overlap in different ways. Additionally, impulsivity can be present to varying degrees in different individuals and can be influenced by a variety of factors, such as genetics, environment, and individual experiences. According to biological and psychological perspective "impulsivity is characterized by failure in inhibiting a potentially risky impulse for the individual or the others around" (Chamberlain, S. R., et al. 2007). From a cognitive view it refers to inability to inhibit behavioral impulses and thoughts (Chudasama, Y.2011). Impulsivity is a common trait in youth, especially during adolescence. It refers to a tendency to act on impulses or urges without thinking about the potential consequences of those actions.

REVIEW OF LITERATURE

Polce, E., et al (2018) studied Gender- and age-varying associations of sensation seeking and substance use across young adulthood while sensation seeking levels and substance use are lower among women, the magnitude of the association of sensation seeking with continuous drinking and with marijuana use among women exceeds that of men in the later 20s. Results showed that significantly stronger associations of sensation seeking with continuous drinking and marijuana use observed among women compared to men during the mid- to late-20s suggests divergent risk factors across genders for substance use during young adulthood, with sensation seeking remaining a strong risk factor for women but not men.

Wellman, R. J., et al (2016) conducted a study to possible outcomes of cigarette smoking. Through longitudinal review it was found that Increased age/grade, lower SES, poor academic performance, higher sensation seeking/risk taking/rebelliousness, susceptibility to smoking, intention to smoke in the future, smoking among family members and friends, and exposure to smoking in films were associated with an increased risk of smoking onset among youth.

Deasy, C., (2014) studies psychological distress and lifestyle of students: implications for health promotion. The study was conducted through extensive study of undergraduate. The findings indicated a high prevalence of risk behaviours (Table 1): 93.2% reported drinking alcohol, 17.3% reported tobacco smoking, 26.3% described their diet as unhealthy/unsure and 26.0% reported physical inactivity. Many students (41.9%) reported high levels of psychological distress.

Leeman, R. F., et al (2014) explored Impulsivity, Sensation-Seeking, and Part-Time Job Status in Relation to Substance Use and Gambling in Adolescents. In the study conducted high school students are chosen as a sample and it was found that both impulsivity and sensation-seeking related significantly to substance use and impulsivity to gambling. Impulsivity had stronger associations with drug and gambling issues than sensation-seeking did. Conversely, there was little relationship between part-time job status and smoking among low sensation-seekers.

Kaynak, Ö., et al (2013) conducted the study on relationships among parental monitoring and sensation seeking on the development of substance use disorder among college students. Survey data of 1253 college students were taken. High levels of sensation seeking were associated with increased risk for both alcohol and cannabis dependence. However no interaction effects were found. The results in continuation of prior findings highlight the influences of pre-college parental monitoring and sensation seeking on the probability of alcohol and/or cannabis dependence during the first year of college. The findings also suggest that these two factors are useful in identifying college students at high risk for alcohol and/or cannabis dependence.

RATIONALE OF THE STUDY

In modern society life has become complicated with more demands to face every day. This phase of young adults is marked by rapid changes such as from completing education to getting into working profession. They also face changing relationship dynamics with peers, family, friends. During the recent times, a shift in the lifestyles and living situations has been often observed. An impact of this shift is usually seen in the increment of the young generation's inclination towards substance use. The most convenient option thus available is often smoking, which is the phenomenon this study attempts to study. Trying and wanting to try new experiences to decrease boredom or seek thrill contributes to sensation seeking while perceived stress and daily hassles makes young adults to seek an immediate escape which is not time consuming but effective. Since all the above-mentioned factors are not a proper think and through process, this is where impulsiveness comes into play making people to make decision without thinking thoroughly. This study focuses on understanding how sensation- seeking, perceived stress and impulsiveness differs in people who smoke and those who do not. It is important to note that the way they deal with it can have short as well as long term effects on their psychological well-being. Stress has a harmful impact on one's mental health and somewhere resilience can help in coping with the stressful situation. The study focuses on understanding the way in which stress and resilience have an impact on the psychological well- being of young adults.

METHODOLOGY

AIM

To study sensation seeking, perceived stress and impulsivity among smokers and non-smokers.

OBJECTIVES

1. To study the difference in sensation seeking, perceived stress and impulsivity among adults who are smokers and non-smokers.
2. To study the relationship between sensation seeking and perceived stress among smokers and non-smokers
3. To study the relationship between sensation seeking and impulsiveness among smokers and non-smokers
4. To study the relationship between perceived stress and impulsiveness among smokers and non-smokers.
5. To study sensation seeking and perceived stress as predictors of impulsiveness smokers and non-smokers

HYPOTHESIS

H1. There will be a difference between sensation seeking, perceived stress and impulsiveness in young adults who smoke and non-smoke.
H2. There will be a significant relationship between sensation seeking and perceived stress in smokers and non-smokers.
H3. There will a significant relationship between perceived stress and impulsiveness in smokers and non-smokers
H4. There will be a significant relationship between sensation seeking and impulsiveness in smokers and non-smokers.
H5. Perceived Stress and sensation seeking will predict impulsiveness in smokers and non-smokers.

VARIABLES

Independent Variable

- Sensation seeking
- Perceived Stress

Dependent Variable

- Impulsiveness

SAMPLE AND ITS SELECTION

25 research paper and literature reviews which studied sensation seeking, perceived stress and impulsiveness over the last decade were studied. Sensation seeking scale v by Marvin Zukerman (1994), Perceived stress scale (PSS) and Barrett Impulsiveness Scale by JH Patton, MS Stanford and E S Barrett in the year 1995 was printed out and were filled by 100 participants (50 smokers, 50 non-smokers)

PROCEDURE

In this study the data was collected using the questionnaires. In the questionnaire consent was added as a very first question along with the knowledge that their responses will be kept confidential was explained and assured. They were also informed that they can withdraw from the study at any point. For making the scales much easier to understand the instruction were written in the separate title box before they could start filling the form

STATISTICAL ANALYSIS

Scientific explanation of any finding is not possible unless some statistical treatments have been given to the data obtained. Statistics provide very clean picture of the results only in the form of its numerical results. Therefore, statistical treatment to the data obtained is inevitably necessary to become sure about the reliability pattern of the results of research problems. Investigations in behavioural sciences classify the nature of relation between behavioural sciences, seek to examine the relationship between various independent variable and the relevant dependent variable. The choice of statistical analysis is related to the types of data and the design of study. The data was analysed for smokers and non-smokers using the t-test for all the three variables. After that correlation analysis was done by calculating the Pearson Correlation Coefficient among the three variables for finding out the relationship between sensation seeking, perceived stress and impulsivity. Then to find whether sensation seeking, and perceived stress predict the impulsiveness regression analysis was used.

RESULTS

Table 1: t-test

	Mean		SD		t-value	sig
	Smokers	Non-Smokers	Smokers	Non-Smokers		
Sensation Seeking	21.04	18.28	3.380	4.352	3.542	Significant
Perceived Stress	19.60	19.80	5.851	5.27	-.180	Insignificant
Impulsiveness	75.96	74.96	8.57	7.42	.784	Insignificant

Table 1: shows the mean, standard deviation and t-value for sensation seeking perceived stress and impulsiveness among smokers and non-smokers.

Table 2: Pearson Correlation

Smokers	Sensation Seeking	Perceived Stress	Impulsiveness
1.Sensation Seeking	1	-.156*	.191
2. Perceived Stress	-.156*	1	.078
3. Impulsiveness	.191	.078	1

*Correlation is significant at the 0.05 level (2-tailed)

Table 2: Correlation between Sensation Seeking, Perceived Stress and impulsiveness of smokers

Table 3: Pearson Correlation

	Sensation Seeking	Perceived Stress	Impulsiveness
1.Sensation Seeking	1	-.173*	.126
2. Perceived Stress	-.173*	1	.072
3. Impulsiveness	.126	.072	1

*Correlation is significant at the 0.05 level (2-tailed)

Table 3 shows correlation between Sensation Seeking, Perceived Stress of non-smokers.

Table 4: Regression

Model	R	R square	Adjusted R square
1	.198[a]	.039	.019

a. Predictors: (Constant), Sensation Seeking, Perceived stress

Table 4 illustrates the regression score between sensation seeking, perceived stress and impulsiveness. The r value was .198 which represents the correlation between the three variables. The finding also shows that the r^2 value is 3.9% which is quite low considering sensation seeking and perceived stress as a predictor of impulsivity.

DISCUSSION

Adapting with the world and getting exposed to too many stimulations can make us take different choices in life. With increased pressure and stress, in the competitive world one tries to find an escape. One of the easiest methods is to try any substance be it with friends or alone. Some however do not indulge in such activities and find healthy ways to cope with stress or avoid seeking novel and new experiences. The main aim of the study was to understand the difference in sensation seeking, perceived stress and impulsiveness between smokers and non-smokers.

H1. There will be a difference in sensation seeking, perceived stress and impulsiveness between young adults who smokers and non-smokers.

From table 1 we can see there is a difference in the mean and standard deviation of sensation seeking of smokers (mean- 21.04, standard deviation -3.380) and non-smokers (mean =18.28, standard deviation-4.352). However not much difference is seen in the domain of perceived stress (mean- 19.60, standard deviation- 5.851) and impulsiveness (Mean- 75.96, standard deviation- 8.57 of smokers and perceived stress (mean- 19.80, standard deviation-5.27) impulsiveness (mean -74.96, standard deviation- 7.42) of smokers. The t value was found to be significant in sensation seeking as the p value 3.542 is more than 1.98 (at 0.05) & 2.63 (at 0.01) but not significant in perceived stress (-.180) and impulsiveness (.784). This implies that there is some level of difference between the two groups in terms of sensation seeking as it came higher in the smokers. According to a study (Hosseini, Z. et al 2022) it was shown that people who indulge in smoking have low self-core and high sensation levels.

H2. There will be a significant relationship between sensation seeking and perceived stress in smokers and non-smokers.

Table 2 and 3 show the correlation of sensation seeking and perceived stress among smokers which came out to be -.156 and -.173 among non-smokers. Insignificant at 0.05 level. It shows a weak negative correlation which implies that increase in one variable results in decrease in another variable, but the strength is not so strong. Even though the difference it minute we can see the negative relationship is more in smokers.

H3. There will be a significant relationship between sensation seeking and impulsiveness in smokers and non-smokers.

Table 2 and 3 we see the correlation of sensation seeking and impulsiveness which came out to be .191 in smokers and .126 in non-smoker, insignificant at 0.05 level. There is a weak positive correlation here which implies change in increase in one variable result increase in another variable. Based on this interpretation it can be understood that even though the correlation is weak positive, yet the sensation seekers and impulsivity is higher in smokers. This could because of the high arousal in trying new things and more carefully analyzing the situation can make them miss the opportunities new experiences.

H4. There will be a significant relationship between perceived stress and impulsiveness in smokers and non-smokers.
Table 2 and 3 show the correlation between perceived stress and impulsiveness which came out to be .078 of smokers and .072 of non-smokers moreover r value was found to be insignificant. Again, there is a weak positive correlation but with increase in perceived stress leads to increase in impulsiveness in smokers. With long term exposure stress can lead to higher impulsivity (McMullin, S. D, et al. (2021) and hence it is necessary to address it and build a healthy mechanism that does not hamper our well-being.

H5. Perceived Stress and sensation seeking will predict impulsiveness in smokers and non-smokers.
Table 4.5 illustrates the regression score between sensation seeking, perceived stress and impulsiveness. The r value was .198 which represents the correlation between the three variables. The finding also shows that the r^2 value is 3.9% of variance which means a low r squared value. It indicates that only a small amount of proportion variance is explained by independent variable and there must be other variables which are playing a role in people continuing smoking. In a study conducted by (Mansour, H., et al 2018) showed that two model linear regression could account for 12.4% variation in substance use, which means impulsivity and sensation seeking does predict substance use among people.

SUMMARY AND CONCLUSION

The presented study is entitled "Sensation Seeking, Perceived Stress and impulsivity among smokers and non-smokers: A Comparative Study". The study included three psychological tests namely Sensation Seeking Scale, Perceived Stress Scale, and Impulsiveness Scale. The sample included 100 participants (50 smokers and 50 non-smokers).

Following objectives were made:

- To study the difference in sensation seeking, perceived stress and impulsivity among adults who are smokers and non-smokers.
- To study the relationship between sensation seeking and perceived stress among smokers and non-smokers
- To study the relationship between sensation seeking and impulsiveness among smokers and non-smokers
- To study the relationship between perceived stress and impulsiveness among smokers and non-smokers.
- To study sensation seeking and perceived stress as predictors of impulsiveness smokers and non-smokers

The hypothesis were as follows.
H1. There will be a difference between sensation seeking, perceived stress and impulsiveness in young adults who smoke and non-smoke.
H2. There will be a significant relationship between sensation seeking and perceived stress in smokers and non-smokers.
H3. There will a significant relationship between perceived stress and impulsiveness in smokers and non-smokers
H4. There will be a significant relationship between sensation seeking and impulsiveness in smokers and non-smokers.
H5. Perceived Stress and sensation seeking will predict impulsiveness in smokers and non-smokers.

Finding of the study can be epitomized as follows.

- There is a significant difference between the sensation seeking of smokers and non-smokers but no significant difference in perceived stress and impulsivity.
- Results showed that there is a weak negative correlation between sensation seeking and perceived stress among smokers and non-smokers insignificant at 0.05 level.
- It showed a weak positive correlation between sensation seeking and impulsiveness among smokers and non-smokers insignificant at 0.05 level.
- It was seen that there is a weak positive correlation between perceived stress and impulsiveness among smokers and non-smokers. Slightly more in smokers but insignificant of 0.05 level
- Sensation seeking and Perceived stress only predict 3.9 % in impulsiveness.

The study overall aimed at studying the difference between the smokers and non-smokers on the factors namely sensation seeking, perceived stress and impulsiveness. Major focus was to observe if there is any level of significant difference based on these variables. Even though there are correlations, they are weak in nature which implies that more factors and variable might be important to considered along with the variables being studied to find the factors which might affect impulsiveness. There are certain findings corresponding to which very few related studies exist for example very few studies were done between perceived stress and impulsiveness.

SUGGESTIONS

- One of the ways to manage impulsiveness can be practicing mindfulness. It allows us to observe our thoughts without judging it. Since it helps us to reflect on it before acting, it can allow us to take more time and choose rational options rather than going all in and thinking impulsively (Gallo, G et al. 2021).
- The rise in smoking due to peer pressure is another issue. To deal with it "assertiveness training" can be beneficial. Firm and clear training should be helpful to enhance the personality of the students so they will be able to refuse the bid from friends and others for the activity that refers to smoking etiquette (Siregar, D. M. 2020).
- People who are into heavy smoking can go for various psychological interventions for smoking cessation such as cognitive behavioural therapy, support counselling and mindfulness interventions (Lightfoot, K. et al, 2021)
- Being in a lot of stress also make people to drift towards unhealthy coping mechanism. Adopting ways which can improve body health and make our mind healthy can be beneficial too. Practicing mindfulness or exercise, self-awareness and learning ways in how to regulate your response to situation are some of the ways where we can manage our stress.

LIMITATIONS

The limitations of the current study are as follows: -

1. The research is only based on the young adult population.
2. The data collected by conducting interview could have led to more appropriate findings and would have led to more appropriate conclusions.
3. The cultural differences and background of the participants during the study were left ignored. It might have revealed some other findings and conclusions.
4. The sample size was small i.e., 100 which can be the plausible explanation for not a huge significant difference.

RECOMMENDATION FOR THE FURTHER RESEARCH WORK

1. Research may be extended to other sections of society other than young adults such as adolescents and old individuals.
2. The study can also include people from the rural areas of India.
3. Identify the factors that makes people adopt smoking and build plans to resolve those in an healthy manner
4. Different variables can be added to see what are the basis that affect the impulsiveness among smokers and non-smokers.

REFERENCES

American Thoracic Society. Why do I smoke and why do I keep smoking? Am J Respir Crit Care Med. 2017;196:7-8. Accessed at https://www.thoracic.org/patients/patient-resources/resources/why-do-i-smoke.pdf on November 12, 2020

Chamberlain, S. R., & Sahakian, B. J. (2007). The neuropsychiatry of impulsivity. Current opinion in psychiatry, 20(3), 255-261.

Chudasama, Y. (2011). Animal models of prefrontal-executive function. Behavioral neuroscience, 125(3), 327.

Deasy, C., Coughlan, B., Pironom, J., Jourdan, D., & Mcnamara, P. M. (2014). Psychological distress and lifestyle of students: implications for health promotion. Health promotion international, 30(1), 77-87.

Evans-Polce, R. J., Schuler, M. S., Schulenberg, J. E., & Patrick, M. E. (2018). Gender-and age-varying associations of sensation seeking and substance use across young adulthood. Addictive behaviors, 84, 271-277.

Gallo, G. G., Curado, D. F., Opaleye, E. S., Donate, A. P. G., Scattone, V. V., & Noto, A. R. (2021). Impulsivity and mindfulness among inpatients with alcohol use disorder. *Substance Use & Misuse*, *56*(1), 25-32.

Hosseini, Z., Jafari, M., Homayuni, A., Rafati, S., & Nikparvar, M. (2022). Differences between smokers and non-smokers in personality traits: the role of sensation seeking and core self-evaluations. Journal of Substance Use, 1-6.

Kaynak, Ö., Meyers, K., Caldeira, K. M., Vincent, K. B., Winters, K. C., & Arria, A. M. (2013). Relationships among parental monitoring and sensation seeking on the development of substance use disorder among college students. Addictive Behaviors, 38(1), 1457-1463.

Lightfoot, K., Panagiotaki, G., & Nobes, G. (2020). Effectiveness of psychological interventions for smoking cessation in adults with mental health problems: A systematic review. *British journal of health psychology*, *25*(3), 615-638.

McMullin, S. D., Shields, G. S., Slavich, G. M., & Buchanan, T. W. (2021). Cumulative lifetime stress exposure predicts greater impulsivity and addictive behaviors. Journal of health psychology, 26(14), 2921-2936

Moeller FG, Barratt ES, Dougherty DM, Schmitz JM, Swann AC. Psychiatric aspects of impulsivity. Am J Psychiatry. 2001;158(11):1783–93

Siregar, D. M. (2020). Asertive Training As Character Education To Reduce Smoking Behavior Among Student In Industrial Revolution Era 4.0. *International Journal of Applied Guidance and Counseling*, *1*(1), 1-8.

Wellman, R. J., Dugas, E. N., Dutczak, H., O'Loughlin, E. K., Datta, G. D., Lauzon, B., & O'Loughlin, J. (2016). Predictors of the onset of cigarette smoking: a systematic review of longitudinal population-based studies in youth. American journal of preventive medicine, 51(5), 767-778.

Yaribeygi, A., Panahi, Y., et al (2017) Impact of stress on body function: A review (2017), EXCLI journal, vol 16, 1057-1072