The Influence of Lifestyle Factors on Psychological Flexibility

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CURE HWS 410

ABSTRACT

- Studies have shown a profound connection between lifestyle, learning, and neurobehaviors. This study explores the correlation between nutrition and its psychological flexibility.
- A total of 250 individuals, aged 18 and older, completed an anonymous online survey that was administered through Google Forms. The survey consisted of demographic questions and assessments of lifestyle choices, neurobehavioral patterns, learning behaviors, and eating habits. Data analysis was performed using Pearson's Correlation Analysis SPSS version 28.0 to identify patterns and correlations between nutrition and psychological flexibility.
- Results showed a significant positive correlation between a healthy diet composed of fish oil, nuts and whole grains ($p < 0.01$). Furthering education, such as reading and attending college, showed a significant positive correlation with psychological flexibility ($p < .05$).
- Both maintaining a healthy diet and the continuation of learning appears to play a role in increasing psychological flexibility. These findings support prior research showing that nutrient-rich diets and continued learning are linked to improved emotional control, flexible thinking, and well-being. Lifestyle changes targeting diet and learning behaviors can support psychological flexibility in many individuals.

INTRODUCTION

- Nutrition plays a crucial role in emotional regulation and overall psychological flexibility. Psychological flexibility refers to an individual's ability to regulate emotions, adapt to changes in circumstances, and engage in goal-directed behaviors despite challenges.
- Previous studies have highlighted how dietary choices contribute to cognitive performance and emotional resilience.
  - Whole food diets such as the Mediterranean diet that is rich in vegetables, nuts, fruits, and fish have been associated with reduced depression, anxiety, and overall improved mental health outcomes (Bremner et al.,2020).
  - Poor diet and nutrient deficiencies are connected to lower energy, mood swings, and higher stress levels (Nematollahi et al., 2017).
- The present study aimed to examine the correlation between nutrition, exercise and other lifestyle factors with psychological flexibility and ability to cope with stress. Using an anonymous online survey administered through Google Forms, data were collected from individuals aged 18 and older.

ACKNOWLEDGEMENT

We thank Binghamton Universities Research Days and the Health and Wellness Department for the research opportunity.

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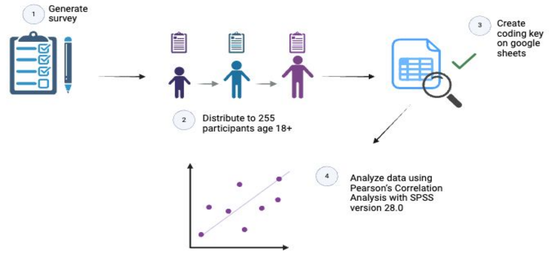
METHODS & RESULTS

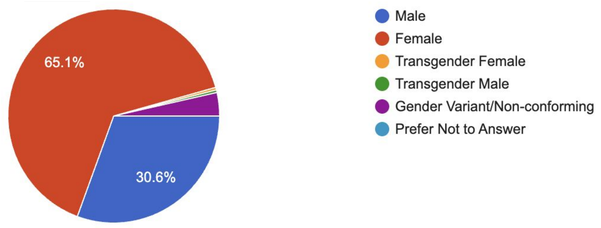
Age Groups
- **18 : 30 participants** **-21: 64 participants**
- **19: 28 participants** **-22: 22 participants**
- **20: 84 participants** **-23+: 18 participants**

Region
- **Majority: New York**

228 participants
Gender
Female: 166 participants
Male: 78 participants
Education
High School Diploma Earned: 207 participants



Gender:



Age:

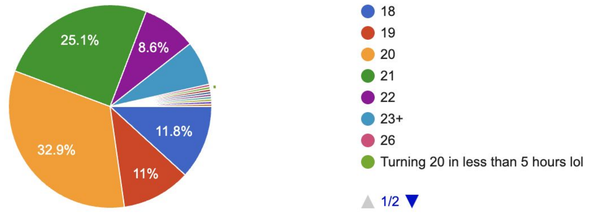


TABLE 1: Consistency of Exercise and Openness to Experiences

Questions	Pearson Relationship
I am the type of person who really enjoys the uncertainty of everyday life.	.251**
I am at my best when doing something that is complex or challenging.	.155*
Everywhere I go, I am out looking for new things or experiences.	.163*
I view challenging situations as an opportunity to grow and learn.	.153*
I like to do things that are a little frightening.	.177*

TABLE 2: Furthering Education and Psychological Flexibility

Questions	Pearson Relationship
For the pleasure that I experience when I read interesting authors.	0.157*
For the pleasure that I experience when I feel completely absorbed by what certain authors have written.	0.132*
Because college allows me to experience a personal satisfaction in my quest for excellence in my studies.	0.126*
Because college allows me to experience a personal satisfaction in my quest for excellence in my studies.	0.148*

TABLE 3: Consumption of Sugary Foods and Ability to Cope with Stress

Questions	Pearson Relationship
I tried to make peace with my negative thoughts and feelings rather than resisting them.	-.165**
I was receptive to observing unpleasant thoughts and feelings without interfering with them.	-.147*
When I was upset, I was able to let those negative feelings pass through me without clinging to them	-.175**
I was able to let negative feelings come and go without getting caught up in them.	-.204**

TABLE 4: The Link Between Consumption of Fruits and Psychological Well-being

Questions	Pearson Relationship
Regardless of my current intelligence level, I think I have the capacity to change quite a bit over time	.128*
I don't know; I can't understand what I am doing in school	-.188*
Even when I felt hurt or upset, I tried to maintain a broader perspective	.150*
Even when I stumbled in my efforts, I didn't quit working towards what was important	.173**

DISCUSSION

- This study highlights the strong link between nutrition and psychological flexibility. A diet rich in fish oil, nuts, and whole grains correlated with stress regulation and improved mental health symptoms. Continued education, such as reading and attending college, was positively associated with psychological flexibility, reinforcing the cognitive benefits of lifelong learning.
- "Feel good" chemicals such as dopamine and serotonin play a major role in psychological flexibility. They aid in regulating emotions such as stress and motivation, creating a positive feedback loop, where certain foods fuel positive eating habits, that directly correlate with a positive mental state (Firth, J. et al., 2020).
- The foods consumed by individuals release these neurotransmitters, which regulate emotions.
- These findings support the growing recognition of the gut-brain connection, where nutrient-dense foods enhance neurotransmitter function and reduce inflammation, influencing mood and adaptability (Zheng et al. 2024).This study relied on self-reported data and its primarily college-student sample limit generalizability.
- Overall, promoting a balanced diet may enhance mental resilience and well-being, underscoring the importance of nutrition in daily life.

FUTURE RESEARCH

- Increasing the amount of participants from 255 would strengthen the accuracy of our results and help us better understand how different individuals experience the relationship between diet and mental health.
- Future studies could assess how diet influences specific mental health conditions, such as anxiety and ADHD, to determine the best diet for each disorder.
- Instead of analyzing diet overall, future research could break down specific food groups, such as processed foods, protein, and whole grains, to determine which group has the best impact on mental health.
- We can also compare mental health effects on different diets, such as the Mediterranean diet vs a Western diet, or plant-based diet vs. omnivorous diet, to identify the most impactful eating habits.

CONCLUSION

- Being mindful of your diet can have a significant impact on an individual's mental well-being, their mood, as well as emotional health.
- Diets rich in whole foods, such as fruits and vegetables, are associated with improved mental health, while consumption of sugary foods are linked to negative emotional stress.
- Balanced nutrition is valuable and important in regards to supporting cognitive functions, stress management, and overall mental health.
- Understanding the relationship between diet and mental health can promote healthier eating habits and long-term well-being.

REFERENCES