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Self-Control As a Buffer Against Overconsumption-Driven Social Influence: A Structural Equation Modelling Approach

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Abstract: This study investigates the bidirectional relationship between social influence (bandwagon, snob, and Veblen effects) and individuals' spending self-control within the context of overconsumption—an increasingly pressing concern for both individual well-being and environmental sustainability. Drawing on behavioural economics theory, the study examines how social pressures affect individuals' self-control and, conversely, how self-control can mitigate these social effects. To explore this dynamic, survey data were collected from 1,260 individuals in Erzurum, Türkiye. Social influence tendencies were measured using the scale by Shukla and Rosendo-Rios (2021), while spending self-control was assessed using the scale by Haws et al. (2012). Two structural models were tested using Structural Equation Modelling (SEM): Model A (social influence → self-control) and Model B (self-control → social influence). Model B was better supported, indicating that individuals with higher self-control are significantly less susceptible to all three types of social influence. In contrast, Model A yielded weaker and mostly insignificant results. Demographic analysis also revealed that age, education level, and upbringing environment significantly influence susceptibility to social pressures. These findings suggest that self-control acts as a buffer against socially driven overconsumption. The study makes both theoretical and methodological contributions by addressing a reciprocal relationship that has been largely overlooked in the literature.

Keywords: *Overconsumption, Spending Self-Control, Veblen Effect, Bandwagon Effect, Snob Effect, Behavioural Economics.*

Introduction

The growing tendency towards excessive consumption has become a major topic of interest in behavioural economics, psychology and marketing. This is due not only to its impact on individual well-being, but also to its implications for global sustainability. The growing demand for basic necessities such as food and energy, driven by an increasingly wealthy global population, has surpassed the regenerative capacity of natural systems. This has contributed to crises such as water scarcity, biodiversity loss and climate change (Moran,

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2016; Hertwich, 2010; McMichael et al., 2017). These trends reflect a fundamental shift in consumption patterns that has emerged alongside modern capitalism.

Advances in production technologies since the Industrial Revolution have enabled mass production and wider product availability, reshaping consumption from a need-based act into a pursuit influenced by comfort, status, and aesthetics. In this context, consumerism has become central to identity construction and social signalling. As Fromm and Anderson (2017) observed, the 20th century transformed consumption into a social virtue, where material accumulation came to symbolize happiness and freedom. Effects such as bandwagon, snob, and Veblen emerged as both drivers and reflections of this transformation, reinforcing the shift toward externally motivated consumption behaviours.

Social influences that shape consumer culture, and are simultaneously shaped by it, often lead individuals to make decisions that exceed rational limits. The effects theorised by Leibenstein (1950), namely the bandwagon, snob, and Veblen effects, encourage individuals to consume based on motives such as conformity, differentiation, or the desire to signal social status. In recent years, the power of these social factors has intensified with the rise of digitalisation and social media, contributing to a culture increasingly centred on visibility (Cochoy et al., 2017). As consumption behaviours become more publicly observable in digital environments, individuals are continuously exposed to others' consumption habits. This exposure promotes dynamics of comparison, conformity, and perceived superiority, transforming consumption into a form of social performance and reinforcing excessive consumption at both the individual and societal level.

However, the drivers of overconsumption should not be regarded solely as external forces that shape consumer preferences. These influences also interact with the individual's internal regulatory mechanisms, particularly self-control. Defined as the ability to resist immediate temptations in favour of long-term goals, self-control plays a vital role in strategic decision-making (Wertenbroch, 1998). Existing research suggests that this capacity can be weakened in environments where social pressures are especially dominant, leading individuals toward more impulsive and less rational spending behaviours (Bearden and Haws, 2012; Berns et al., 2008).

Given that social influences can drive individuals' consumption decisions beyond rational boundaries, and that this influence may be closely linked to individuals' capacity for self-control, the present study aims to examine the reciprocal interaction between social influence and self-control. In the existing literature, this relationship has predominantly been treated as unidirectional, with a primary focus on how social influences shape consumer behaviour. In contrast, only a limited number of studies have explored whether internal regulatory mechanisms, such as self-control, play a protective or transformative role in the face of social influence. However, little is known about whether self-control can actively buffer the impact of social pressures on consumption, or conversely, whether social influence can undermine self-control itself. This study seeks to address this gap by adopting a bidirectional analytical framework. The analysis will be conducted using Structural Equation Modelling (SEM), with the goal of identifying how individuals' financial self-control is shaped not only by personal attributes but also through dynamic interaction with various forms of social influence. To guide this investigation, the study is structured around the following research questions:

RQ1: How do social influence mechanisms affect individuals' levels of self-control in consumption behaviour?

RQ2: To what extent does consumer self-control mitigate the influence of social factors such as bandwagon, snob, and Veblen effects on overconsumption?

In doing so, the research aims to offer a theoretical contribution to the behavioural economics literature while also providing a more holistic understanding of the psychological and social dynamics underlying excessive consumption.

Literature Review

Leibenstein (1950) distinguishes between functional and non-functional demand. While functional demand is based on the direct utility derived from a good's inherent characteristics, non-functional demand is shaped by external factors such as others' consumption, the desire to signal social status, or the aspiration for differentiation. In explaining non-functional demand, Leibenstein (1950) emphasizes that the horizontal summation of individual demand curves does not always result in the market demand curve. He refers to this as "non-additivity," underscoring that in sectors such as fashion, an individual's decision to purchase a good may be influenced by whether others are buying the same product. Leibenstein's work was the first to systematically incorporate the concepts of the bandwagon, snob, and Veblen effects into consumer demand theory.

In Leibenstein's (1950) theory, one of the earliest approaches addressing external effects is the idea that individuals determine their own demand based on the consumption levels of others which is referred to as the bandwagon effect. Leibenstein defines the bandwagon effect under the assumption that consumers are either informed about or hold accurate expectations regarding the aggregate demand of others. The effect reflects individuals' tendency to conform to the majority, even when their personal preferences differ. In this context, the desire to integrate into the social environment and "be part of the crowd" becomes a key motivator (Bindra et al., 2022). The dependence of demand on the number of other consumers is referred to as network externalities (Ünsal, 2017). Within this framework, the bandwagon effect exemplifies positive network externalities.

However, the opposite tendency may also be observed in consumption decisions—known as the snob effect. Here, demand is negatively correlated with total market demand. According to van Herpen et al. (2005), the snob effect arises from the scarcity of a good. Scarcity makes access limited and exclusive, increasing perceived value and providing social prestige. Thus, the snob effect represents negative network externalities (Ünsal, 2017). Another concept, the Veblen effect, refers to consumption aimed at gaining prestige or signalling social status. According to Leibenstein (1950), consumer demand depends not only on the actual price of the product but also on how that price is perceived by society. As prices increase, demand may rise because higher prices connote higher status. Leibenstein conceptualized all three effects as external effects on utility, which have since been explored in the literature in connection with social status and influence (Corneo & Jeanne, 1997; Kastanakis & Balabanis, 2012).

The non-functional demand behaviours introduced by Leibenstein remain highly relevant to understanding individual consumption today. However, decision-making processes are influenced not only by external social factors but also by internal self-regulation mechanisms. With the rise of behavioural economics and growing criticism of neoclassical assumptions, scholars have increasingly emphasized the importance of self-control in consumer decision-making. Haws, Bearden, and Nenkov (2012) distinguish consumer spending self-control from general self-control, defining it as the ability to monitor and regulate one's financial behaviour according to self-imposed standards. Inadequate self-control can expose individuals not only to financial risks but also to stronger susceptibility to social influence. Baumeister (2002); Roberts and Manolis (2012) argue that individuals with high self-control show less impulsive purchasing behaviour. While such tendencies originate from individual impulsivity, environmental stimuli, such as marketing tactics, can exacerbate them (Wertenbroch, 2001). Wertenbroch et al. (2001) further claim that hedonic goods elicit stronger impulses than utilitarian goods, increasing the need for self-control. In such cases, strategies like mental budgeting serve as protective mechanisms. Similarly, Nepomuceno (2012) found that individuals with high self-control tend to lead frugal lifestyles and exhibit tightwadism.

Another stream of research suggests that social influences can weaken self-control. According to Grinblatt et al. (2008), social cues—such as neighbours' spending—can undermine internal control, leading to irrational consumption. The extent to which individuals are affected by these influences may vary based on personal prudence. Aguirre-Rodriguez & Torres (2023) show that people with higher prudence are less likely to succumb to short-term impulses and socially induced pressure. This is further reinforced by findings on the Veblen effect. Sivanathan and Pettit (2010) demonstrate that threats to social status lower self-esteem, prompting conspicuous consumption as a compensatory strategy. Podoshen & Andrzejewski (2012) argue that in consumer-driven societies, status-motivated spending is associated with both impulsive consumption and weakened self-control. Similarly, Pellegrino & Shannon (2021) find that while social media use may enhance self-esteem, it simultaneously erodes self-control, facilitating excessive and irrational spending. Vohra (2016) supports this, showing that conspicuous consumption undermines rational thinking and promotes impulsivity.

Parallel findings have emerged in research on the bandwagon effect. Wilcox & Stephen (2013) show that bandwagon-like social connections may reduce self-control. Kang & Ma (2020) argue that fear of missing out (FOMO) drives consumers toward irrational, conformity-based purchases. Under scarcity conditions, Zhang et al. (2022) found that the bandwagon effect intensifies, further amplifying impulsive buying. Likewise, Xing et al. (2022) identified the snob effect, alongside hedonism and perfectionism, as a driver of impulsive consumption, reflecting a clear lack of self-regulation.

Although social influences on consumption are well documented, their reciprocal relationship with self-control remains underexplored. This study addresses whether social pressures actively erode individuals' financial self-control, or whether weak self-control makes individuals more susceptible to these pressures. Accordingly, we propose a bidirectional framework, operationalised through the following hypotheses:

H1. Stronger social influence mechanisms (bandwagon, snob, and Veblen) are negatively associated with individuals' levels of spending self-control.

H2. Higher levels of consumer self-control are negatively associated with the intensity of social influence effects (bandwagon, snob, and Veblen).

The next section presents the data, sampling design, measurement scales, and analytical approach used to test these hypotheses.

Methodology

This study employed a quantitative research design using Structural Equation Modelling (SEM) to analyse the reciprocal relationship between social influence (bandwagon, snob, and Veblen effects) and consumer spending self-control. The bidirectional approach was adopted to fill a gap in prior research, which has mostly treated the relationship as one-sided. Here, we examine not only how social influences weaken self-control, but also whether self-control can mitigate social pressures that encourage overconsumption. Accordingly, two alternative models were developed:

Model A tests whether external social pressures drive individuals to behave in a way that weakens their internal spending control mechanisms. The sub-hypotheses of Model A are as follows:

H1a: The snob effect has a significant impact on consumer spending self-control.

H1b: The bandwagon effect has a significant impact on consumer spending self-control.

H1c: The Veblen effect has a significant impact on consumer spending self-control.

Model B examines the reverse relationship, investigating whether individuals with stronger self-regulation are less susceptible to social influences in their consumption behaviour. The sub-hypotheses of Model B are as follows:

H2a: Consumer spending self-control has a significant effect on the snob effect.
H2b: Consumer spending self-control has a significant effect on the bandwagon effect.
H2c: Consumer spending self-control has a significant effect on the Veblen effect.

To test these models, validated measurement scales were employed. Social Influence was measured through a scale incorporating the bandwagon, snob, and Veblen effects, operationalised by Shukla and Rosendo-Rios (2021) and Consumer Spending Self-Control was assessed using the scale developed by Haws et al. (2012). This scale evaluates individuals' capacity for goal-setting and planning, monitoring expenses and resisting impulsive buying behaviour. All items across the scales were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Data Collection and Sample

The survey was conducted in Erzurum, a city in eastern Türkiye. Erzurum was chosen because it reflects the socio-cultural characteristics of the eastern region while also being more urbanised than its neighbouring provinces. People from surrounding areas often travel to Erzurum for shopping, and the city has three major shopping malls. For this reason, it was considered an appropriate location to study overconsumption.

A total of 1,260 individuals were surveyed through face-to-face questionnaires in these malls. Participation was voluntary and respondents were approached randomly within the malls. Before proceeding with the main analyses, univariate outliers were identified using z-scores, while multivariate outliers were assessed through Mahalanobis distance values. These extreme observations were excluded because they could distort parameter estimates and reduce the reliability of the SEM results. After this procedure, 1,046 valid questionnaires were retained for analysis. The demographic and descriptive characteristics of the sample included in the research are presented in Table 1.

Table 1: Demographic and Descriptive Statistics

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	512	48.9%
	Female	534	51.1%
	Total	**1046**	**100.0%**
Age	18-25 years	328	31.4%
	26-35 years	265	25.3%
	36-45 years	265	25.3%
	46+ years	188	18.0%
	Total	**1046**	**100.0%**
Place of Upbringing	Village	97	9.3%
	Town/District	260	24.9%
	City Center	601	57.5%
	Metropolis	88	8.4%
	Total	**1046**	**100.0%**
Educational Level	Illiterate	8	0.8%
	Primary Education	69	6.6%
	Secondary Education	231	22.1%
	Undergraduate	677	64.7%
	Postgraduate	61	5.8%
	Total	**1046**	**100.0%**
Marital Status	Married	410	39.2%
	Single	535	51.1%

	Divorced	79	7.6%
	Widowed	22	2.1%
	Total	**1046**	**100.0%**
Occupation	Retired	42	4.0%
	Public Sector Employee	190	18.2%
	Private Sector Employee	296	28.3%
	Tradesperson	81	7.7%
	Farmer	16	1.5%
	Student	311	29.7%
	Housewife	57	5.4%
	Other	53	5.1%
	Total	**1046**	**100.0%**

Table 1 shows that the sample consisted of 1,046 participants, with a nearly even gender distribution: 48.9% male (n = 512) and 51.1% female (n = 534). In terms of age, 31.4% of the participants were between 18 and 25 years old, 25.3% between 26 and 35, another 25.3% between 36 and 45, and 18.0% were aged 46 or above. Regarding participants' upbringing environments, the majority (57.5%) reported growing up in a provincial city center, followed by 24.9% in a town or district, 9.3% in a village, and 8.4% in a metropolitan area. Educational attainment was predominantly high, with 64.7% holding a university degree, 22.1% having completed secondary education, 6.6% primary education, and 5.8% reporting postgraduate education; only 0.8% were illiterate. Concerning marital status, 51.1% of respondents were single, 39.2% married, 7.6% divorced, and 2.1% widowed. In terms of occupational status, 29.7% were students, 28.3% employed in the private sector, 18.2% in the public sector, 7.7% were tradespeople, 5.4% homemakers, 5.1% in other occupations, 4.0% retired, and 1.5% were farmers.

Results

Measurement Model Evaluation

Prior to testing the alternative structural models, the measurement model was established and assessed for validity and reliability. Validity and reliability were evaluated separately based on the Fornell-Larcker criterion, HTMT analysis, and model fit indices. The descriptive statistics and normality test results calculated for the scale and its subdimensions used in the study are presented in Table 2.

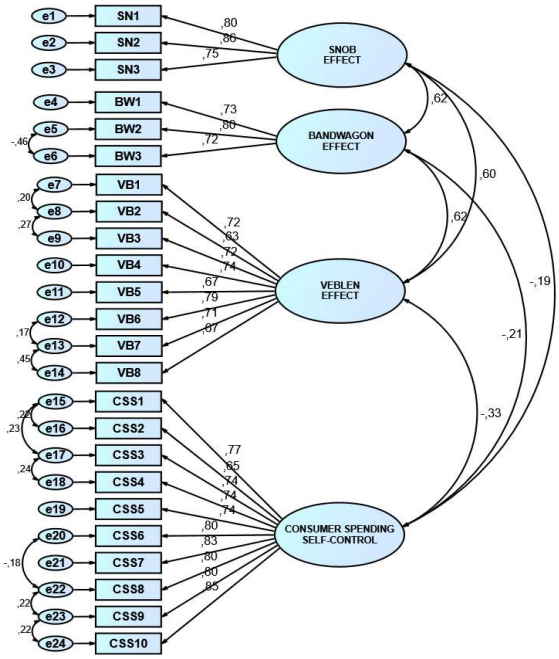
Table 2: Descriptive Statistics and Normality Test Results of the Variables

Statistics	Snob Effect	Bandwagon Effect	Veblen Effect	Self-Control
N	1046	1046	1046	1046
Minimum	1.000	1.000	1.000	1.000
Maximum	5.000	4.333	4.500	5.000
Mean	2.315	2.370	2.068	3.596
Standard Deviation	0.900	0.842	0.740	0.757
Kolmogorov–Smirnov	D(1046)=0.190*	D(1046)=0.124*	D(1046)=0.075*	D(1046)=0.089*
Skewness	[0.000]	[0.000]	[0.000]	[0.000]
Kurtosis	0.387	0.060	0.418	-0.417
N	2.538	2.279	2.747	3.287

Given the large sample size (N = 1046), parametric tests are considered appropriate. All variables (Snob, Bandwagon, Veblen, and Self-Control) were found to be non-normally distributed based on the Kolmogorov–Smirnov test ($p < 0.05$). However, skewness and kurtosis values for all constructs fall within acceptable ranges ($|S| < 1$, $K–3 < 1$), indicating no severe deviations from normality.

The schematic representation of the measurement model, which was constructed prior to testing the research hypothesis models, is presented in Figure 1.

Figure 1: Measurement Model



The parameter estimates ad model fit indices pertaining to the measurement model are reported in Table 3.

Table 3: Estimation Results of the Measurement Model

Exogenous		Endogenous	β	Std. β	S.H	t	[p]
SN3			1.000	0.748	-	-	-
SN2	←	Snob Effect	1.208*	0.863	0.047	25.958	[0.000]
SN1			1.111*	0.804	0.045	24.822	[0.000]
BW3			1.000	0.723	-	-	-
BW2	←	Bandwagon Effect	0.716*	0.797	0.040	17.876	[0.000]
BW1			0.931*	0.729	0.054	17.247	[0.000]
VB8			1.000	0.673	-	-	-
VB7			1.051*	0.710	0.039	27.020	[0.000]
VB6			1.275*	0.788	0.058	21.967	[0.000]
VB5			1.306*	0.669	0.068	19.140	[0.000]
VB4	←	Veblen Effect	1.292*	0.742	0.062	20.930	[0.000]
VB3			1.171*	0.718	0.058	20.332	[0.000]
VB2			1.145*	0.633	0.063	18.062	[0.000]
VB1			1.058*	0.721	0.052	20.421	[0.000]
CSS10			1.000	0.852	-	-	-
CSS9			0.860*	0.797	0.024	35.583	[0.000]
CSS8			0.933*	0.804	0.029	31.737	[0.000]
CSS7			0.986*	0.834	0.029	34.033	[0.000]
CSS6	←	Self-Control	0.944*	0.799	0.030	31.520	[0.000]
CSS5			0.916*	0.742	0.032	28.304	[0.000]
CSS4			0.841*	0.741	0.030	28.226	[0.000]
CSS3			0.814*	0.741	0.029	28.161	[0.000]
CSS2			0.723*	0.654	0.031	23.656	[0.000]

CSS1	0.843*	0.768	0.028	29.769	[0.000]
Model Fit Indices					
$\chi^2(235)=1138.774$* [0.000]	NFI=0.927	IFI=0.941		CFI=0.941	
χ^2/S.D=4.846	RFI=0.914	TLI=0.931		RMSEA=0.061	

(*) indicates statistical significance at the 5% level; parentheses contain the degrees of freedom for the test; square brackets indicate the p-values.

According to Table 3, the chi-square statistic is relatively high, and the hypothesis of equality between the population and sample covariance matrices is rejected ($p < 0.05$). Although the chi-square to degrees of freedom ratio is acceptable, it still suggests a partial model misfit. Given the test's sensitivity in large samples, alternative fit indices are also examined for a more reliable evaluation. For the measurement model, the fit indices (CFI = 0.941, IFI = 0.941, NFI = 0.927, TLI = 0.931) exceed the 0.90 threshold, indicating an acceptable model fit (Hu and Bentler, 1999). Given the large sample size, the chi-square test may overstate misfit; however, the ratio of chi-square to degrees of freedom remains below 5, supporting the model's adequacy (Kline, 2023). All factor loadings are statistically significant ($p < 0.05$) and above 0.60, confirming the validity and reliability of the measurement model (see Table 4).

Table 4: Validity and Reliability Results of the Measurement Model

	CR	AVE	MSV	MaxR(H)	SN	BW	VB	CSS
SN	0.848	0.65	0.387	0.858	**0.806**			
BW	0.794	0.563	0.39	0.799	0.622***	**0.750**		
VB	0.889	0.501	0.39	0.893	0.599***	0.624***	**0.708**	
CSS	0.937	0.601	0.108	0.942	-0.189***	-0.210***	-0.329***	**0.775**

(*) indicates statistical significance at the 5% level. Bold values represent the square roots of the AVE values, while the numbers below them show the correlation matrix.

As shown in Table 4, all constructs demonstrate satisfactory reliability, with CR values exceeding the 0.70 threshold (Hair et al., 2019). The AVE values for the Snob Effect (0.650), Bandwagon Effect (0.563), and Self-Control (0.601) surpass 0.50, indicating adequate convergent validity. Although the AVE value for the Veblen Effect (0.501) is marginal, it remains acceptable (Fornell and Larcker, 1981). Discriminant validity is also supported, as the square roots of the AVE values exceed the corresponding inter-construct correlations, satisfying the Fornell–Larcker criterion (Henseler et al., 2015).

The results of the HTMT (Heterotrait–Monotrait Ratio) analysis for the measurement model are presented in Table 5.

Table 5: HTMT Analysis Results

	SN	BW	VB	CSS
SN				
BW	0.701			
VB	0.602	0.652		
CSS	0.19	0.205	0.33	

As shown in Table 5, all HTMT values are below the 0.85 threshold, confirming adequate discriminant validity among the constructs (Henseler et al., 2015; Kline, 2023).

Structural Model Results

In light of the measurement model findings, it has been confirmed that the model satisfies the necessary psychometric properties required for structural equation modelling. Therefore, the analysis proceeds with testing the research hypotheses using the structural model. The structural equation model diagrams for Model A and Model B are presented in Figures 2.a and 2.b, respectively.

Figure 2: Structural Model Diagrams for Hypothesis Testing
Figure 2a: Model A

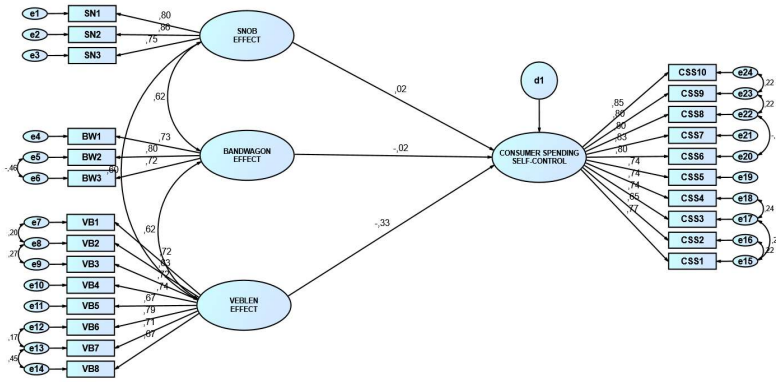
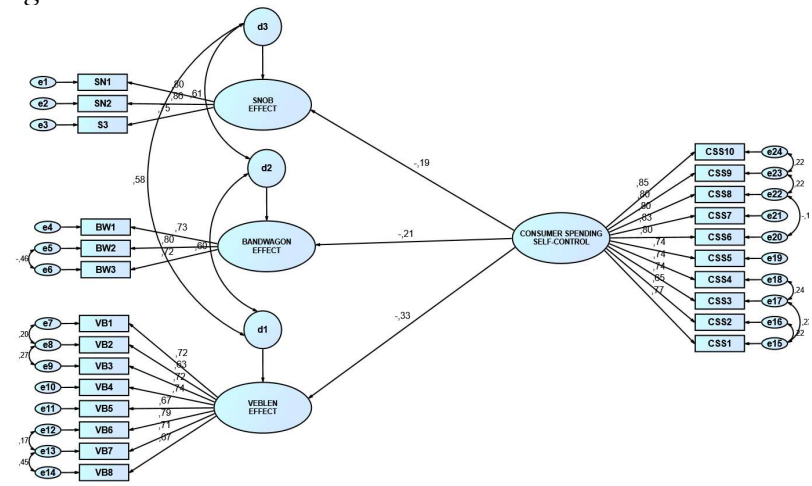


Figure 2b: Model B



The findings for Model A and Model B are reported in Table 6 for comparison.
Table 6: Findings of the Hypothesis Testing Models

Model A Results							
Exogenous variables	←	**Endogenous variables**	**β**	**Std.β**	**S.H**	**t**	**p**
Self-Control	←	Snob Effect	0.020	0.018	0.054	0.370	[0.712]
Self-Control	←	Bandwagon Effect	-0.015	-0.015	0.048	-0.306	[0.760]
Self-Control	←	Veblen Effect	-0.458*	-0.330	0.070	-6.569	[0.000]
$\chi^2(235)=1138.774$* [0.000]		NFI=0.927		IFI=0.941		CFI=0.941	
χ^2/S.D=4.846		RFI=0.914		TLI=0.931		RMSEA=0.061	
Model B Results							
Exogenous variables	←	**Endogenous variables**	**β**	**Std.β**	**S.H**	**t**	**p**
Snob Effect	←	Self-Control	-0.237*	-0.329	0.025	-9.370	[0.000]
Bandwagon Effect	←	Self-Control	-0.222*	-0.210	0.037	-6.054	[0.000]
Veblen Effect	←	Self-Control	-0.173*	-0.189	0.032	-5.468	[0.000]
$\chi^2(235)=1138.774$* [0.000]		NFI=0.927		IFI=0.941		CFI=0.941	
χ^2/S.D=4.846		RFI=0.914		TLI=0.931		RMSEA=0.061	

(*) indicates statistical significance at the 5% level; parentheses contain the degrees of freedom for the test; square brackets indicate the p-values.

According to Table 6, the fit indices calculated for both Model A and Model B are identical and consistent with the measurement model results. This indicates that the two models are equivalent, meaning they produce the same covariance matrix and fit indices—a common occurrence in SEM (Lee and Hershberger, 1990). In such cases, models are compared based on the significance of their path coefficients.

In Model A, neither the snob effect (Std.β = 0.018, $p > 0.05$) nor the bandwagon effect (Std.β = -0.015, $p > 0.05$) significantly influences self-control, suggesting that these tendencies do not affect individuals' spending discipline. In contrast, the Veblen effect exerts a significant negative influence (Std.β = -0.330, $p < 0.05$), indicating that higher levels of conspicuous consumption are associated with lower self-control.

In Model B, where self-control predicts social influence tendencies, all paths are significant and negative: self-control reduces the snob effect (Std.β = -0.329, $p < 0.05$), the bandwagon effect (Std.β = -0.210, $p < 0.05$), and the Veblen effect (Std.β = -0.189, $p < 0.05$).

Comparing the two models, Model B receives stronger empirical support. These findings suggest that individual self-control plays a guiding and regulatory role in mitigating socially driven consumption behaviours.

Group Differences: T-Test and ANOVA Results

Following the structural model analyses, Independent Samples T-Test and ANOVA were conducted to examine whether the scales and their subdimensions differed significantly across demographic and descriptive variables such as gender, age, place of upbringing, education level, marital status, and occupation.

The findings of the Independent Sample T-Test examining gender differences are shown in Table 7.

Table 7: Independent Samples T-Test Results Examining Gender Differences

Variable	Gender	N	$\bar{X}$	σ	Levene	T-Test
Snob Effect	Male	512	2.312	0.935	F(1, 1044)=2.954	t(1044)=-0.117
	Female	534	2.318	0.865	[0.086]	[0.907]
Bandwagon Effect	Male	512	2.344	0.855	F(1, 1044)=0.686	t(1044)=-0.950
	Female	534	2.394	0.829	[0.408]	[0.342]
Veblen Effect	Male	512	2.115	0.734	F(1, 1044)=0.752	t(1044)=2.023*
	Female	534	2.022	0.744	[0.386]	[0.043]
Self-Control	Male	512	3.562	0.765	F(1, 1044)=0.197	t(1044)=-1.463
	Female	534	3.630	0.747	[0.657]	[0.144]

* indicates statistical significance at the 5% level; $\bar{X}$: Mean; σ: Standard deviation; t: t-test statistic; parentheses contain degrees of freedom; square brackets contain p-values.

As presented in Table 7, gender-based differences were generally insignificant across most variables, except for the Veblen effect. While men and women did not differ in terms of snob, bandwagon, or self-control scores, men reported significantly higher levels of conspicuous consumption (Veblen effect), indicating that status-driven consumption remains more pronounced among male participants.

Table 8 presents the ANOVA results examining differences among age groups.

Table 8: ANOVA Test Results Examining Differences by Age Groups

Variable	Age	N	$\bar{X}$	σ	Levene	Anova	P.H
Snob Effect	1)18-25 Years	328	2.510	0.835	F(3, 1042)=0.938	F(3, 1042)=12.688*	1>2 an 3> 4
	2)26-35 Years	265	2.301	0.910			
	3)36-45 Years	265	2.303	0.918	[0.421]	[0.000]	
	4)46+ Years	188	2.012	0.887			

Bandwagon Effect	1)18-25 Years	328	2.461	0.785	F(3, 1042)=1.097	F(3, 1042)=8.945*	1, 2 and 3 >4
	2)26-35 Years	265	2.467	0.854			
	3)36-45 Years	265	2.347	0.852	[0.349]	[0.000]	
	4)46+ Years	188	2.105	0.854			
Veblen Effect	1)18-25 Years	328	2.128	0.752	F(3, 1042)=1.018	F(3, 1042)=4.370*	1 and 2 >4
	2)26-35 Years	265	2.136	0.766			
	3)36-45 Years	265	2.032	0.700	[0.384]	[0.005]	
	4)46+ Years	188	1.916	0.717			
Self-Control	1)18-25 Years	328	3.575	0.768	F(3, 1042)=1.417	F(3, 1042)=1.159	-
	2)26-35 Years	265	3.567	0.699			
	3)36-45 Years	265	3.588	0.801	[0.214]	[0.324]	
	4)46+ Years	188	3.688	0.750			

* indicates statistical significance at the 5% level; $\bar{X}$: Mean; σ: Standard deviation; t: t-test statistic; parentheses contain degrees of freedom; square brackets contain p-values.

As shown in Table 8, age-based differences were significant for all three social influence effects but not for self-control. Younger participants, particularly those aged 18–25, exhibited stronger snob, bandwagon, and Veblen tendencies compared to older groups, whereas participants aged 46 and above consistently displayed the lowest scores. These findings suggest that social influence on consumption is more pronounced among younger individuals, while self-control levels remain relatively stable across age groups.

As shown in Table 9, the ANOVA results examine whether consumer behaviour differs based on the type of location in which individuals were raised.

Table 9: ANOVA Test Results Examining Differences by Place of Upbringing

Variable	**Place of Upbringing**	**N**	$\bar{X}$	**σ**	**Levene**	**Anova**	**P.H**
Snob Effect	1)Village	97	2.237	0.829	F(3, 1042)=1.179	F(3, 1042)=0.784	-
	2)Town/District	260	2.272	0.906			
	3)City Centre	601	2.334	0.913	[0.316]	[0.503]	
	4)Metropolis	88	2.398	0.865			
Bandwagon Effect	1)Village	97	2.474	0.906	F(3, 1042)=1.293	F(3, 1042)=3.188*	4>2 and 3
	2)Town/District	260	2.332	0.836			
	3)City Centre	601	2.336	0.833	[0.275]	[0.023]	
	4)Metropolis	88	2.598	0.815			
Veblen Effect	1)Village	97	1.999	0.742	F(3, 1042)=0.863	F(3, 1042)=0.930	-
	2)Town/District	260	2.022	0.724			
	3)City Centre	601	2.092	0.753	[0.460]	[0.426]	
	4)Metropolis	88	2.114	0.701			
Self-Control	1)Village	97	3.833	0.638	F(3, 1042)=1.958	F(3, 1042)=4.168*	1> 2, 3 and 4
	2)Town/District	260	3.533	0.794			
	3)City Centre	601	3.598	0.759	[0.119]	[0.006]	
	4)Metropolis	88	3.513	0.703			

As presented in Table 9, the place of upbringing significantly influenced only two variables. Individuals raised in metropolitan areas exhibited stronger bandwagon tendencies, reflecting greater susceptibility to socially driven consumption patterns, whereas those who grew up in rural areas demonstrated higher levels of self-control. No significant differences were observed for snob or Veblen effects.

The ANOVA test results examining differences in terms of education level are presented in Table 10.

Table 10: ANOVA Test Results Examining Differences by Education Level

Variable	Educational Level	N	$\bar{X}$	σ	Levene	Anova	P.H
Snob Effect	1) Primary Education or below	77	1.900	0.885	F(3, 1042)=0.420	F(3, 1042)=10.306*	3 and 4 > 1 and 2
	2) Secondary Education	231	2.166	0.916			
	3) Undergraduate	677	2.406	0.875			
	4) Postgraduate	61	2.399	0.917	[0.739]	[0.000]	
Bandwagon Effect	1) Primary Education and below	77	2.022	0.881	F(3, 1042)=0.779	F(3, 1042)=8.890*	3 and 4 > 1 and 2
	2) Secondary Education	231	2.231	0.858			
	3) Undergraduate	677	2.448	0.814			
	4) Postgraduate	61	2.464	0.876	[0.506]	[0.000]	
Veblen Effect	1) Primary Education or below	77	1.817	0.766	F(3, 1042)=1.052	F(3, 1042)=4.781*	3 and 4 > 1
	2) Secondary Education	231	2.021	0.711			
	3) Undergraduate	677	2.096	0.732			
	4) Postgraduate	61	2.242	0.839	[0.369]	[0.003]	
Self-Control	1) Primary Education or below	77	3.879	0.723	F(3, 1042)=1.023	F(3, 1042)=4.219*	1>2 and 3
	2) Secondary Education	231	3.597	0.795			
	3) Undergraduate	677	3.560	0.733			
	4) Postgraduate	61	3.641	0.847	[0.382]	[0.006]	

* indicates statistical significance at the 5% level; $\bar{X}$: Mean; σ: Standard deviation; t: t-test statistic; parentheses contain degrees of freedom; square brackets contain p-values.

As shown in Table 10, educational level significantly affected all variables. Participants with university or postgraduate education exhibited higher levels of snob, bandwagon, and Veblen effects, indicating that higher education is associated with stronger social influence tendencies in consumption. Conversely, individuals with lower educational attainment (particularly primary education or below) reported higher levels of self-control. These findings suggest that education may increase social comparison sensitivity, possibly due to greater exposure to status-oriented consumption environments.

The independent samples t-test results examining differences based on marital status are presented in Table 11.

Table 11: Independent Samples T-Test Results Examining Differences by Marital Status

Variable	Marital Status	N	$\bar{X}$	σ	Levene	T-Test
Snob Effect	Married	410	2.165	0.912	F(1, 1044)=0.125	t(1044)=-4.371*
	Single/Divorced	636	2.412	0.878	[0.723]	[0.000]
Bandwagon Effect	Married	410	2.289	0.847	F(1, 1044)=0.046	t(1044)=-2.506*
	Single/Divorced	636	2.422	0.835	[0.830]	[0.012]
Veblen Effect	Married	410	2.044	0.761	F(1, 1044)=0.696	t(1044)=-0.828
	Single/Divorced	636	2.083	0.727	[0.404]	[0.408]
Self-Control	Married	410	3.640	0.734	F(1, 1044)=3.341	t(1044)=1.487
	Single/Divorced	636	3.569	0.770	[0.068]	[0.137]

* indicates statistical significance at the 5% level; $\bar{X}$: Mean; σ: Standard deviation; t: t-test statistic; parentheses contain degrees of freedom; square brackets contain p-values.

As shown in Table 11, marital status was associated with differences in social influence tendencies. Single, divorced, or widowed participants reported higher levels of snob and bandwagon effects compared to married individuals, suggesting that social approval and distinction motives may be stronger among non-married consumers. No significant differences were observed for the Veblen effect or self-control.The findings of the ANOVA test examining the differences by occupation are presented in Table 12.

Table 12: ANOVA Test Results Examining Differences by Occupation

Variable	Occupation	N	$\bar{X}$	σ	Levene	Anova	P.H
Snob Effect	1) Public Sector Employee	190	2.198	0.871	F(4, 1041)=1.628 [0.165]	F(4, 1041)=12.423* [0.000]	2 and 4> 1, 3 and 5
	2) Private Sector Employee	296	2.437	0.922			
	3) Tradesperson	81	2.148	0.907			
	4) Student	311	2.496	0.825			
	5)Retired/Housewife/Other	168	1.978	0.902			
Bandwagon Effect	1) Public Sector Employee	190	2.409	0.785	F(4, 1041)=1.457 [0.213]	F(4, 1041)=7.938* [0.000]	1, 2, 3 and 4>5
	2) Private Sector Employee	296	2.439	0.825			
	3) Tradesperson	81	2.235	0.897			
	4) Student	311	2.477	0.799			
	5) Retired/Housewife/Other	168	2.069	0.913			
Veblen Effect	1) Public Sector Employee	190	2.073	0.727	F(4, 1041)=1.136 [0.338]	F(4, 1041)=4.293* [0.002]	2>5
	2) Private Sector Employee	296	2.162	0.718			
	3) Tradesperson	81	2.009	0.715			
	4) Student	311	2.093	0.761			
	5) Retired/Housewife/Other	168	1.876	0.737			
Self-Control	1) Public Sector Employee	190	3.466	0.720	F(4, 1041)=1.362 [0.245]	F(4, 1041)=2.861* [0.023]	2>1
	2) Private Sector Employee	296	3.659	0.723			
	3) Tradesperson	81	3.619	0.716			
	4) Student	311	3.558	0.769			
	5) Retired/Housewife/Other	168	3.694	0.831			

*Indicates statistical significance at the 5% level; $\bar{X}$: Mean; σ: Standard deviation; t: t-test statistic; parentheses contain degrees of freedom; square brackets contain p-values.

As presented in Table 12, occupational differences were significant across all variables. Private sector employees and students exhibited higher levels of snob and bandwagon tendencies compared to other occupational groups, whereas retirees and housewives showed the lowest scores. Similarly, private sector employees reported higher levels of conspicuous (Veblen-type) consumption than retirees. Interestingly, self-control levels were slightly higher among private sector employees than public sector employees, while no other occupational differences were statistically meaningful.

Discussion

In the past, societies primarily struggled to survive and access goods due to limited production techniques and scarce resources. Wars, famines, and inadequate production conditions forced people to compete for food, clothing, and other basic necessities. However, today's conditions have radically changed. The problem is no longer scarcity, but rather the excess created by abundance. Since the 20th century, technological advancements, mass production, and changing living conditions have transformed consumption. What was once need-based has increasingly become shaped by external motivations such as comfort, prestige, aesthetics, and social visibility. Accelerated by digitalisation and the impact of social media in the 21st century, this transformation has turned consumption into a marker of

social identity. As a result, today's debate has shifted from “how to survive” to “how to manage overconsumption caused by abundance.

In this context, this study examines the relationship between social influences (bandwagon, snob, and Veblen effects) and individuals’ spending self-control. While previous studies often explored this relationship unidirectionally, this research adopts a bidirectional perspective. The central question is: Do social influences weaken individuals' self-control, or are individuals with lower self-control more vulnerable to these social effects? To address this research question, survey data were gathered from participants residing in Erzurum, Türkiye. The data were analysed using Structural Equation Modelling (SEM) to test two competing models: Model A, which assumes that social influence affects self-control, and Model B, which posits that self-control influences susceptibility to social influence. Social influence tendencies were measured based on Leibenstein (1950) and Veblen (1899), using the scale by Shukla & Rosendo-Rios (2021). Spending self-control was measured using the scale developed by Haws, Bearden, and Nenkov (2012).

Findings from both models indicate that the relationship between social influence and self-control is reciprocal, not one-way. Model B proved statistically stronger and more explanatory. This means that individuals with higher self-control significantly reduce their susceptibility to social influences (bandwagon, snob, and Veblen effects). This result aligns with the behavioural framework proposed by Shefrin and Thaler (1978), who conceptualised self-control as an internal regulatory mechanism mediating the conflict between the “planner” (long-term rational self) and the “doer” (short-term impulsive self). Within this dual-self perspective, individuals with stronger self-control can resist socially driven consumption pressures, thereby restoring a form of bounded rationality in decision-making. In contrast, in Model A, only the Veblen effect had a significant negative impact on self-control; snob and bandwagon effects did not yield meaningful results. Especially the results from Model B show that participants with high levels of self-discipline are more resistant to social pressures and external consumption norms. These findings strongly support the views of Haws et al. (2012), who position spending self-control as a key regulator in financial decision-making. They are also consistent with Baumeister (2002) and Roberts and Manolis (2012), who argue that low self-control increases impulsive and unplanned spending. Additionally, the negative impact of the Veblen effect on self-control in Model A supports Sivanathan and Pettit (2010), who found that social status threats lead individuals toward compensatory conspicuous consumption.

The demographic results reveal that younger individuals are particularly more sensitive to snob and bandwagon effects. This supports Nguyen and Van Nguyen (2025), who found that young consumers tend to engage in impulsive purchasing. Unlike previous generations, today’s youth live in digital environments where visibility and social approval carry significant weight. This digital environment increases consumption pressure, especially through social media. Also, young individuals often lack financial experience, which leads them to prioritise immediate gratification over long-term planning. As a result, self-control weakens in younger consumers.

Unexpectedly, higher levels of education are associated with increased susceptibility to social influence. This finding contradicts traditional economic assumptions, which suggest that education should foster more rational decision-making. This contradiction aligns with the behavioural economics perspective on bounded rationality. Even educated individuals may not act rationally when influenced by social pressure or status motivations. Moreover, higher education levels often correspond with higher income, which can make status-driven products more accessible. While Rana and Tirthani (2012) found a negative relationship, Hejase et al. (2015) reported no significant link between education and consumption behaviour. Therefore, the influence of education on sensitivity to social effects appears to depend on contextual and

sample-specific factors. These findings make more sense when interpreted through behavioural economics, especially under the influence of social norms and cognitive limitations.

As for gender, no significant differences were found in snob and bandwagon effects. However, men exhibited significantly higher Veblen tendencies (i.e., conspicuous consumption) compared to women. This can be explained by traditional social roles, where masculinity is more strongly associated with displays of status and material ownership.

Finally, the social and cultural environment during childhood and adolescence seems to be an important factor shaping consumption habits and spending control. The variable "place of upbringing" offers a relatively neglected but unique contribution to the literature. According to the findings, there was no significant difference in snob or Veblen effects based on where individuals were raised. However, those raised in metropolitan areas exhibited significantly higher levels of bandwagon tendencies. In contrast, participants raised in rural environments demonstrated higher self-control levels. This suggests that consumption decisions are not merely individual choices but are shaped by the social context of one's upbringing. Such environmental influences may have lasting impacts on both susceptibility to social influences and the ability to control spending.

Conclusion

This study investigated the reciprocal relationship between the bandwagon, snob, and Veblen effects and individuals' spending self-control. The findings demonstrate that, contrary to the traditionally unidirectional approach in the literature, this relationship is bidirectional. Specifically, self-control appears to function as a protective mechanism against socially driven consumption tendencies, especially among individuals who are younger, more educated, and raised in metropolitan, consumption-intensive environments. These results suggest that policy designs and behavioural interventions should prioritize these more vulnerable groups. For instance, educational programs aimed at enhancing self-regulation among young people or awareness campaigns tailored to the specific pressures of urban consumer life may be effective.

However, it is important to note that self-control is not merely an individual skill but also shaped by cultural values and collective memory. Therefore, any strategy should not only target individual behaviour change but also consider broader economic values and consumption norms passed down across generations.

Although non-rational consumption driven by pleasure or status may provide short-term satisfaction, it undermines long-term well-being at both individual and societal levels. From a behavioural economics perspective, this pattern reflects the tendency to disproportionately favour present benefits over future outcomes. Thus, beyond individual interventions, there is a need for a broader cultural shift in how society conceptualizes consumption. Policymakers should take the lead in designing interventions that encourage individuals to prioritize long-term well-being and reduce excessive consumption behaviours. In this context, implementing behavioural "nudge" policies may offer an effective tool for promoting more rational and sustainable consumption choices.

That said, this study has certain limitations. First, it was conducted using a sample from Erzurum, Türkiye, and the results may reflect specific cultural characteristics of that region. Second, the data were based on self-reported responses, which may be subject to biases, including socially desirable responding and question framing effects. These factors should be considered when interpreting the results.

Despite these limitations, the study provides evidence for a mutual interaction between social influences and spending self-control. While eliminating social effects entirely may be unrealistic, individual self-control appears to act as a buffering mechanism that mitigates their impact. Future studies should explore strategies to enhance consumers' financial self-

control and test the findings across different geographical and cultural contexts to assess their generalizability.

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Ethics statement

Approval for the study was obtained from the Erzurum Technical University Scientific Research and Publication Ethics Committee confirming that the research complied with ethical standards.