



Exploring Online Impulsive Buying in Generation Z: The Roles of Self-Esteem and Sensation Seeking Across Male and Female Consumers

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Abstract: This study explored the relationship between impulsive buying behaviour and psychological factors such as self-esteem and sensation-seeking among Generation Z online shoppers in West Bengal, India. The research involved 151 participants (69 high-impulsive buyers and 82 low-impulsive buyers) aged 20-25. Purposive sampling was used. Key findings revealed significant differences in self-esteem and sensation-seeking between high and low-impulsive buyers. Significant gender differences were observed in self-esteem, with males and females exhibiting distinct levels. However, no significant interaction effects were found between gender and impulsive buying behaviour on sensation-seeking. The study utilised standardised measures such as Impulsiveness: Buying Impulsiveness Scale (BIS) by Rook and Fisher (1995), Rosenberg Self-Esteem Scale (RSES) by Rosenberg, M. (1965), The Sensation-Seeking Scale, Form V (SSS-V) by Zuckerman, M. (1978). Data analysis involved two-way ANOVA to examine main and interaction effects. The findings contribute to understanding the psychological underpinnings of impulsive buying behaviour among young online consumers. They highlight the importance of considering both individual differences (impulsive buying tendencies) and sociodemographic factors (gender) in understanding consumer behaviour. This research has implications for marketers, who can leverage these insights to develop targeted strategies, and for policymakers and researchers interested in promoting consumer well-being and responsible consumption habits among young adults.

IndexTerms - Impulsive Buying Behaviour, Gender, Generation Z, Self-Esteem, Sensation-Seeking.

I. INTRODUCTION

This chapter provides a comprehensive overview of impulsive buying behaviour, focusing on online shopping trends and Generation Z consumers. It reviews the literature on psychological factors like self-esteem and sensation-seeking highlighting gaps and forming research questions.

History of Impulsive Buying Behaviour

Impulse buying refers to unplanned, emotion-driven purchases made for immediate gratification, often leading to regret. Early studies by Du Pont (1949) and Clover (1950) defined it as spontaneous and emotionally motivated. Rook (1987) redefined it as a sudden, powerful urge to buy, influenced by emotions and situational factors. Stern's (1962) theory categorized it into pure, reminder, suggestion, and planned impulse buying. Today, online shopping, credit availability, and marketing amplify this behaviour, contributing significantly to retail sales.

While moderate impulse buying can be recreational, excessive behaviour often leads to financial and psychological challenges (Bossuyt et al., 2017). Impulse buying, driven by emotions and situational factors (Zheng et al., 2019), constitutes a significant share of retail sales, generating \$17.78 billion annually in the U.S., with consumers spending an average of \$5,400 on unplanned purchases (Tran, 2019). The COVID-19 pandemic further increased monthly impulse spending by 18% (Keenan, 2021; Li Cain, 2020), with impulse purchases accounting for an estimated 20% of retail sales (Repko, 2020). Using the TCCM framework, Redine et al. (2022) synthesized the literature to propose a future research agenda for impulse buying.

Impulse Buying Behaviour in Online Shopping

E-commerce has transformed retail, increasing impulse purchases through convenience and personalized experiences. Research by Pacheco et al. (2021) identified factors like stress, boredom, and materialism as triggers. Studies in India (Meena Rani & Catherine, 2023) and Finland (Nyrhinen et al., 2023) revealed the influence of income, site features, and targeted ads on online impulse buying among Generation Z.

Impulse Buying Behaviour of Generation Z Consumers

Generation Z displays distinct impulsive buying patterns driven by digital nativity, social media, and FOMO. Studies (Djafarova & Bowes, 2021; Sudirjo et al., 2023) highlight their preference for quick decisions and discounts. Despite being informed shoppers, they remain susceptible to emotional triggers and targeted marketing.

Impulsive Buying Behaviour Across Gender Differences

Gender, rooted in biological and social factors, influences consumer behaviour, including impulsive buying. A 2023 study by Dr Sriparna Guha found significant gender differences in impulsive buying among Kolkata college students, shaped by emotional response, interpersonal influence, and self-control. However, a 2024 study by Arora, Agarwal, and Khurana, involving 417 participants, found no significant gender difference in Gen Z's impulse buying behaviour when shopping with family members.

II. RESEARCH METHODOLOGY

The methodology section outlines the plan and method that how the study is conducted. This study investigates variables such as self-esteem and sensation-seeking, sample divided into high and low impulsive buyers across genders using a comparative design. The details are as follows:

3.1 Population and Sample

A purposive sample of 151 Generation Z customers (20–25 years) from West Bengal was chosen based on substantial online buying experience (3–5 years). The sample comprised 69 high impulsive purchasers (37 males, 32 females) and 82 low impulsive purchasers (36 males, 46 females), equivalent socio-economic status, pocket allowance (₹5,000–₹10,000), daily purchase frequency, session length (30–60 minutes), and purchasing freedom. Inclusion necessitated everyday online shopping and financial reliance, whereas those beyond the age group, less experienced, with financial independence or without purchasing independence were excluded.

3.2 Data and Sources of Data

Data were collected via online and offline surveys. Participants were informed about the study objectives through an informed consent form. The Buying Impulsiveness Scale (Rook & Fisher, 1995) was used to classify participants into high (scores ≥ 32) and low (scores ≤ 22) impulsive buyers, with intermediate scores excluded. Measures taken to collect the data were Informed Consent, General Information Schedule, Impulsiveness: Buying Impulsiveness Scale (BIS) (Rook and Fisher, 1995), Rosenberg Self-Esteem Scale (RSES) (Rosenberg, M., 1965) and The Sensation-Seeking Scale, Form V (SSS-V) (Zuckerman, M., 1978).

3.3 Theoretical framework

Hawkins Stern's impulsive buying theory, developed in 1962, outlines the nature and drivers of impulse buying behaviour. Stern categorized impulse buying into four types:

1. *Pure Impulse Buying*: This is the most common form of impulsive buying where a consumer purchases a product they had not planned to buy and breaks their usual purchase pattern.
2. *Reminder Impulse Buying*: This occurs when a consumer sees an item and remembers that they need it or have run out of it, leading to an unplanned purchase.
3. *Suggestion Impulse Buying*: Here, a consumer makes a purchase based on a suggestion or recommendation. The consumer did not have the item in mind but is persuaded to buy it after seeing it or learning about its benefits.
4. *Planned Impulse Buying*: This type involves a consumer going shopping with a general intention of making some purchases but without a specific item in mind. They plan to take advantage of promotions or discounts and decide what to buy once they see the available options.

Hans J. Eysenck and Sybil B.G. Eysenck (1964) formulated the Eysenck Personality Theory, with three main dimensions—extraversion, neuroticism, and psychoticism—mainly determined by genetics. These aspects greatly influence behaviour, such as impulsive consumption. Extraverts require excitement and stimulation from the outside environment and tend to be more prone to impulsive purchases. Those who are high in neuroticism can turn shopping into an emotional coping mechanism, whereas the impulsive and low self-control individuals who are high in psychoticism are likely to pursue instant gratification from impulsiveness in buying.

Hofstede's Cultural Dimensions Theory identifies six dimensions—Power Distance Index (PDI), Individualism vs. Collectivism (IDV), Uncertainty Avoidance Index (UAI), Long-Term Orientation vs. Short-Term Normative Orientation (LTO), Indulgence vs. Restraint (IVR), and Masculinity vs. Femininity (MAS)—along which cultural values influence human behaviour. Of these, the Masculinity vs. Femininity (MAS) dimension is an important one that influences impulsive buying behavior across cultures.

In societies that are male-dominated, in which achievement, competition, and material success values hold sway, impulsive shopping tends to be motivated by the need to show status and wealth. Impulse purchases can be a way of proclaiming success or earning recognition from society. Feminine societies, on the other hand, value relationships, quality of life, and emotional well-being and, therefore, consumers will indulge in compulsive consumption for self-comfort, nurturing, or care, which is sometimes aimed at experiencing and self-gratification rather than public approval.

3.4 Statistical tools and econometric models

The individual total raw scores of the research participants were obtained by adding up the each of the Buying Impulsiveness Scale (BIS) item scores. This was followed by segregation of scores into high and low. Through General Information Schedule, the gender difference that is the number of male and female participants among the population was estimated. The groups of overall high and low impulsive buyers, overall male and female impulsive buyers, male high and low impulsive buyers and female high and low impulsive buyers were compared across the psychological variables including self-

esteem, sensation seeking, emotional self-regulation and subjective happiness. An attempt was undertaken to achieve the main effect and interaction effect of two levels of impulsive buying behaviour namely; high and low impulsive buying behaviour and gender differences- Male and Female consumers with respect to Self-Esteem, Sensation Seeking, Emotional Self-Regulation and Subjective Happiness by administering Two-Way Analysis of Variance. The mean and standard deviation of all the groups were calculated as a prerequisite for the above-mentioned statistics.

3.4.1 Descriptive Statistics

The section of discussion interprets and contextualizes the findings presented in the results chapter. It explores the implications of the results, discusses their significance, and relates them to existing bodies of knowledge and theories.

The data collected from the different groups of the respondents were systematically organized and properly tabulated by keeping each of the variables examined in the present study into consideration. The collected data was subjected to suitable statistical treatment. Initially, descriptive statistics such as means and standard deviations for the different groups with respect to each of the variables were calculated.

3.4.2 Inferential Statistics

After calculating mean and standard deviation, Two-Way Analysis of Variance for two independent measures with unequal cell frequencies were calculated as well to test the main effects in correspondence to two factors namely, Factor A in which two groups (Group AI and AII) are subdivided based on impulsive buying behaviour (High impulsive buying behaviour and Low impulsive buying behaviour) and Factor B in which two groups (Group BI and BII) are subdivided based on gender differences (Male and Female) and the interaction effect between these two factors on each of the variable.

III. RESULTS AND DISCUSSION

Results of Descriptive Statistics of Study Variables

table 4.1: mean and sd of male and female consumers (combined) with high and low impulsive buying behaviour with respect to the variables examined in the study:

Variable	Dimensions	Factor A (impulsive buying behaviour: High and Low)	Mean	Std. Deviation
Self-Esteem		High Low	26.72 28.57	4.87 4.34
Sensation-Seeking	Boredom Susceptibility Disinhibition Experience Seeking Thrill and Adventure Seeking Sensation Seeking (overall)	High Low High Low High Low High Low	3.68 2.69 4.19 3.58 5.25 5.15 6.13 6.03 19.20 17.72	2.14 2.04 2.18 1.97 1.74 1.76 2.36 2.58 5.33 5.54

table 4.2: mean and sd of male and female consumers with high impulsive buying behaviour with respect to the variables examined in the study:

Variable	Dimensions	Factor B (gender: Male and Female)	Mea n	Std. Deviatio n
Self-Esteem		High Low	28.84 26.70	4.65 4.47
Sensation- Seeking	Boredom	High	3.34	2.17
	Susceptibilit y	Low	2.96	2.09
	Disinhibition	High Low	4.22 3.53	2.09 2.03
	Experience Seeking	High Low	5.41 4.18	1.67 1.81
	Thrill and Adventure Seeking	High Low	6.60 5.81	2.31 2.57
	Sensation Seeking (overall)	High Low	19.66 17.22	5.06 5.62

table 4.3: mean and sd of male and female consumers with high impulsive buying behaviour with respect to the variables examined in the study:

Variable	Dimensions	Factor B (Male and Female)	Mea n	Std. Deviatio n
Self-Esteem		Male Female	28.14 25.09	5.02 4.19
Sensation- Seeking	Boredom	Male	4.16	2.09
	Susceptibilit y	Female	3.13	2.09
	Disinhibition	Male Female	4.78 3.50	2.14 2.05
	Experience Seeking	Male Female	5.62 4.81	1.67 1.73
	Thrill and Adventure Seeking	Male Female	6.16 5.09	2.34 2.41
	Sensation Seeking (overall)	Male Female	20.57 17.63	4.95 5.39

table 4.4: mean and standard deviation of male and female consumers with low impulsive buying behaviour with respect to the variables examined in the study:

Variable	Dimensions	Factor B (Male and Female)	Mea n	Std. Deviatio n
Self-Esteem		Male Female	29.56 27.80	4.17 4.36
Sensation- Seeking	Boredom	Male	2.50	1.95
	Susceptibilit y	Female	2.85	2.11
	Disinhibition	Male	3.64	1.89
		Female	3.54	2.04
	Experience Seeking	Male	5.19	1.65
		Female	5.12	1.86
Thrill and Adventure Seeking		Male	7.06	2.23
		Female	5.62	2.69
Sensation Seeking (overall)		Male	18.72	5.07
		Female	16.93	5.81

Results of Inferential Statistics of Study Variables

table 4.5: mean squares (ms) and f ratios obtained from two-way analysis of variance showing significance of main effects for factors a and b and their interaction effects on different variables:

Variable	Dimensions	Source of Variation	Mean Square s	F
Self- Esteem		Factor A		7.972*
		Factor B	158.31	*
		Factor A × Factor B	213.08	10.73*
			15.44	*
Sensation- Seeking	Boredom	Factor A	34.89	8.17**
		Factor B	4.41	1.03
		Factor A × Factor B	17.79	4.17*
	Disinhibition		11.25	2.72
		Factor A	17.65	4.27*
		Factor B	13.10	3.17
	Experience Seeking	Factor A × Factor B	0.16	0.05
			7.43	2.45
		Factor A	4.85	1.60
	Thrill and Adventure Seeking	Factor B		
		Factor A × Factor B	1.55	0.26
			21.30	3.57
	Sensation Seeking (overall)		17.63	2.96
		Factor A		
		Factor B	181.60	7.23**
		Factor A × Factor B	74.88	2.98
			85.96	3.42
		Factor A Factor B Factor A × Factor B		

P < 0.05 *

p < 0.01 **

The Two-Way ANOVA results indicate that Factor A (High and Low Impulsive Buying Behaviour) significantly affects Self-Esteem, Boredom Susceptibility, overall Sensation-seeking ($p < 0.05$ and 0.01), but not Disinhibition, Experience Seeking, Thrill and Adventure Seeking. Factor B (Male and Female) significantly impacts Self-Esteem and Disinhibition ($p < 0.05$ and 0.01) but no other variables or dimensions. Interaction effects between Factors A and B are significant only for Boredom Susceptibility.

Discussion

For Generation Z, self-esteem is shaped by digital culture, social media comparisons, and the academic pressure and social expectations. Men generally report higher self-esteem than women due to societal and traditional gender roles that emphasize independence and success for men, reinforcing their self-worth (Bleidorn et al., 2016). Research consistently shows that low self-esteem is associated with higher impulsive buying tendencies, while higher self-esteem promotes self-control and rational decision-making (Kalal, 2023; Pacheco et al., 2023). Additionally, studies indicate that gender differences in self-esteem influence impulsive buying behaviour, with males exhibiting higher self-esteem compared to females, though impulsive buying behaviour remains a significant factor independent of gender differences (Major et al., 1999; Bleidorn et al., 2016). For Generation Z, self-esteem plays a crucial role in understanding the interplay between impulsive buying and the unique challenges influenced by technology and societal pressures.

The present study found that consumers with high impulsive buying behaviour, particularly Generation Z, exhibited higher levels of sensation-seeking, especially in boredom susceptibility, compared to those with low impulsive buying behaviour. This aligns with findings that high sensation seekers, including Gen Z individuals, tend to pursue exciting activities to alleviate boredom, which can lead to impulsive buying (Zuckerman, 1979; Pacheco et al., 2021). Male consumers demonstrated higher sensation-seeking overall, particularly in disinhibition, likely due to social and biological factors such as testosterone levels and cultural reinforcement of risk-taking behaviours (Lee & Miller, 2016). While no significant differences were observed in other subscales across genders, the interaction effect between gender and impulsive buying behaviour was significant for boredom susceptibility, corroborating studies indicating that boredom susceptibility influences impulsive buying more strongly in men (Otero-López & Villardefrancos, 2013). These findings underscore that sensation-seeking and its subcomponents, particularly boredom susceptibility and disinhibition, play a critical role in shaping impulsive buying behaviour among Generation Z consumers, who are especially drawn to novel and intense experiences (Ghuman & Kumar, 2018; Sharma et al., 2010).

Conclusion

The present study highlights that impulsive buying behaviour among Generation Z consumers is significantly influenced by self-esteem and sensation-seeking, with notable differences observed between high and low impulsive buyers. Consumers with high impulsive buying behaviour exhibit lower self-esteem, likely due to the influence of curated lifestyles on social media driving impulsive purchases for temporary self-worth boosts, whereas low impulsive buyers demonstrate higher self-esteem, aligning their purchasing behaviours with long-term goals. High impulsive buyers also display higher sensation-seeking, particularly in boredom susceptibility, driven by a craving for novel and thrilling experiences to escape monotony. Although gender differences were not consistently significant, male consumers exhibited higher levels of self-esteem and sensation-seeking compared to females, potentially influenced by traditional gender norms, societal expectations, and biological factors. Furthermore, male consumers with low impulsive buying behaviour consistently reported the highest self-esteem and sensation-seeking levels among all groups, highlighting their ability to resist impulsive temptations and maintain greater confidence and emotional stability.

Figures:

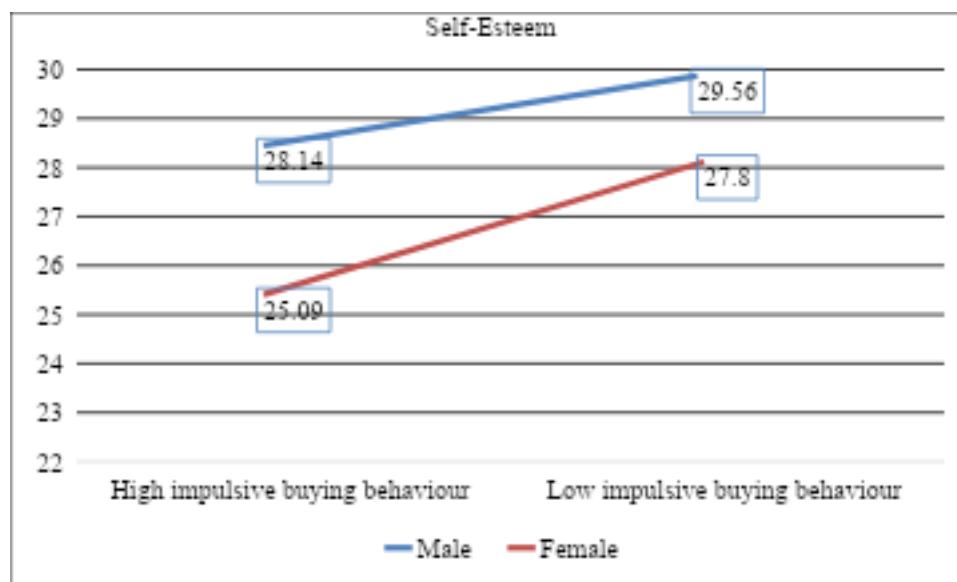


figure 1: graphical representation of the main effect and interaction effect of impulsive buying behaviour and gender differences with respect to self-esteem



figure 2: graphical representation of the main effect and interaction effect of impulsive buying behaviour and gender differences with respect to sensation seeking (overall)

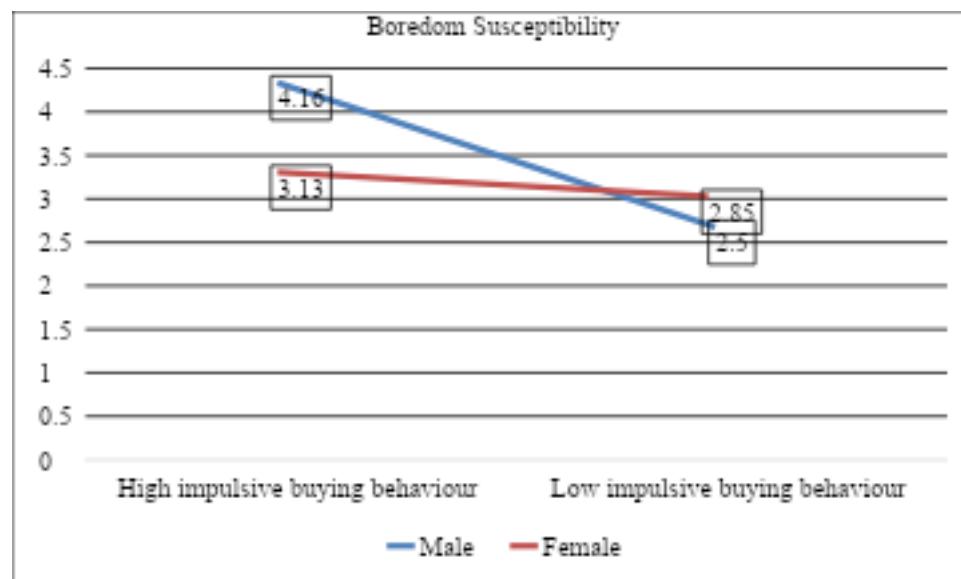


figure 3.1: graphical representation of the main effect and interaction effect of impulsive buying behaviour and gender differences with respect to the dimension of boredom susceptibility

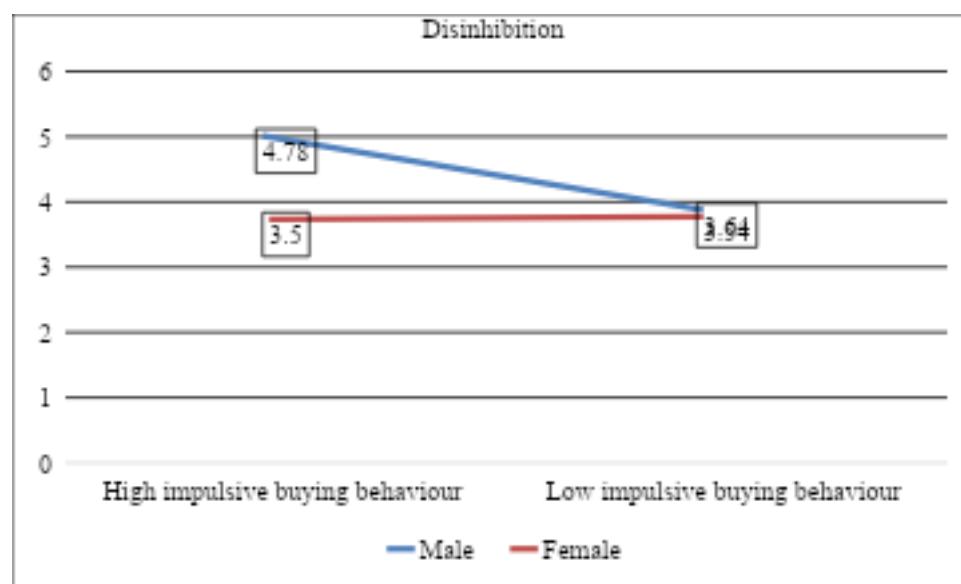


figure 3.2: graphical representation of the main effect and interaction effect of impulsive buying behaviour and gender differences with respect to the dimension of disinhibition

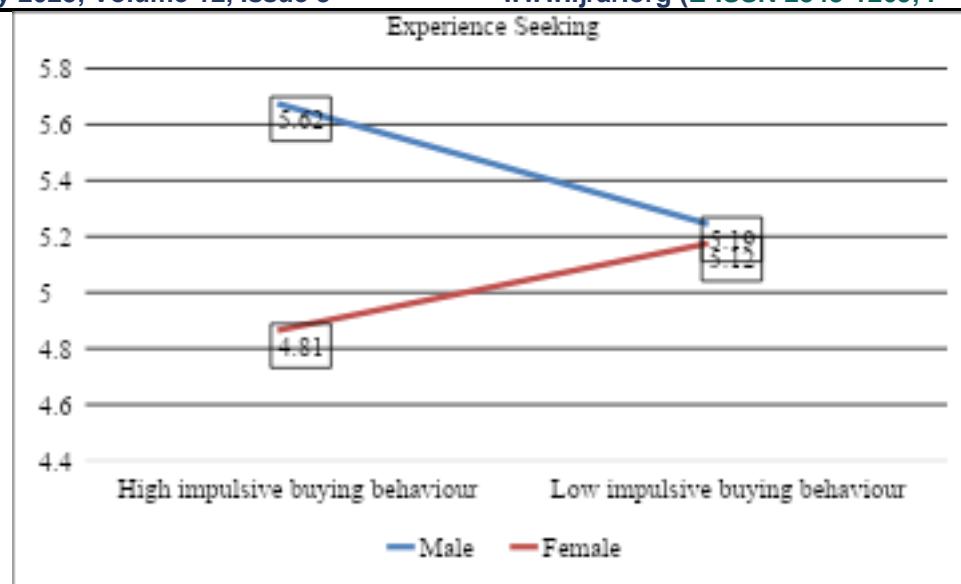


figure 3.3: graphical representation of the main effect and interaction effect of impulsive buying behaviour and gender differences with respect to the dimension of experience seeking

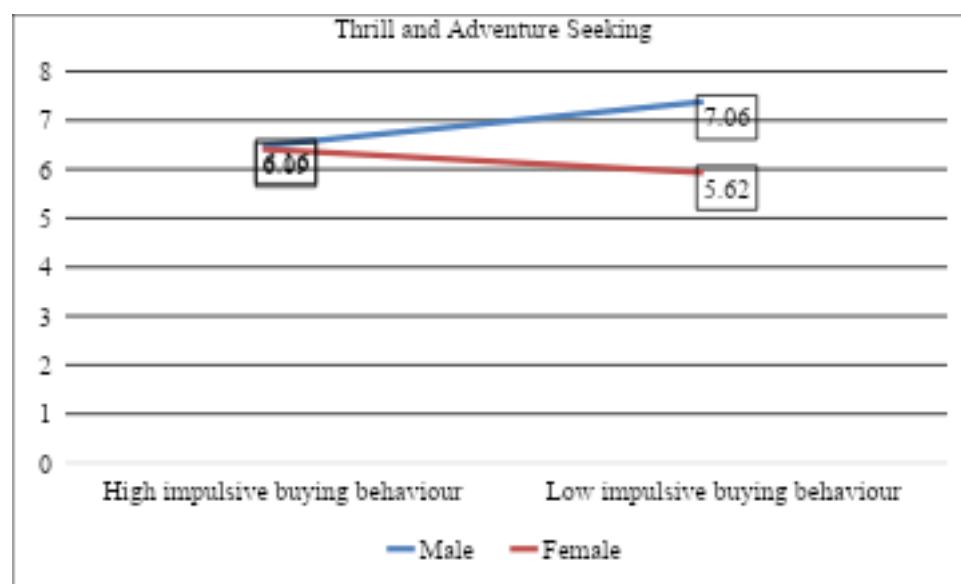


figure 3.4: graphical representation of the main effect and interaction effect of impulsive buying behaviour and gender differences with respect to the dimension of thrill and adventure seeking

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