

# Effect of Positive Emotions on Mental Health

<sup>1</sup>Bhawna and <sup>2</sup>Dr. Shivani Dutt Bhambri

<sup>1</sup>Student of Bachelors Applied Psychology Honors, <sup>2</sup>Assistant Professor

<sup>1</sup>Amity Institute of Psychology and Allied Sciences

<sup>1</sup>Amity University Noida, Uttar Pradesh, India

## Abstract

Positive emotions, according to the broaden-and-build theory of positive emotions, can increase one's resilience to stress by broadening the range of possible coping mechanisms that might be considered. According to studies, anxiety and depression symptoms are substantially influenced by excessive stress, particularly chronic levels of stress. The objective of the study is to measure positive emotions in male and female. Using a sample size of 60 young adults (30 males 30 females) the present study examined the effect of positive emotions on mental health. The tools used for the assessment is PANAS and Mental Health Inventory. The result of the study shows that men tends to feel more positive emotions than women. By fostering happy emotions at appropriate times to deal with unpleasant emotions, people may improve their psychological and possibly even physical health, according to research on the reversing effect of positive emotions.

**Keywords - Positive Emotions, Mental Health , Young Adulthood , Positive Psychology , Positive Affect**

## Introduction

### Mental Health

According to the World Health Organization (WHO), mental health is “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”. This definition, although marking significant progress in moving away from the idea of mental health as the absence of mental disease, has certain concerns. When it defines pleasant sentiments and positive functioning as crucial criteria for mental health, it raises various issues and opens the door to potential misconceptions. Regarding well-being as a crucial component of mental health is actually difficult to reconcile with the numerous difficult life circumstances in which well-being may even be unhealthy: most people would regard as mentally unhealthy a person experiencing a state of well-being while killing multiple people during a war action and would regard as healthy a person feeling desperate after being fired from his or her job in a situation in which occupational opportunities are scarce.

People who are mentally well are frequently depressed, ill, furious, or unhappy, and this is a normal part of living a complete life. Despite this, mental health is frequently thought of as a wholly positive state characterized by emotions of contentment and environmental mastery (2-4).

### Positive Emotions

According to the American Psychological Association (APA), the term "positive emotion" refers to an emotional response that is intended to express a positive affect, such as happiness when a goal is achieved, relief when a threat is avoided, or contentment when one is happy with the way things are right now.

In other words Positive Emotions are pleasant or desirable situational responses that range from curiosity and contentment to love and joy, although they are separate from pleasurable sensation and undifferentiated positive affect. These emotions are indicators of people's general well-being or pleasure, but they also help them grow and succeed in the future. Work, school, relationships, mental and physical health, and lifespan have all proved this.

The list of Positive Emotions we feel in our day to day life:

- Joy: It is a feeling of excitement, happiness, and maybe even exhilaration that is frequently perceived as an abrupt surge when something positive occurs.
- Gratitude: It is the emotion of being thankful, whether it be for anything particular or just for everything. It is frequently accompanied by humility and even respect.
- Serenity: A quiet, pleasant state of acceptance of oneself is known as serenity.
- Interest: Having a need to learn more or being fascinated by anything that demands your attention is called having an interest.
- Hope: A sense of optimism and eagerness for a bright future is called hope.
- Pride: It is the feeling of satisfaction with one's accomplishments, abilities, or other characteristics.
- Amusement: A state of happiness and lightheartedness that is frequently accompanied by smiles and unforced laughing.
- Inspiration: It is the experience of being involved, encouraged, and inspired by what you see.
- Cheerfulness: Being cheerful, energetic, and obviously joyful or cheery; feeling as though everything is going your way.
- Surprise (the good kind!): It is a feeling of excitement when someone delivers you unanticipated joy or when something turns out even better than you had anticipated.
- Confidence: The emotion of confidence is one that involves a high sense of self-worth and belief in oneself; it can either be more general or particular to a circumstance or activity.
- Admiration: Regard for someone or something that is warmly approved of, respected, and appreciated is known as admiration.

- Optimism: positive and hopeful emotion that encourages you to look forward to a bright future, one in which you believe that things will mostly work out.
- Happiness: is the state of being content and happy with how things are going in life, as well as having a general sense of delight and zeal for living.
- Love: is a sense of intense and persistent passion for someone as well as a readiness to put their needs ahead of your own. It can be aimed at a specific person, a group of people, or even all of mankind. It is among the strongest positive emotions.

Interpersonal capitalisation is the word for the phenomena when people express excitement for positive things happening in their partners' life Lukasz D. Kaczmarek (2022). When people are more likely to react ecstatically to their partner's accomplishment, little is known. This gap needed to be filled, therefore we looked at whether positive and negative Emotions influence whether partners respond enthusiastically to capitalization attempts (RCA). Participants (N=224) commented on their successful relationship. Prior to each effort at capitalization (operationalized as reactions to the news that their partner won), To provoke positive (mainly amusement) or negative (mostly anger in a game), we used video snippets (especially fury) or indifferent feelings in the respondent. We noted the emotional intensity, Physiological reaction, verbal RCA, and smile intensity. Indirect (but not direct) effects in which evoking happy emotions increased and evoking negative emotions decreased passionate RCA (smiling intensity and enthusiastic verbal RCA). These benefits were not physiological, but rather modest and controlled by emotional valence and smiling intensity reactivity. The results provide fresh proof that joyful feelings motivate capitalization process.

Psychological maltreatment experienced as a kid has negative effects on teenagers and young adults as a kind of child abuse Gökmen Arslan et.al (2022). Although psychological abuse is associated with poorer health, some protective variables, such as a positive opinion of one's talents, one's background, and one's own personality, may ultimately have a greater impact on young adults' mental wellness. We examined the impact of a positive viewpoint on the relationship between psychological abuse and mental health using a sample of 394 young individuals (76% male; M 21.36 SD = 2.57) from Turkey. The results showed that positive perception and mental wellness were significantly predicted by psychological abuse. The damaging effects of psychological mistreatment on young people' mental health were also mitigated by positive impression. The damaging effects of psychological mistreatment on young people' mental health were also mitigated by positive impression. Results also indicated that the connection between abuse and mental health was masked by positive impression. Clinical implications were highlighted in order to assist mental health professionals in enhancing young people' mental wellness.

There is a widely held belief that higher degrees of extraversion are advantageous to wellbeing E. Kuijpers et.al (2022). We looked at the connection between cumulative counterdispositional extraversion and happy emotions using the theories that acting inconsistently with one's trait level is demanding and laborious to sustain and that repeated taxations of one's self-regulatory resources are unpleasant. Participants consistently assessed their level of state extraversion and good sensations in two experience-sampling (ESM) investigations. According to the findings, cumulative positive departures from one's trait extraversion level were shown to be positively related with good feelings, whilst cumulative negative deviations were found to be adversely connected with pleasant sentiments. This supports the notion that higher degrees of extraversion correlate with larger amounts of positive behaviours when examining cumulative examples of extraversion-related activities.

Calls have been made to address the connected public problem of mental illness as the COVID-19 global health disaster plays out around the globe Lea Waters et.al (2022). By taking into account the role that positive psychology elements can play in preventing mental illness, promoting mental health throughout COVID-19, and developing positive processes and skills that may serve to promote future mental health, the current study aims to widen these calls. In this essay, we examine the research and practical implications of nine positive psychology concepts that help individuals survive pandemics: meaning, coping, self-compassion, bravery, gratitude, character strengths, good emotions, positive interpersonal processes, and high-quality connections. It seems sense that research is mainly focused on tackling the ways in which individuals are hurt and weakened during acute crises like COVID-19. This need not, however, be at the price of looking at how individuals are maintained and strengthened.

Although being "bad-tempered or irritable due to hunger" is commonly referred to as being "hungry," shockingly few research have looked at how hunger affects emotions M.A.Ackermans (2022). However, ladies who try to cut back on their eating may run the danger of being caught in a vicious cycle of hunger and unfavorable feelings. In other words, feeling hungry may cause bad feelings, which can then cause overeating, and overeating can then cause further restriction, which can then cause more hunger. The purpose of this study was to investigate the relationship between hunger and both happy and negative emotions in women with healthy BMIs, as well as the contribution of subclinical eating disorder symptoms to this relationship. The Eating Disorder Examination Questionnaire and the Profile of Mood States were performed in the lab by the women, who were then randomly allocated to one of two conditions: hunger (fasting for 14 hours; n = 53) or satiation (eating breakfast before the study; n = 55). Women who were hungry reported more overall negative feelings (such as tension, anger, weariness, and bewilderment) and less overall good emotions (such as vigor and a little decrease in esteem-related affect) than women who were full. Additionally, higher eating disorder symptoms were linked to decreased esteem-related affect in satisfied but not hungry women. Based on these findings, practitioners and people in general should be aware of the harmful effects that dietary restriction has on mental health. Second, given that it has the potential to perpetuate eating pathology, clinicians and individuals alike should be cautious about relatively low esteem-related affect in patients who exhibit eating disorder symptoms when they are satisfied.

Concerns regarding the physical and emotional health of people have been raised by the COVID-19 epidemic. An urgent "call to action" for psychological therapies that boost positive mood and psychological resilience has been issued in response Varma (2022). It has been demonstrated that prosocial conduct efficiently promotes wellbeing, but is this tactic helpful in a pandemic when constant concern for one's own safety may sharply increase self-focused worry? During the early stages of the pandemic (April 2020), we performed two online preregistered experiments (N = 1,623) to test this hypothesis by randomly assigning individuals to do either

self- or other-beneficial action. For the first time, we experimented with the relationship between prosocial behaviour and the stressor (coronavirus illness 2019 [COVID-19]): Participants bought things for themselves or someone else that were either COVID-19-related (personal protective equipment, PPE) or COVID-19-unrelated (food/writing supplies). Prosocial activity (vs. non-prosocial or prosel) was associated with greater levels of self-reported good affect, empathy, and social connectivity, in line with preregistered assumptions. Furthermore, we discovered that psychological advantages were greater when acts of generosity were unrelated to COVID-19 (vs. related to COVID-19). Prosocial activity had favourable effects on empathy and social connectivity but not post-task good affect when prosocial and prosel spending engaged the same COVID-19 PPEs items. These results imply that, notwithstanding boundary considerations, generous behaviour offers one tactic to support wellbeing throughout the epidemic.

Adolescent motivation may be preserved by promoting self-efficacy and pleasant feelings in learning situations that encourage constructive accomplishment objectives Sabine Schweder (2022). According to accomplishment goal theory, the interaction between self-efficacy, emotions, and goals can be moderated by the learning setting and gender. This study contrasted the experiences of female and male students participating in teacher-directed learning (TL) with those of students participating in a self-directed learning environment (SL). Latent mean comparison showed that both male and female teenagers in SL report greater means in mastery objectives and good feelings. This information was obtained from questionnaires that 828 adolescents (7th/8th grades; MAge = 13.6; SD =.88) completed. According to the results of multigroup structural equation modelling, only mastery objectives are strongly connected to both happy emotions and self-efficacy for both male and female students in SL, however boys and girls in TL revealed distinct associations: Boys in TL in particular tend to have negative habits based on a job avoidance mindset.

Although previous research has shown that happiness and effective learning are related, there is little data on how happiness and accomplishment objectives and quantifiable indicators of school involvement are related Jesus Alfonso Datu and others (2022). This study uses a two-wave longitudinal design to evaluate the reciprocal relationships between happy emotions and mastery-approach objectives and teacher-reported academic engagement, drawing on the broaden-and-build theory of positive emotions. 411 high school students in the Philippines underwent two administrations of a survey that included tools for gauging students' positive emotions (such as the Modified Differential Emotions Scale) and mastery-approach objectives (such as the Achievement Goal Questionnaire - Revised) (i.e., 1-month interval). To give a more accurate assessment of each student's involvement in academic activities, ten classroom advisors also completed a teacher-reported measure of academic engagement. Positive emotions demonstrated positive concurrent links to mastery-approach objectives and all engagement measures, according to the results of cross-lagged panel structural equation modeling using a maximum likelihood estimation technique. Positive emotions did not, after adjusting for auto-regressor effects, predict subsequent mastery-approach goals and engagement, in contrast to earlier studies. Goals for the mastery method were a strong predictor of future good feelings, behavioural engagement, and cognitive engagement. Engagement factors were not associated with successful happy emotions or mastery approach objectives. The findings of this study demonstrate the positive effects that students' intrinsic motivation to learn has on their emotional and intellectual development.

The purpose of this research is to examine how positive emotions may be effectively controlled by interaction design and how design-mediated positive emotions could improve wellbeing JungKyoon Yoon (2022). This research investigates how design may both inspire and facilitate emotion-regulating activities with the hypothesis that the key to successful positive emotion regulation is an intentional participation in the activities that support happy feelings. The creation of Purpal, a self-administered interactive gadget that promotes Positive Mental Time Traveling (PMTT) in the context of consumption, is described in the study as an example of how interactions might be systematically designed to facilitate positive emotion regulation. PMTT is a technique for controlling emotions in which the person vividly recalls or anticipates pleasant occurrences. The study described in the paper evaluated the efficacy and utility of Purpal in (1) inspiring users to engage in PMTT, (2) facilitating good emotional experiences, (3) encouraging people to utilise it in their daily life, and (4) enhancing their well-being. The findings demonstrated that Purpal provides users with a means of self-reflection on their purchasing intents and future experiencing values, allowing them to fully immerse themselves in PMTT. Purpal's company was successful in promoting healthy emotional experiences and wellbeing. Its potential for long-term usage was also well acknowledged.

This review article offers a comprehensive analysis of the neuro physiological underpinnings of happy feelings and positive affect that together support happiness and wellbeing in both humans and other animals Rebecca Alexander (2021). In the context of pleasant emotions and affect, this study explores the relationships among neurotransmitters, hormones, brain networks, and cognitive processes. We also investigate the effects of good social connections and environmental circumstances on the regulation of positive emotions and affect, taking into account lifelong developmental views. The dynamic and adaptable neurophysiological mechanisms that underlie good emotions are also examined, along with flow experiences and meditation techniques that alter brain function patterns and eventually promote wellbeing. This review is a component of "The Human Affect some Project" (<http://neuroqualia.org/background.php>), and in order to further one of the project's main goals, we also looked at pertinent language elements and terms that describe contentment and wellbeing. With the overriding objective of developing fresh suggestions for expanding neuroscience research on happy feelings and wellbeing, these language characteristics are examined within the framework of the literature on neuroscience.

There are various ways that stress and emotions affect eating behaviour: Stress can cause either overeating or under eating, but feeling either happy or negative emotions often results in increased food consumption Julia Reichenberger (2018). These associations appear to be influenced by a number of participant factors, including gender, BMI, and restricted, emotional, or external eating habits. The majority of research to far has relied on laboratory experiments, which has simplified actual feeding events. The purpose of the current study was to use ecological momentary assessment to distinguish the impacts of stress, negative emotions, and good emotions on two significant aspects of eating behaviour, namely taste- and hunger-based eating, in daily life (EMA). Additionally, the already noted individual variations as well as the crucial yet unstudied concept of time pressure during eating were looked at.

Although both negative and positive emotions are significant indicators of teenage wellness, research on happy emotions is scarce Lin Shen (2018). We utilised structural equation modelling to explore relationships between self-reported sleep duration and quality with positive affect, negative affect, and happiness in 4582 adolescents (69.4% girls; age M SD = 14.55 1.74 years), while adjusting for age and sex. Overall, compared to sleep length, sleep quality showed greater relationships with all emotional variables. While poorer sleep exhibited higher connections with negative affect, shorter sleep was more specifically connected with lower positive emotions (happy, followed by positive affect). Protecting sleep time may encourage happy feelings, and improving sleep quality may lessen mood swings. Positive and negative emotions may both be included in future studies to better understand the wellness of teenagers.

The aim of the study is to measure the effect of positive emotions on mental health of young adulthood (male and female).

### Methodology

**Study Design:** Cross Sectional Study

**Study Type:** Qualitative Study

**Study Population:** Young Adults (20-25)

**Locale:** New Delhi

**Sample Size:** 60 (30 male and 30 female)

### Description of Tools

S.No	Tool Used	Author of the test	Year	Reliability	Validity
1.	Mental Health Inventory	Dr. Jagdish, Dr. A.K. Srivastava	1983	r= 0.73	0.54
2.	Panas Scale	David Watson, Lee Anna Clark, and Auke Tellegen	1988	r= 0.86-0.90 (positive affect)  r= 0.84-0.87 (negative affect)	HSCL = .74 negative affect and -.19 for positive affect.  BDI = .65 for negative affect and -.29 for positive

### Result:

#### Socio Demographic Details

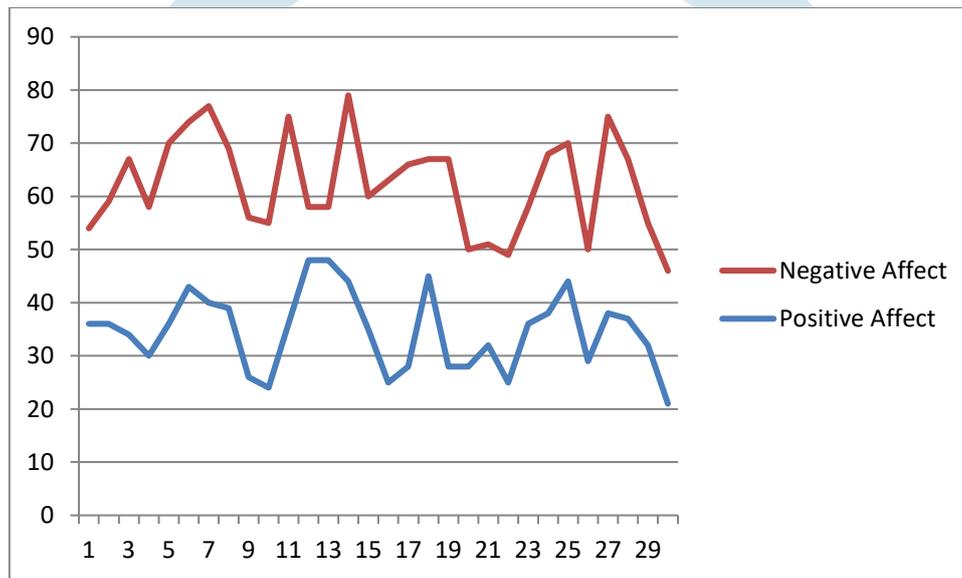
- **Age** – 20-25(years)
- **Gender** – 30 male 30 female
- **Occupation**- students and employee

#### Scoring of PANAS Scale

**Table 1: Shows the positive and negative affect in female**

Participant (Female)	Positive Affect	Negative Affect
1	36	18
2	36	23
3	34	33
4	30	28
5	36	34
6	43	31
7	40	37
8	39	30
9	26	30
10	24	31
11	36	39
12	48	10
13	48	10
14	44	35
15	35	25

16	25	38
17	28	38
18	45	22
19	28	39
20	28	22
21	32	19
22	25	24
23	36	22
24	38	30
25	44	26
26	29	21
27	38	37
28	37	30
29	32	23
30	21	25

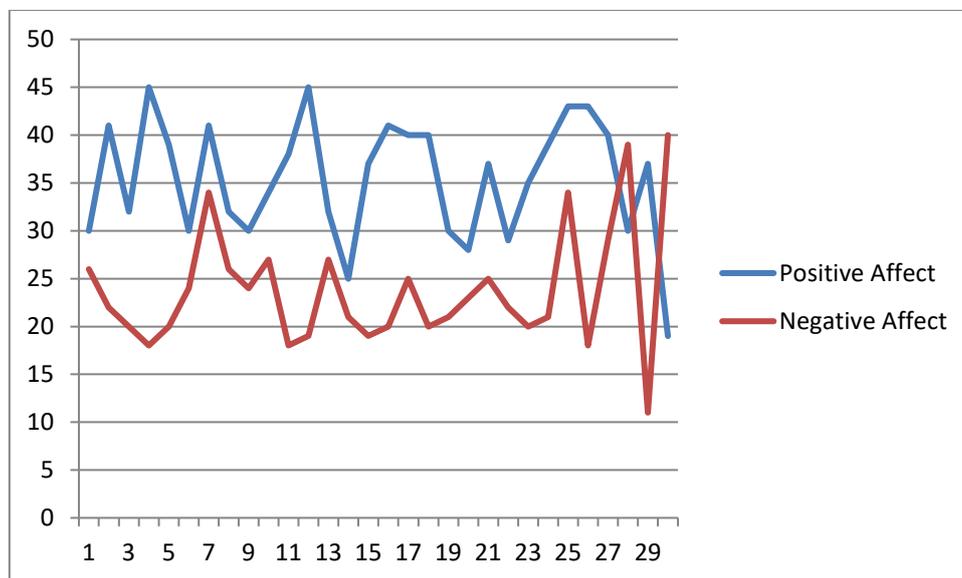


Comparison of negative and positive affect in females

Table 2: Shows result of positive and negative affect in males

Participant (Male)	Positive Affect	Negative Affect
1	30	26
2	41	22
3	32	20
4	45	18
5	39	20
6	30	24
7	41	34
8	32	26
9	30	24
10	34	27
11	38	18
12	45	19
13	32	27
14	25	21
15	37	19
16	41	20
17	40	25
18	40	20
19	30	21
20	28	23
21	37	25
22	29	22

23	35	20
24	39	21
25	43	34
26	43	18
27	40	29
28	30	39
29	37	11
30	19	40



Comparison of negative and positive affect in males

**Table 1** shows that positive affect is more than negative affect in females that is participant (1,2,3,4,5,6,7,8,12,13,14,15,18,19,20,21,22,23,24,25,26,27,28,29,30) has more positive emotions than negative emotions . Participant (9,10,11,16,17) shows more negative emotions than positive emotions.

**Table 2** shows participant (1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29) have more positive emotions than negative emotion out of 30 participant subject 30 have more negative emotion positive emotion.

**Scoring of Mental Health Inventory**

**Table 1: showing result of false items in women**

Dimensions	Female
Positive Self Evaluation (PSE)	356
Perception Of Reality (POR)	359
Integration Of Personality (IOP)	958
Autonomy (AUTNY)	400
Group Oriented Attitude (GOA)	568
Environmental Mastery (EM)	253
<b>Total False items</b>	<b>2894</b>

**Table 1.1: Showing the result of true items in female**

Dimensions	Female
Positive Self Evaluation (PSE)	654
Perception Of Reality (POR)	431
Integration Of Personality (IOP)	107
Autonomy (AUTNY)	208
Group Oriented Attitude (GOA)	379
Environmental Competence (EC)	699
<b>Total True items</b>	<b>2478</b>

**Grand Total (Female): 5372**

**Table 2: Showing results of false items in Male**

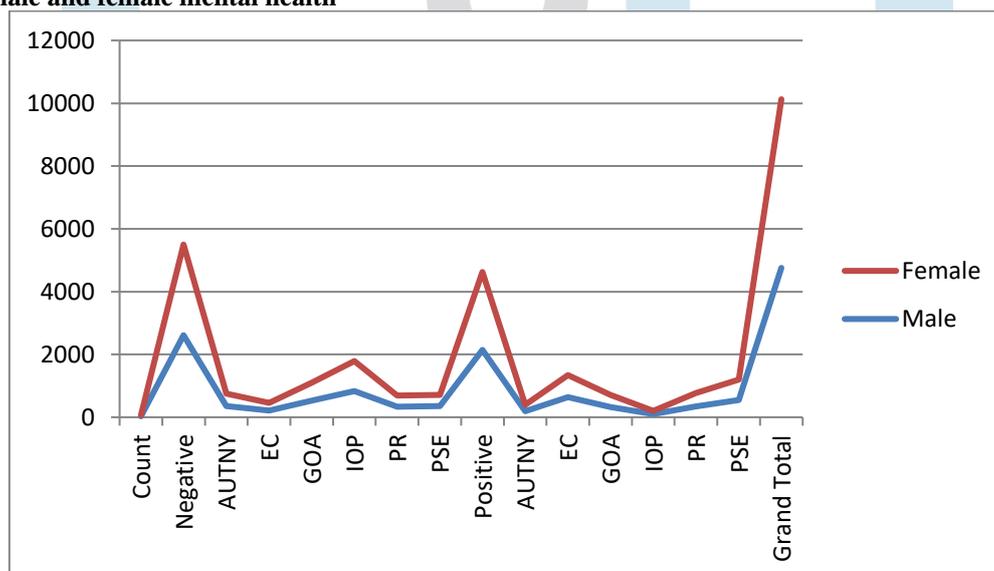
Dimensions	Male
Positive Self Evaluation (PSE)	353
Perception Of Reality (POR)	336
Integration Of Personality (IOP)	830
Autonomy (AUTNY)	355
Group Oriented Attitude (GOA)	526
Environmental Competence (EC)	208
<b>Total False items</b>	<b>2608</b>

**Table 2.2: Showing results of true items in Male**

Dimensions	Male
Positive Self Evaluation (PSE)	546
Perception Of Reality (POR)	341
Integration Of Personality (IOP)	100
Autonomy (AUTNY)	191
Group Oriented Attitude (GOA)	329
Environmental Competence (EC)	641
<b>Total True items</b>	<b>2148</b>

**Grand Total (Male) – 4756**

**Comparison of male and female mental health**



As we can see the data is evaluated on the basis of six dimensions. The female score more in Positive Self Evaluation (PSE) than male which includes self confidence, self acceptance etc. The second dimension is Perception of Reality (POR) i.e. absence of excessive fantasy and a broad outlook on the world is more among females than a male. The third dimension Integration of Personality (IOP) which indicates the ability to understand and to share other people emotions etc is more in female than a male. The fourth dimension i.e. Autonomy (AUTNY) which includes stable set of internal standards for one's action etc is more among females than a male. The fifth dimension Group Oriented Attitudes (GOA) measures ability to get along with others, work with others, and ability to find recreation is less in males than a female. The last dimension which is Environmental Competence (EC) includes efficiency in meeting situational requirements, the ability to work and play is scored higher in females than a male.

#### **Discussion**

Our findings show that the males tend to experience more positive emotions than females whereas females mental health has shown better results than males. As we have studied our positive emotions lead to a broader momentary actions (Fredrickson 1988). Positive emotions lead to an increase of hope, reduced illness symptoms, mindfulness, relationship quality which overall increases life satisfaction. As a result, this indicates that both males and females lack in various areas whether they are positive emotions or mental health.

A research had shown that individuals who experience positive emotions had better wellbeing and less risk of stress. On the other hand the individual who experience negative emotions and mental ill health are more prone to health problems. High levels of positive emotions are correlated with higher levels of resilience, whereas high levels of negative emotions are associated with lower levels of resilience. These results are in line with previous studies that demonstrate how coping with stressful situations is aided by

positive emotions ( Folkman, 1997; Fredrickson et al., 2003; Moskowitz et al., 2020). Therefore, the current results states that the effect of positive emotions in males and females, females experience more negative emotions.

Therefore, it can be inferred that increasing positive emotions may be a better means of assisting people in coping with their current distress than pursuing the elimination of negative emotions.

### Conclusion

The study examined the effect of positive emotion on mental health (male and female). The study suggests that the higher the positive emotions we experience the less we experience stress. Today people are trying to enhance their mental health and suffering. This suggests the positive emotions are a vital role for a better mental health and for a better functioning in one's life.

### Limitations

- The sample size is small.

### References

- [1] Ackermans, M. A., Jonker, N. C., Bennis, E. C., & de Jong, P. J. (2022). Hunger increases negative and decreases positive emotions in women with a healthy weight. *Appetite*, 168, 105746.
- [2] Alexander, R., Aragón, O. R., Bookwala, J., Cherbuin, N., Gatt, J. M., Kahrilas, I. J., Kästner, N., Lawrence, A., Lowe, L., Morrison, R. G., Mueller, S. C., Nusslock, R., Papadelis, C., Polnaszek, K. L., Helene Richter, S., Siltan, R. L., & Styliadis, C. (2021). The neuroscience of positive emotions and affect: Implications for cultivating happiness and wellbeing. *Neuroscience and biobehavioral reviews*, 121, 220–249.
- [3] Arslan, G. (2022). Childhood psychological maltreatment, optimism, aversion to happiness, and psychological adjustment among college students. *Current psychology*, 1-9.
- [4] Datu, J. A. D., Valdez, J. P. M., McInerney, D. M., & Cayubit, R. F. (2022). The effects of gratitude and kindness on life satisfaction, positive emotions, negative emotions, and COVID-19 anxiety: An online pilot experimental study. *Applied Psychology: Health and Well-Being*, 14(2), 347-361.
- [5] Kaczmarek, L. D., Kashdan, T. B., Behnke, M., Dziekan, M., Matuła, E., Kosakowski, M., ... & Guzik, P. (2022). Positive emotions boost enthusiastic responsiveness to capitalization attempts. Dissecting self-report, physiology, and behavior. *Journal of Happiness Studies*, 23(1), 81-99.
- [6] Kuijpers, E., Pickett, J., Wille, B., & Hofmans, J. (2022). Do you feel better when you behave more extraverted than you are? The relationship between cumulative counterdispositional extraversion and positive feelings. *Personality and Social Psychology Bulletin*, 48(4), 606-623.
- [7] Reichenberger, J., Kuppens, P., Liedlgruber, M., Wilhelm, F. H., Tiefengrabner, M., Ginzinger, S., & Blechert, J. (2018). No haste, more taste: An EMA study of the effects of stress, negative and positive emotions on eating behavior. *Biological psychology*, 131, 54-62.
- [8] Schweder, S., Raufelder, D., & Wulff, T. (2022). Adolescents' goals, self-efficacy, and positive emotions—how important is the learning context?. *International Journal of School & Educational Psychology*, 10(1), 1-17.
- [9] Shen, L., van Schie, J., Ditchburn, G., Brook, L., & Bei, B. (2018). Positive and negative emotions: Differential associations with sleep duration and quality in adolescents. *Journal of youth and adolescence*, 47(12), 2584-2595.
- [10] Varma, M. M., Chen, D., Lin, X., Akin, L. B., & Hu, X. (2022). Prosocial behavior promotes positive emotion during the COVID-19 pandemic. *Emotion*.
- [11] Waters, L., Algoe, S. B., Dutton, J., Emmons, R., Fredrickson, B. L., Heaphy, E., & Steger, M. (2022). Positive psychology in a pandemic: Buffering, bolstering, and building mental health. *The Journal of Positive Psychology*, 17(3), 303-323.
- [12] Yoon, J., Li, S., & Hao, Y. (2022). Design-Mediated Positive Emotion Regulation: The Development of an Interactive Device that Supports Daily Practice of Positive Mental Time Traveling. *International Journal of Human-Computer Interaction*, 38(5), 432-446.