

Exploring the Impact of Personality on Food Preferences



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Introduction

Focus: The impact of food flavours on personality traits, specifically extroversion and introversion

Motivation: Gaps in existing literature

Data Collection: 11 question Qualtrics public survey

Background Research

Flavour preferences vary greatly from person to person.

Studies show that certain personality traits are correlated with flavour preferences.

Neurotransmitters are a contributing factor in the relationship between personality and flavour preferences.

Survey Explanation & Target Participants

Purpose of Survey

- Helps us analyze whether individuals with different personality characteristics are statistically more likely to prefer particular flavours

Target Participants

- Broad range of participants, primarily university students and adults within our social and academic circles
- $n = 53$

People often describe extroverts as recharged by social time, and introverts as recharged by alone time. I would consider myself:

☐ Mostly extroverted

☐ Mostly introverted

☐ An equal mixture of both

☐ I don't know

Rate the extent to which you like savoury (umami) foods.

Dislike a great deal			Dislike somewhat		Neither like nor dislike		Like somewhat		Like a great deal	
0	1	2	3	4	5	6	7	8	9	10



Data Cleaning

1. Surveys Marked as “Unfinished”
2. Incomplete Responses
3. Preview Responses
4. Bot Detection
5. Proper Capitalization
6. Split Columns

Analysis Question 1

What food flavours are preferred by individuals who identify as highly sensitive (i.e., those who selected “describes me very well” or “describes me extremely well”), and how do these flavour preferences compare in terms of likeability?

Analysis Question 2

Do more intense flavours (like spicy, bitter, etc.) tend to be associated with certain personality types versus less intense flavours (like savoury or sweet), which may be associated with other personality types?

Analysis Question 3

To what extent do individuals who describe themselves as carefree or impulsive prefer strong and unconventional flavours (e.g. spicy, bitter, sour, salty) over less bold ones (e.g. sweet, savoury)?

Analysis Question 4

Do individuals' statements about being extroverted, introverted, or in between align with their answers about their personality characteristics?

Analysis Question 5

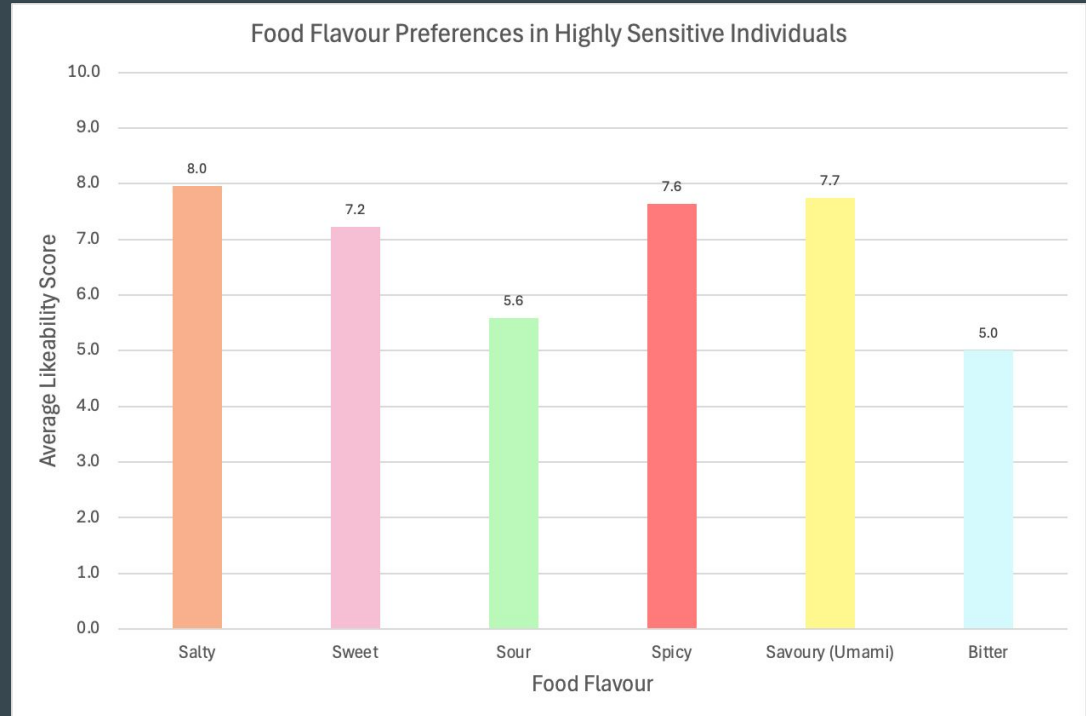
Is there a noticeable difference in flavour preferences between individuals who identify as introverts versus those who identify as ambiverts?

Analysis Question 1 Findings

What food flavours are preferred by individuals who identify as highly sensitive (i.e., those who selected “describes me very well” or “describes me extremely well”), and how do these flavour preferences compare in terms of likeability?

Highly sensitive individuals show a clear preference for salty, savoury, spicy, and sweet flavours.

Highly sensitive individuals appear to have a lower preference for bitter and sour flavours.



Analysis Question 2 Findings

Do more intense flavours (like spicy, bitter, etc.) tend to be associated with certain personality types versus less intense flavours (like savoury or sweet), which may be associated with other personality types?

Mostly introverted individuals tend to prefer milder flavors like savoury or sweet.

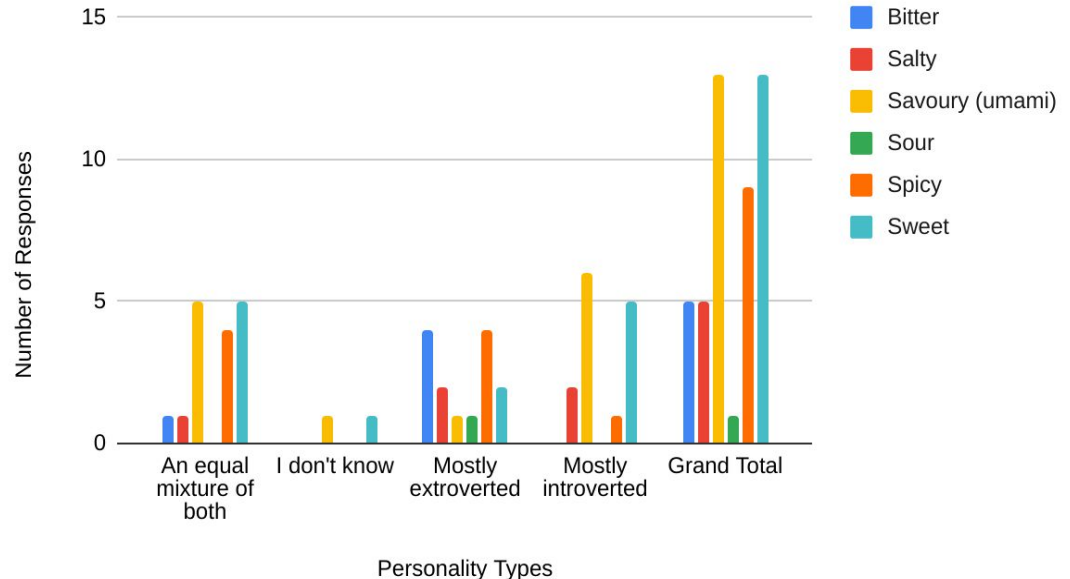
- Least popular choice was spicy flavors.

Mostly extroverted individuals tend to prefer bolder flavors like spicy or bitter.

- Least popular flavor was sour or savoury.

Ambiverts (those with an equal mix of both) tend to prefer savoury or sweet flavors.

Personality Types Versus Food Flavor Preferences



Analysis Question 3 Findings

To what extent do individuals who describe themselves as carefree or impulsive prefer strong and unconventional flavours (e.g. spicy, bitter, sour, salty) over less bold ones (e.g. sweet, savoury)?

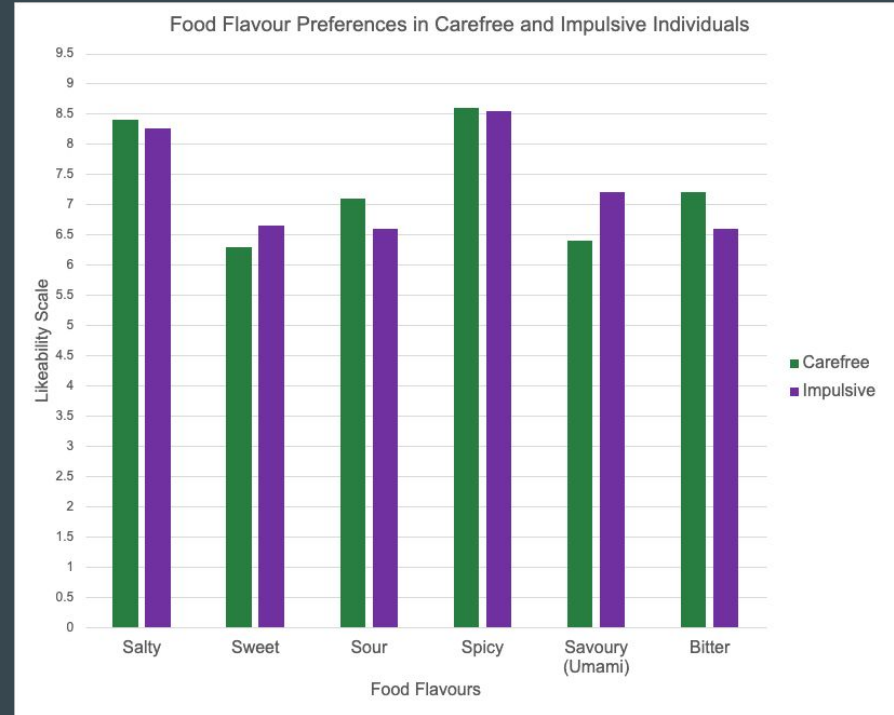
Both carefree and impulsive individuals prefer spicy and salty food the most.

- Shared tendency to prefer bold flavours, associated with high sensation seeking.

Both carefree and impulsive individuals rate sweet foods the lowest.

- Less bold flavours juxtapose the personality traits.

Averages for both bar charts are similar, highlighting the correlation between personality aspects and flavour preferences.



Analysis Question 4 Findings

Do individuals' statements about being extroverted, introverted, or in between align with their answers about their personality characteristics?

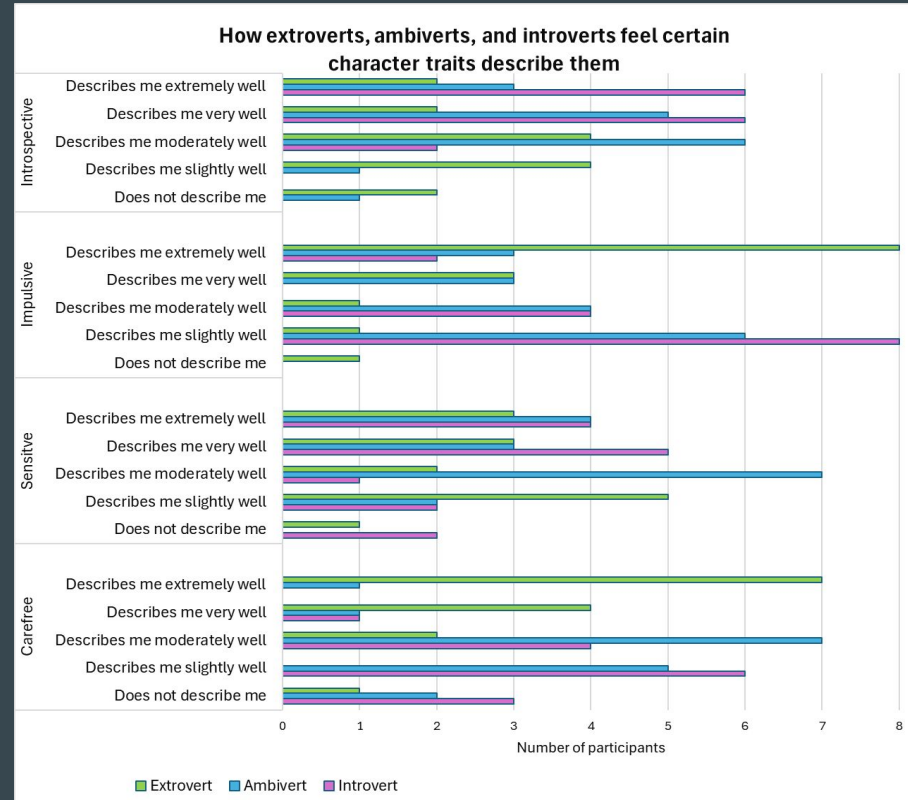
Most extroverts describe themselves as extremely or very impulsive and carefree.

Introverts are slightly or moderately impulsive or carefree.

- Most ambiverts fall in the middle range of each personality trait.

High variation for sensitivity.

- Not strongly correlated for extroversion/introversion



Analysis Question 5 Findings

Is there a noticeable difference in flavour preferences between individuals who identify as introverts versus those who identify as ambiverts?

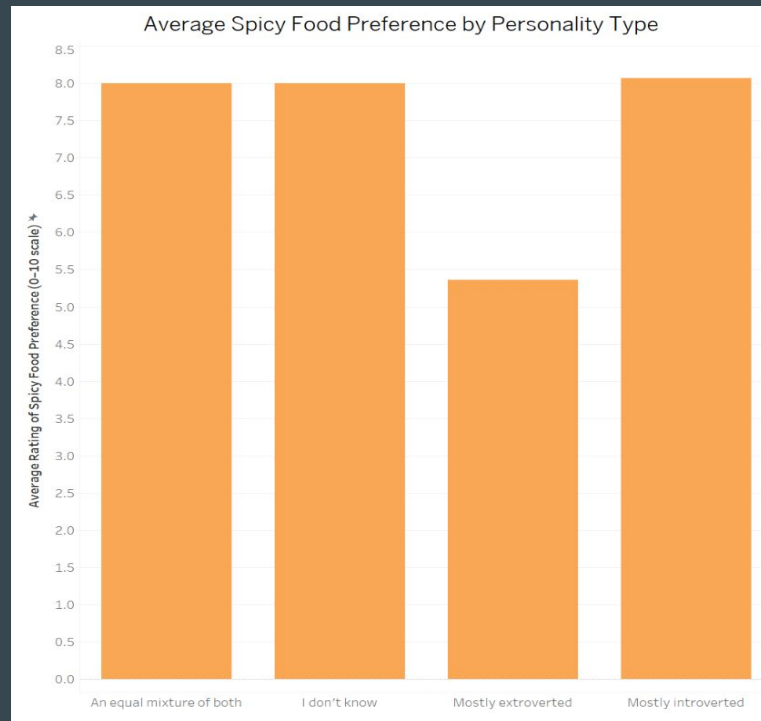
Introverts had the **highest average rating** for spicy food.

Extroverts gave the **lowest average rating** for spicy food.

- Challenges assumptions about sensation-seeking and bold flavours.
- Suggests other factors may influence flavour preference.

Ambiverts and “I don’t know” groups were **in the middle**.

- However, they also rated spicy foods quite high.



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