

ORIGINAL RESEARCH

# Exploring the Impact of Social Media Sites on Compulsive Shopping Behavior: The Mediating Role of Materialism

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**Purpose:** This study aims to examine the influence of social media sites and television advertisements on compulsive shopping behavior, and whether this influence is mediated by materialism in the university students of Saudi Arabia.

**Methods:** Data was collected from 487 students at Saudi universities. AMOS and Structural equation modeling (SEM) were utilized to examine the data. The research supports the Hypothesis that adolescents who are more materialistic are more prone than less materialistic adolescents to engage in compulsive shopping behavior.

**Results:** The findings were consistent with other research, suggesting that the same remains true in the culture of Saudi Arabia. The research's findings show that television advertisements and the use of social media sites positively related to compulsive shopping behavior among university students, and materialism mediated the relationship between television advertisements and social media sites.

**Conclusion:** The research emphasizes the significance of comprehending the materialistic attitude and consumption choices of adolescents and offers crucial information for scholars, decision-makers, and management of top companies.

**Keywords:** social media sites, materialism, compulsive behavior, internet use, university students

#### Introduction

Compulsive shopping behavior is a contemporary disorder gaining traction among researchers. 1,2 This problematic shopping behavior has increased quickly in recent years, especially among young adults, and has had negative psychological and economic impacts. Compulsive purchasing is a chronic aberrant type of shopping and spending depicted by an excessive, uncontrolled, and persistent need to buy regardless of the consequences.<sup>3</sup> Several scholars defined compulsive shopping behavior as an emotional state in which a person who is lonely with low self-esteem and low impulse control looks for excitement. 4-6 Parents, adolescents, decision-makers, and advertisers all across the globe are concerned about the rising level of materialism.<sup>7-9</sup> This paper discusses the antecedents of compulsive purchase behavior and the potential mediation role of materialism. Swift suburbanization, parents' higher spending power, and the importance of adolescents in the family's buying choices can all be linked to the causes of materialistic views. 10-13 Researchers have thoroughly researched materialism's nature, <sup>14,15</sup> antecedents, <sup>16,17</sup> and consequences <sup>18,19</sup> of materialism. Materialism is discussed as an adverse attribute in the marketing field that tends to negatively affect youths' subjective happiness and fulfillment in life<sup>20,21</sup> and has a positive association with compulsive buying.<sup>22</sup> Pupils with a strong sense of materialism are dissatisfied, less pleased, and have a lesser degree of "self-actualization" than pupils who are not as materialistic, according to a poll at the Singapore Business School.<sup>23</sup> The tremendous rise in consumerism among young people has become a societal problem in the past few years<sup>24</sup> Dittmar, Bond, Hurst, Kasser<sup>18</sup> discovered that people pick up materialistic values through social learning from social media sites and media, which frequently support materialistic lifestyles. Youth who experience this type of social learning are more likely to be intrigued by cutting-edge items and

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open to commercials and promotional offers. 25 The present generation of kids, according to Schor, 26 is "the most brandoriented, consumer-involved, and materialistic generation in history". Such pricey object ownership is thought to give the most life happiness to overly materialistic people. The potency of materialism's influence on young adults' conduct grows every day. Recent high school graduates, for instance, are more materialistic than Baby Boomers who graduated from high school in the 1970s; 62% of students polled in 2005-07 believe that it is vital to "have a lot of money". compared to just 48% of students in 1976–78.<sup>27</sup> In a similar vein, a UK poll found that youth nowadays tend to be more materialistic than youth in earlier generations. <sup>28</sup> The utilization of "social media sites" (SMSs) has significantly amplified during the last ten years.<sup>29</sup> Even though social media sites are primarily consumed for societal drives, there is a certain sign to propose that people might feel obliged to spend a lot of money on the opportunity to "maintain" their social media profiles online.<sup>29</sup> Youth are especially accountable for using social media sites since they face the danger of being addicted to them. <sup>30,31</sup> It is quite improbable that young people would fully stop using the Internet (and, by extension, SMSs), in contrast to other addictions, as it is an essential part of the modern professional and recreational culture. 32 As a result, adolescents' potential misapplication of social media sites is probable to be a persistent, ever-present problem. Further unfavorable effects of this phenomenon include a greater propensity to engage in both traditional compulsive buying and online compulsive buying.<sup>33</sup> Although the effect of social networking site usage on compulsive intention to buy has been examined by Lee, Park, and Bryan Lee, 3 little is known about the relationship between the two behaviors and the underlying mechanisms that underlie it.

Researchers exploring market psychology have paid close attention to compulsive shopping behavior.<sup>34,35</sup> This is due to the harmful psychological effects of compulsive shopping behavior, which disturbs over fifty million United States individuals.<sup>18</sup> The definition of compulsive shopping behavior given by Ninan, Rothbaum, Marsteller, Knight, Eccard<sup>36</sup> is "impulsive and compulsive buying of unneeded objects". Scholars have linked young people's materialistic beliefs and obsessive shopping behavior to major constructions like TV ads and social media sites (SMSs).<sup>15,37</sup> On the other hand, Yurchisin, Johnson<sup>38</sup> discovered that materialism is the primary cause of compulsive shopping intention and consequently influences all consumer purchasing decisions. 5.8% of United States consumers were compulsive shoppers who felt that material possessions are essential for pleasure, success, and self-identity.<sup>39</sup> The research environment for this study was Saudi Arabia.

Saudi Arabia has experienced a noteworthy demographic transition as a rising economy, with the middle-class income rising and the population's median age dropping to under.<sup>30</sup> The social structure of Saudi Arabia is changing quickly.<sup>40</sup> Today's youth value freedom and uniqueness.<sup>41</sup> The prevalence of young people's psychiatric illnesses and distinctive spending patterns has increased as a result.<sup>31</sup> Young folks' increasing propensity for excessive consumption may drive materialism and obsessive shopping. There is less study on materialism in Saudi Arabia, despite the significant research on it among youngsters in industrialized countries. The current study significantly contributes to the body of literature in several ways to fill this research gap. The objectives of this study were to investigate the causes of materialistic views among Saudi Arabian youth, we first offer a conceptual model based on the body of literature already in existence. Secondly, by incorporating numerous antecedents and consequences of materialism among adolescent, we evaluate and validate the conceptual model, broadening the breadth of the research. Thirdly, we concentrate on materialism as a potential mediating variable among TV advertisements, social media sites and university student's compulsive shopping behavior.

# Literature Review and Theoretical Support

# Theoretical Support

The theory of reasoned action was employed to support this conceptual framework in this research. Ajzen<sup>42</sup> suggested this theory. According to this theory, one of the most important indicators of behavioral intention is the attitude toward behavior. <sup>43–45</sup> The definition of attitude is "an internal evaluation of an object such as a branded product". According to Kaur, Hundal, <sup>46</sup> customer attitude and behavior toward advertisements influence shopper exposure, attention, and reaction to specific advertisements via several cognitive and emotional processes. Attitudes toward ads, compulsive shopping, and materialism are regularly employed factors in consumer compulsive buying behavior research to predict the efficacy of marketing communications across various media. <sup>47,48</sup>

## TV Advertisement and Social Media Sites

Advertising is an operational strategy for transforming individual's opinions and enticing them to a product.<sup>49</sup> Advertisement is a marketing message that uses television and social media sites to urge customers to continue or adopt an activity through sponsored content.<sup>50</sup> It is a non-personal way of spreading information about an item or goods a sponsor supplies through media.<sup>51</sup> Oparaugo, Dogo Daji, Kawoh<sup>52</sup> claimed that advertising is a sponsored, non-personal manner of publicizing concepts, goods or services, ideas, and information via media (verbal and visual) and discovered promoter impact behavior. According to Zhang, Jeong, Olson, Evans,<sup>53</sup> an organization's use of mass media is critical to accomplish communication and marketing objectives, and all-out information about the goods is delivered to the specific market. According to Dangelico, Nonino, Pompei,<sup>54</sup> the objective of advertising is popular all over the globe. Almost all companies spend money on advertising to get consumers to shop for their goods and services. In line with Išoraitė, Gulevičiūtė,<sup>55</sup> such advertising is a visual expressing the entire tale or textual form that the spectator cannot overlook, and it is useful for various advertising mediums.

Advertising is a marketing approach used to entice consumers to goods or services. Individuals choose brands with which they have an emotional connection.<sup>56</sup> You are free to choose your media. Television and social media sites.

- 1. Television is the quickest means of telecommunication for getting and sending multicolor images and visuals frequently seen by individuals all over the globe.<sup>57</sup>
- 2. Social Media: Using the most popular platform among consumers, marketers focus their clients by providing links on social media sites.<sup>58</sup>

#### **Materialism**

Materialism is a trait of modern civilizations, manifesting as possessiveness, jealousy, and lack of generosity.<sup>59</sup> Materialism is a personality characteristic that highlights goods as fundamental to a person's identity and success.<sup>60</sup> Similarly, Richins<sup>61</sup> defines materialism value as the conviction that acquiring material possessions is a primary life goal, as well as a key to satisfaction and self-definition. The quest for societal status over material things has led to extravagant spending in this competitive society.<sup>62</sup> Materialists frequently pursue exterior fulfillment through material goods, enlarged financial position, and the utilization of money.<sup>13</sup> They feel that some material items are required to enjoy life's pleasures, making them a significant pattern of utilization in which young people consistently utilize material products to transmit their enlarged selves.<sup>63,64</sup> Status consumption, for example, has been discovered to have a substantial optimistic link with materialism among students in Malaysia.<sup>65</sup> Materialistic people are less content, more willing to use money, more likely to favor borrowing money for lavish items, and more likely to be compulsive consumers.<sup>66</sup> They have a deep emotional tie to objects and find respite from bad emotions through purchases.

Aside from compulsive purchasing, materialism has been linked to high fashion engagement O'cass,<sup>67</sup> lavish item purchases Sharda, Bhat,<sup>68</sup> ostentatious spending, and impulsive shopping.<sup>69</sup> Materialistic youngsters are always driven to make extravagant purchases since acquiring riches and material possessions is one of their primary objectives in life. They utilize pricey things to symbolize their social standing, reputation, and prosperity. According to researchers, materialistic conduct is elicited in young people by external and internal inputs. According to Kasser, Ryan, Couchman, Sheldon 70, materialistic values are driven by two key factors: socialization inputs and psychological stimuli. Social agents such as social media exposure and television commercials comprise the socialization component. The psychological element, on the other hand, is internal and comprises of stress and subjective well-being.<sup>24</sup>

# Compulsive Shopping Behavior

Compulsive shopping behavior is a contemporary disorder gaining traction among researchers.<sup>1,2</sup> This problematic shopping behavior has increased quickly in recent years, especially among young adults, and has had negative psychological and economic impacts. Compulsive purchasing is a chronic aberrant type of shopping and spending depicted by an excessive, uncontrolled, and persistent need to buy regardless of the consequences.<sup>3</sup> Several scholars defined compulsive shopping behavior as an emotional state in which a person who is lonely with low self-esteem and low impulse control looks for excitement.<sup>4–6</sup> Compared to non-compulsive consumers, obsessive buyers feel that owning a costly item is crucial to

happiness and success.<sup>70</sup> The act of purchase, rather than the goods themselves, assists in alleviating the negative state of mind.<sup>71</sup> However, the improvement in mood is only short, as compulsive shoppers expressed feelings of remorse, guilt, and humiliation after a compulsive buying session.<sup>72,73</sup> As a result, a spiteful cycle of adverse mood states followed by buying behavior is created.<sup>74</sup> Many research treats compulsive shopping as a binary behavior, with customers classified as compulsive or non-compulsive.<sup>4</sup> However, differences in levels of compulsive buyers may occur. For example, Nataraajan, Goff<sup>75</sup> argue that compulsive shopping behavior should be treated as a constant variable ranging from low to high. Similarly, Edwards<sup>76</sup> recognizes five different groups of obsessive consumers, ranging from the least to the most compulsive shopping. Noncompulsive, recreational, borderline, compulsive, and addicted are the levels.

Scholars determined that materialism, television ads, and SNS media exposure might lead to highly compulsive purchase behavior. <sup>18</sup> The present study treats the last two factors as precursors of materialism. Dittmar <sup>70</sup> concluded that Adults with a substantial predisposition to materialism are also prone to demonstrate compulsive shopping behavior, directing to unrestrained shopping, and this link is the topic of this present research.

Figure 1 shows the proposed research paradigm, in which the mediating role of materialism is explored among the study variables after the direct impacts of TV advertisements and social media sites on compulsive shopping behavior among young people have been evaluated.

## TV Advertisements and Compulsive Shopping Behavior

According to Mikołajczak-Degrauwe, Brengman,<sup>77</sup> buyers are bombarded by hundreds of advertising messages daily. The primary goal of advertising for producers and merchants is to entice customers and encourage them to make purchases. Nevertheless, ensuring that customers view advertising favorably has always been difficult. Various study findings have deduced that individuals' attitudes toward advertising have been generally unfavorable since the 1970s.<sup>78,79</sup> However, studies have shown that favorable attitudes toward advertising impact attitudes toward the products they promote.<sup>80</sup> For instance, a costly and effective advertising effort is interpreted as an indication of excellent product quality.<sup>81</sup> Even though advertisements do not precisely enhance readiness to pay, customers are likelier to purchase advertised goods than unadvertised goods.<sup>82</sup> Advertising may boost a company's earnings in this way.<sup>83</sup>

Additionally, studies have shown a link between brand cognition and promotion attitude.<sup>84,85</sup> The intent to purchase a brand is also greatly influenced by one's attitude toward it.<sup>85</sup> Therefore, it follows that positive attitudes toward advertising influence intentions to purchase advertised products.

Yüksel, Eroğlu<sup>86</sup> examined how opinions about advertising and compulsive buying relate. Compulsive purchasing inclinations are conceptualized as producing unfavorable attitudes about advertising. Furthermore, they contend that viewing TV programs and commercials has a moderating effect on this relationship. The latter seems accurate in a sample of Korea but not in America. However, Kwak, Zinkhan, DeLorme<sup>87</sup> study's findings surprised us; the authors concluded that CB had a bad relationship with attitudes about advertising based on the findings. But in our conceptualization, we anticipate a favorable

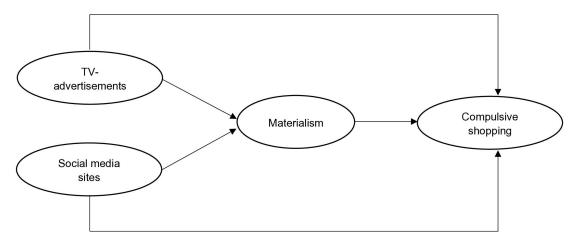


Figure I Hypothesized model.

relationship. The social comparison hypothesis Festinger<sup>88</sup> contends that people are fundamentally driven to assess their own beliefs and skills in light of those of others. They could be upward or downward comparisons. Negative self-evaluations result from comparisons with "better" people, whereas positive self-evaluations result from comparisons with "worse" people. Exposure to such commercials may cause an adverse comparison and a stronger desire to buy the promoted material things because most advertising content is made up of idealized pictures.<sup>89</sup> We think these favorable sentiments can boost compulsive buying in the same manner that optimistic attitudes about commercials fortify the desire to purchase advertised products.<sup>85</sup> This is because compulsive consumers frequently experience sadness,<sup>90,91</sup> low self-esteem,<sup>92</sup> and high levels of materialism.<sup>18</sup> They could consequently be more likely to purchase marketed goods due to poor self-evaluation and social comparison (through advertisements). Hence, we postulate that:

H1: TV advertisements are positively correlated with compulsive shopping among university students.

## SMSs and Compulsive Shopping Behavior

In the consumer behavior literature, compulsive shopping is well-documented. <sup>4,90,91,93</sup> The phrase itself refers to a chronic, recurrent, and uncontrolled temptation to buy that is largely motivated by negative feelings and is frequently connected with severe psychological, societal, and fiscal effects. <sup>70,92,94</sup> Compulsive buying is a persistent, tricky behavior in which people cannot control compulsive purchasing patterns. <sup>4,95</sup> It occurs when a person feels the urge to buy something without carefully considering whether they need it. <sup>6,24,33</sup> Compulsive shopping has been described as an unhealthy, "senseless" consumer behavior. <sup>73,96,97</sup> In the past few years, there has been some empirical investigation of the emergence of compulsive shopping behaviors among customers. <sup>93,98,99</sup> Earlier research assumed that using the Internet may be equally favorable to "rational" purchases as traditional retailers by reducing marketing distractions and allowing information search of information and price and product evaluations. <sup>70</sup> However, empirical research demonstrates that the Internet and social media sites can cause compulsive behavior, including compulsive shopping. <sup>73,100,101</sup>

"Consumers can shop the world from the comfort of their homes, with unlimited access twenty-four hours a day". The purchasing procedure is both simple and distant. After credit card information is provided (typically with the option of storing it for future transactions), all that is necessary is a single "click" of a "button". In effect, the latest empirical research findings corroborate the latter Hypothesis, indicating that Internet and social media site usage exacerbates such a propensity. The findings Müller, Arikian, De Zwaan, Mitchell, 104,105 in particular, showed that some Internet use features appear to force customers to make purchases compulsively. The time consumed on online purchasing websites and the overall "severity" of Internet usage are examples of such features. More directly connected to the present research is the discovery that Internet consumers who devote more time to SMSs have a considerably greater propensity for compulsive purchases. In fact, in the existing research, both extensive SMSs and compulsive shopping have been defined as addictive behaviors that are commonly followed by negative repercussions. Henceforth, the subsequent Hypothesis is established.

**H2**: SMS use has a beneficial impact on compulsive shopping behavior among university students.

# Mediating Effect of Materialism

Materialism is a trait of modern civilizations, manifesting as possessiveness, jealousy, and lack of generosity. Materialism is a personality characteristic that highlights goods as fundamental to a person's identity and success. Similarly, Richins<sup>61</sup> defines materialism value as the conviction that acquiring material possessions is a primary life goal, as well as a key to satisfaction and self-definition. Materialism is the view that obtaining material possessions, achieving financial security, achieving status, and projecting the right image are the main objectives of life. Materialism is a cognitive type that leads to compulsive shopping, according to the I-PACE model. Ompulsive buying can satiate the psychological demands of those with materialistic values and seek material fulfillment.

This study investigates whether materialism mediates the relationship between several technological elements and compulsive shopping. Theoretical underpinnings supporting the mediating impact of materialism on compulsive behavior have been shown in many research. Peer communication was evaluated empirically by Weaver, Moschis, Davis as a mediating variable between the dependent variables (materialism and obsessive behavior) and the independent factors

(gender and family). Materialism was looked at by Kukar-Kinney, Ridgway, Monroe<sup>73</sup> as a potential predictor of compulsive shopping. Researchers have comprehensively examined how sociological elements like social media sites and TV advertisements are connected to "materialism" and compulsive shopping among adolescents. We suggest that materialism is a potential mediating variable between the sociological aspects of social media sites, TV commercials, and compulsive behavior based on existing literature. Consequently, the following hypotheses are put forth:

**H3**: Materialism mediates the relationship between television advertisements and compulsive shopping behavior among university students.

**H4**: Materialism mediates the relationship between social media and compulsive shopping behavior among university students.

### **Materials and Methods**

The present research aims to determine how television advertisements and social media sites (SMSs) influence compulsive shopping behavior systems among university students with the possible mediating impact of materialism. This research is empirical and descriptive. However, this research followed a logical reasoning approach as the basis of the research is connected with current literature. Likewise, this research used a cross-section scheme to collect data from participants. Purposive sampling was used with a survey method to gauge customer response.

#### Measurement of Variables

The study's questionnaire was modified based on previously published research. A five point likert scale was used to gauge all the items. We assessed the mediating variable "materialism" utilizing six items from.<sup>15</sup> The "Materialism" variable was evaluated by asking participants to describe how much they agreed with certain statements. For instance, "Acquiring valuable things is important for my happiness". The independent variable television advertisement impact was evaluated employing four items from.<sup>114</sup> A "television advertisement" variable was assessed by asking participants, for instance, "Advertisements help me decide what things to buy".

The dependent variable, compulsive shopping behavior, was evaluated using five items from. <sup>115</sup> The "Compulsive Shopping" variable was assessed by asking participants questions: "I sometimes feel that something inside is pushing me to go shopping". Mueller, Mitchell, Peterson, Faber, Steffen, Crosby, Claes<sup>6</sup> developed an 8-item measure to assess social media site use (independent variable). "Internet" was swapped with "social media sites" to be appropriate for the research (for instance, "I spent more time than I planned using SMS").<sup>33</sup>

#### Data Collection

The Data for this study were obtained from the students of universities. There were 487 participants. The survey technique was opted to improve the validity of the data. For empirical research, the questionnaire is an appropriate technique for investigating the relationship among studied variables, and questionnaires are usually used by researchers in social sciences. The data were collected in the spring of 2023 from university students located in the capital, the financial hub (Riyadh) of Saudi Arabia. Students of universities are the appropriate population for this research, generally as students of universities have leisure time and some more money than students in other kinds of schools. A structured questionnaire was dispersed to participants through lectures in the attendance of their teachers. Beforehand, the participants were requested to fill, they were briefed about the introduction of the research's variables. 88 out of 487 responses were cast off because of the missing data. Henceforth, the ultimate sample included results from 419 participants. Among the participants, 51.2% were male, and 48.8% were female students.

# Common Method Bias (CMB)

As data is acquired all at once and from a single source, bias issues may arise that raise serious questions about the study's validity. The Harman single-factor test was used to examine the biases issue. The findings showed that each component of the proposed model could be divided into four factors, with the first factor accounting for just 38.82% of

the variance. This statistical number suggests that typical biases should be less than 50%. As a result, there is no bias issue with our statistical data.

## **Data Analysis and Results**

We tested our study hypotheses using a structural equation modeling approach with AMOS 25.0. We first performed "confirmatory factor analysis (CFA)" to assess the appropriateness of the model following Anderson, Gerbing<sup>119</sup> suggestion for a two-step SEM technique. The relationship between all the variables was then determined by examining a final structural model that had been suggested. In Table 1, several fit indices, including 2/df, the Tucker-Lewis index (TLI), the comparative fit index (CFI), the standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA), were performed.

## **Descriptive Statistics**

Table 2 shows the statistical values for each observed variable for the mean, standard deviation, AVE, and Pearson's correlations. The mean values varied from 2.91 to 3.41, while the standard deviations ranged from 0.43 to 0.85. Table 2 reveals the strong and substantial relationships between all the study variables. Table 2 also displays the discriminant validity of each component for which empirical "average variance extracted (AVE)" values exceed intercorrelations values and are more than 0.5. 120

## Measurement Model Assessment

The standard factor loadings, alpha reliability, and Cronbach's reliability (CR) of each component are shown in Table 3 of this study's measurement model, which was verified using "Confirmatory Factor Analysis (CFA)". TV advertisements, social media sites, materialism, and compulsive intention to buy's respective alpha coefficients are 0.95, 0.96, 0.95, and 0.97. The proposed alpha is 0.70, yet these alpha are greater. Whereas standardized factor loadings of TV advertisements varied from 0.73 to 0.89, for social media sites ranged from 0.78 to 0.83, for materialism from 0.74 to 0.83, and for compulsive intention to buy from 0.76 to 0.82. Every factor loading exceeds 0.50<sup>122</sup> and makes a considerable contribution. The (CR) varied from 0.94 to 0.96 for television advertisements, social media sites, materialism, and compulsive intention to buy, above the recommended threshold of 0.60. 123

Table I Model Fit Statistics

Model Fit Value	Criteria		
2.17	<3.00		
0.96	>0.95		
0.947	>0.95		
0.06	<0.08		
0.05	<0.08		
	2.17 0.96 0.947 0.06		

Table 2 Descriptive Statistics and Correlation

	Variable	Mean	SD	1	2	3	4
ı	TV Ads	3.01	0.70	0.53			
2	SMSs	2.91	0.43	0.32**	0.5 I		
3	Mat	3.41	0.85	0.43**	0.29**	0.56	
4	CSB	3.29	0.68	0.37**	0.49**	0.46	0.61

**Notes**: \*\*\*p < 0.01; bold diagonal values are square roots of AVE showing discriminant validity.

Table 3 CFA and Measurement Model

Variables	Items	Loadings	α	CR
TV Ad	TV Ad I	0.737	0.95	0.94
	TV Ad 2	0.892		
	TV Ad 3	0.753		
	TV Ad 4	0.841		
SMS	SMS I	0.789	0.96	0.95
	SMS 2	0.801		
	SMS 3	0.794		
	SMS 4	0.839		
	SMS 5	0.813		
	SMS 6	0.800		
	SMS 7	0.805		
	SMS 8	0.863		
MAT	Mat I	0.744	0.95	0.96
	Mat 2	0.831		
	Mat 3	0.817		
	Mat 4	0.795		
	Mat 5	0.803		
	Mat 6	0.819		
CSB	CSB I	0.821	0.97	0.95
	CSB 2	0.763		
	CSB 3	0.796		
	CSB 4	0.815		
	CSB 5	0.817		

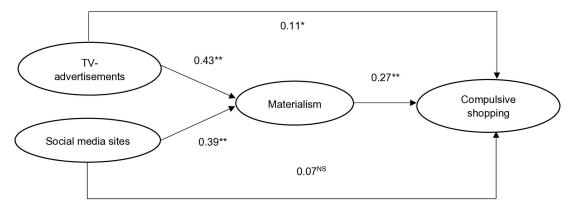
## Hypothesis Testing

We employed a comprehensive SEM model with maximum likelihood estimation in "AMOS" software to evaluate the hypotheses of our study. At the same time, correlations (given in Table 2) and SEM results corroborated hypotheses 1–2 (shown in Table 4). As indicated by hypothesis 1, there is a substantial positive connection between TV advertisements and the compulsive shopping behavior of university students. We discovered evidence for the first Hypothesis ( $\beta = 0.45$ , t= 7.25, p <0.01), as shown in Table 2 and 4. The second Hypothesis anticipates a positive relationship between social media sites and the compulsive shopping behavior of university students. Hypothesis 2 had support (standardized  $\beta = 0.31$ , t= 7.81, p < 0.01). In the following stage, Hypotheses three and fourth are analyzed by reviewing the 4 Baron, Kenny<sup>124</sup> prerequisites for mediating analysis: (1) the explanatory variable has to forecast the dependent variable, (2) the projected mediating variable has to be forecasted by the explanatory variable, (3) the projected mediating variable forecast the dependent variable, and (4), the direct relationship between the explanatory variable and the dependent variable has to lessen (if possible need to be not significant for complete mediation) once the mediating variable is inserted.

As shown in Table 4, TV advertisements accomplished Baron, Kenny<sup>124</sup> first prerequisite (1), as TV advertisements exhibited substantial paths to compulsive intention to buy ( $\beta = 0.45$ , p < 0.01) and social media sites to compulsive intention to buy ( $\beta = 0.31$ , p < 0.01). Concerning 2nd prerequisite of mediation, materialism accomplishes Baron, Kenny<sup>124</sup> criteria. In Figure 2, TV advertisements considerably anticipated materialism ( $\beta = 0.43$ , p < 0.01) and social media sites to materialism ( $\beta = 0.39$ , p < 0.01), whereas in the third criterion, the mediating variable, materialism

**Table 4**  $\beta$  Coefficients for Testing Hypotheses I and 2

Relationship			Estimate	T	LLCI	ULCI	
ні	DA VT	$\rightarrow$	CSB	0.45	7.25	0.31	0.75
H2	SMS	$\rightarrow$	CSB	0.31	7.81	0.84	1.18



**Figure 2** Structural equation modeling (SEM) results for the hypothesized mediation model H3 and H4. \*\*p < 0.01, \*p < 0.05. **Abbreviation**: NS, Non Significant.

forecasted dependent variable work compulsive intention to buy ( $\beta$  = 0.27, p < 0.01). In the last prerequisite, the direct association between TV advertisements and compulsive intention to buy in the attendance of mediating variable materialism is reduced (from  $\beta$  = 0.45 to  $\beta$  = 0.11) and is numerically significant. It offered partial mediation. Likewise, the direct association between social media sites and compulsive intention to buy in the attendance of mediating variables vanishes and turns insignificant ( $\beta$  = 0.07, see Figure 2), displaying whole mediation influence. Altogether, these outcomes statistically backed Hypothesis 3 and Hypothesis 4.

### **Discussion and Conclusion**

The current study assessed the association among social media sites and TV advertisements, materialism, and consumer-compulsive intention to shop behavior among university students in Saudi Arabia and discovered that University students in Saudi Arabia are more materialistic than ever. The findings may offer useful contributions for further knowing the Saudi Arabian markets and shoppers. Founded on the existing literature, <sup>14,125</sup> we split our conceptual research model into two models. The first research framework investigated two substantial aspects: TV advertisements and social media sites. With the research framework, we investigated the impact of materialism on compulsive intention to buy behavior among university students.

This research's findings backed our proposed hypotheses, ratifying that "materialism" is one of the crucial reasons for compulsive intention to buy behavior among university students. The findings of our research are related to existing literature. <sup>10,34,126–128</sup> According to Hypothesis H1, university students in Saudi Arabia appear to be more likely to adopt compulsive shopping and materialistic behavior due to watching TV advertisements. People's perceptions are influenced by television. Thus, those who watch it often tend to have more compulsive shopping and materialistic views. Because of the propensity for high materialistic values, previous research suggested that these values may significantly impact the level of compulsive buying. Companies have dedicated large sums to advertising campaigns since youngsters have become a significant market segment for international corporations pushing products. Advertising frequently induces customers to make purchases by depicting attractive or well-known product users, highlighting a societal enticement for product use, and linking the product to the wealthy. <sup>129</sup> Previous research revealed that watching too much television may make you more compulsive shopper and materialistic. Chan, Prendergast 133 confirm this and the most recent survey in Saudi Arabia.

Hypothesis 2 shows a link between using social media sites and young people's compulsive purchasing behavior. The results reveal that young Saudi Arabian individuals who use social media sites more obsessively have more compulsive buying urges. The users of these social networking websites "buy not so much to obtain utility or service from a purchased commodity as to achieve gratification through the buying process itself'. The findings confirm earlier research that repeatedly demonstrated a connection between internet/social networking site use and online addiction and compulsive purchase. This relationship may result from the "impulse-inducing" features of social media sites, such as the continual exposure to online marketing and the ease of online purchases. According to Sharif, Khanekharab, the adverse impacts of using SMSs on young people's identities may cause this beneficial relationship among young adults.

Young adult SMS users experience identity confusion due to exposure to several identities. Young people may then turn to material consumerism and obsessive shopping to deal with their divided identities. 18

In terms of hypotheses 3 and 4, they are consistent with the research of Weaver, Moschis, Davis, <sup>112</sup> who looked at the role of materialism in mediating the relationship between the predictors' variables of gender and family and the outcome variable of compulsive buying. However, no one has specifically looked into the direct impact of TV advertisements and social media sites on compulsive buying behavior in Saudi Arabian youth, with materialism as a mediating factor. The current study evaluated this gap and found that materialism strengthens and mediates the link between adolescent compulsive buying behavior, social media sites, and television commercials. The results of the mediation study also demonstrated the complete acceptability of the purported theories.

Our findings demonstrate that social and commercial elements have a comparable impact on young adults in Saudi Arabia as on young people worldwide. That may be inferred from the fact that the present research results are comparable to those of investigations done in other cultures. <sup>10,34</sup> Despite the country's strong Islamic traditions, globalization has led to buyer attitudes in Saudi Arabia comparable to elsewhere. Following the research results, Saudi Arabian youth share the same materialism as young people in other industrialized countries. Culture in Saudi Arabian society is evolving. These modifications are caused by the characteristics above middle-class population growth, growth of mass media (Television and social media sites), and technical advancements. Although the public has been responding to these cultural shifts, their impact has permeated every aspect of life.

The cultural transition has led to the changes that are listed below. First, society's overall purchasing patterns have altered due to substantial growth in middle-class income. Young adults today are very interested in material goods and buying expensive items since it seems like this is a big part of contemporary life. Consequently, the family structure is changing from one that favors collectivism to one that favors individuality. The predominant factor is the large percentage of young adults. The media have impacted second, personal lifestyles. Media has substantially influenced how people behave, and it has a big impact on young people. As social media sites and television use boost materialistic behavior in youth, media use is included in this study as a control variable. Saudi Arabia is an emerging nation that is experiencing cultural and societal changes. The nation's youth use social media extensively, which is the cause of these changes. Youth in Saudi Arabia utilize social media sites for various things, such as learning about companies, goods, and sales, and today's youth are more exposed to media than youth in the past (ie, Facebook, Twitter, and LinkedIn). This has had a big impact on compulsive buying and materialistic attitudes. The empirical research discussed here clarifies these points. It demonstrates that youth in Saudi Arabia, a contemporary Islamic nation, have materialistic outlooks similar to those of other cultures. Finally, based on the research findings, it is concluded that young adults in Saudi Arabia are primarily affected by materialism and compulsive buying due to our study variables (TV advertisements and social media sites). The association between the research variables, which indicate societal determinants, and compulsive shopping was mediated by materialism.

# Practical Implications

The new research findings provide policymakers with further recommendations to reduce early adolescents' demand for material possessions. These findings, which display that youth in Saudi Arabia are either already affected by materialism or are at risk of turning so, are also instructive for government policy administrators. Officials might want to think about what they can do to stop this expanding tendency. If so, given that this study suggests that this is a global issue, solutions that function well in very diverse civilizations must be considered. Governments should launch an educational program for young individuals to foster a good buyer mindset to prevent materialism and obsessive shopping. Second, since TV advertisements and social media sites are strongly linked to consumer-compulsive behavior and material consumption, officials must implement rules to reduce the impact. New aesthetic and ethics courses should be implemented at the university level to reduce the materialism that affects young adults.

Fourth, materialism goes against the customs of Saudi Arabia since it constantly emphasizes individual values, a country where the collective family system is dominant. Families should spend time with their children and teach them their core beliefs. Children should not be allowed to compare their consumption habits to those of their peers.

## Theoretical Implications

Our study adds to the body of knowledge already available. First, by putting to the test and confirming the determinants of compulsive shopping behavior in young people, our study expands a theoretical model. The findings showed that all assumptions contained in the theoretical framework were accepted. Our research offers theoretical support for views on the causes of compulsive buying behavior in the existing literature that addresses a range of sociocultural circumstances. However this study is the first to empirically investigate the relationships between TV advertisements and social media sites, compulsive intention to buy behavior, and materialism among youth in Saudi Arabia and, by extension, other cultures with a predominance of Islamic impact. Secondly, this research confirms the findings of Chan, Prendergast<sup>133</sup> and Chan, Fang<sup>134</sup> and extends them by including materialism as a mediating variable in the theoretical framework. TV advertisements and social media sites are the key components for the formation of compulsive buying in modern Islamic culture. Third, our suggested model offers a fresh, theoretical viewpoint on materialism beliefs and compulsive buying. This is because only a small number of research have found that materialism can mediate between the antecedents of compulsive buying. This research thus adds to the body of knowledge regarding the causes of compulsive consumer buying behavior.

#### Limitations and Future Research

Our research has several limitations. We began by collecting information from the responders, who were all students of the universities. The study's conclusions have limited external validity since the model's outcomes could vary depending on the context and the study's intended audience. The theoretical framework should be retested and validated in more circumstances by subsequent scholars.

Secondly, the data was gathered from Saudi Arabia's business capital region, where youths are more influenced by contextual variables (TV advertisements and social media sites) than those in the countryside youth. The findings of the research are thus restricted to a major metropolis. Future studies should use a sizable sample size and gather information from around the nation to provide a more complete picture of young adults' opinions regarding the study components. Third, cross-sectional data were employed in our study. Longitudinal research might aid in the clarification of this idea since behavior evolves, and compulsive intention to buy behavior is not a one-dimensional entity. Fourth, more research should consider product type (luxury vs affordable) as a predictive variable of materialism and compulsive intention to buy. Future research may also look at how family communication affects consumerism.

# **Data Sharing Statement**

The raw data supporting the conclusions of this article will be made available by the corresponding author without undue reservation.

#### **Ethics Statement**

The present study obtained approval from the Research Ethics Committee of King Saud University, Saudi Arabia and complied with the Declaration of Helsinki. The subjects were fully informed of the content and purpose of the survey before participation. Informed consent was obtained from all subjects who were involved in the study.

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## **Author Contributions**

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or all these areas; took part in drafting, revising and critically reviewing the article; gave final approval of the version published; have agreed on the journal to which the article has been submitted.

## **Disclosure**

The authors declare no conflicts of interest.

## References

- 1. Black DW. Compulsive shopping: a review and update. Curr Opin Psychol. 2022;46:101321. doi:10.1016/j.copsyc.2022.101321
- Ali S, Mishra M, Javed HMU. The impact of mall personality and shopping value on shoppers' well-being: moderating role of compulsive shopping. Int J Retail Distrib Manage. 2021;49:1178–1197. doi:10.1108/IJRDM-07-2020-0272
- 3. Lee S, Park J, Bryan Lee S. The interplay of internet addiction and compulsive shopping behaviors. *Soc Behav Pers*. 2016;44(11):1901–1912. doi:10.2224/sbp.2016.44.11.1901
- 4. Faber RJ, O'guinn TC. A clinical screener for compulsive buying. J Consum Res. 1992;19(3):459-469. doi:10.1086/209315
- 5. Gori A, Topino E, Fioravanti G, Casale S. Exploring the psychodynamics of compulsive shopping: single and moderated mediation analyses. *Int J Ment Health Addict*. 2022;2022:1–17.
- Mueller A, Mitchell JE, Peterson LA, et al. Depression, materialism, and excessive internet use in relation to compulsive buying. Comprehensive Psychiatry. 2011;52(4):420–424. doi:10.1016/j.comppsych.2010.09.001
- Duh HI. Childhood family experiences and young generation Y money attitudes and materialism. Pers Individ Dif. 2016;95:134–139. doi:10.1016/j.paid.2016.02.027
- 8. Górnik-Durose ME, Pilch I. The dual nature of materialism. How personality shapes materialistic value orientation. *J Econ Psychol.* 2016;57:102–116. doi:10.1016/j.joep.2016.09.008
- Liao J, Wang L. Face as a mediator of the relationship between material value and brand consciousness. Psychol Mark. 2009;26(11):987–1001. doi:10.1002/mar.20309
- 10. Chan K. Social comparison of material possessions among adolescents. Qual Mark Res. 2008;11(3):316-330. doi:10.1108/13522750810879039
- 11. Hultman M, Kazeminia A, Ghasemi V. Intention to visit and willingness to pay premium for ecotourism: the impact of attitude, materialism, and motivation. *J Bus Res*. 2015;68(9):1854–1861. doi:10.1016/j.jbusres.2015.01.013
- 12. Pugliese JA, Okun MA. Social control and strenuous exercise among late adolescent college students: parents versus peers as influence agents. *J Adolesc*. 2014;37(5):543–554. doi:10.1016/j.adolescence.2014.04.008
- 13. Tsang J-A, Carpenter TP, Roberts JA, Frisch MB, Carlisle RD. Why are materialists less happy? The role of gratitude and need satisfaction in the relationship between materialism and life satisfaction. *Pers Individ Dif.* 2014;64:62–66. doi:10.1016/j.paid.2014.02.009
- 14. Cole D, Wright ND, Sirgy MJ, Kosenko R, Rahtz D, Meadow HL. Testing the reliability and validity of Belk's and Richins' materialism scales. Paper presented at: proceedings of the 1992 academy of marketing science (AMS) annual conference; 2015.
- Richins ML, Dawson S. A consumer values orientation for materialism and its measurement: scale development and validation. J Consum Res. 1992;19(3):303–316. doi:10.1086/209304
- 16. Roy SK, Eshghi A, Sarkar A. Antecedents and consequences of brand love. J Brand Manag. 2013;20:325-332. doi:10.1057/bm.2012.24
- Parr NJ, Zeman J, Braunstein K, Price N. Peer emotion socialization and somatic complaints in adolescents. J Adolesc. 2016;50:22–30. doi:10.1016/j.adolescence.2016.04.004
- 18. Dittmar H, Bond R, Hurst M, Kasser T. The relationship between materialism and personal well-being: a meta-analysis. *J Pers Soc Psychol.* 2014;107(5):879. doi:10.1037/a0037409
- 19. Unanue W, Dittmar H, Vignoles VL, Vansteenkiste M. Materialism and well-being in the UK and Chile: basic need satisfaction and basic need frustration as underlying psychological processes. *Eur J Pers*. 2014;28(6):569–585. doi:10.1002/per.1954
- 20. Christopher AN, Saliba L, Deadmarsh EJ. Materialism and well-being: the mediating effect of locus of control. *Pers Individ Dif.* 2009;46 (7):682–686. doi:10.1016/j.paid.2009.01.003
- 21. Froh JJ, Emmons RA, Card NA, Bono G, Wilson JA. Gratitude and the reduced costs of materialism in adolescents. *J Happiness Stud.* 2011;12:289–302. doi:10.1007/s10902-010-9195-9
- 22. Manolis C, Roberts JA. Subjective well-being among adolescent consumers: the effects of materialism, compulsive buying, and time affluence. *Appl Res Qual Life*. 2012;7:117–135. doi:10.1007/s11482-011-9155-5
- 23. Ortega-Quijano N, Arce-Diego JL. Mueller matrix differential decomposition. Optics Lett. 2011;36(10):1942–1944. doi:10.1364/OL.36.001942
- Kasser T, Rosenblum KL, Sameroff AJ, et al. Changes in materialism, changes in psychological well-being: evidence from three longitudinal studies and an intervention experiment. *Motiv Emot.* 2014;38:1–22. doi:10.1007/s11031-013-9371-4
- Marvin R, Cooper G, Hoffman K, Powell B. The circle of security project: attachment-based intervention with caregiver-pre-school child dyads. Attach Human Dev. 2002;4(1):107–124. doi:10.1080/14616730252982491
- 26. Schor JB. When childhood gets commercialized, can children be protected? 2006.
- 27. Twenge JM. The evidence for generation me and against generation we. Emerg Adulthood. 2013;1(1):11-16. doi:10.1177/2167696812466548
- 28. Lenka U, Lenka U. A review on the role of media in increasing materialism among children. *Procedia Soc Behav Sci.* 2014;133:456–464. doi:10.1016/j.sbspro.2014.04.212
- 29. Griffiths MD. Social networking addiction: emerging themes and issues. J Addict Res Ther. 2013;4(5). doi:10.4172/2155-6105.1000e118
- 30. Enrique E. Addiction to new technologies and to online social networking in young people: a new challenge. Adicciones. 2010;22(2):1.
- 31. Wang R, Liu H, Jiang J, Song Y. Will materialism lead to happiness? A longitudinal analysis of the mediating role of psychological needs satisfaction. *Pers Individ Dif.* 2017;105:312–317. doi:10.1016/j.paid.2016.10.014
- 32. Kuss DJ, Griffiths MD. Online social networking and addiction—a review of the psychological literature. *Int J Environ Res Public Health*. 2011;8(9):3528–3552. doi:10.3390/ijerph8093528
- 33. Sharif SP, Khanekharab J. Identity confusion and materialism mediate the relationship between excessive social network site usage and online compulsive buying. Cyberpsychol Behav Soc Netw. 2017;20(8):494–500. doi:10.1089/cyber.2017.0162
- 34. Chan K, Zhang H, Wang I. Materialism among adolescents in urban China. Young Consum. 2006;7(2):64-77. doi:10.1108/17473610610701510
- 35. Lejoyeux M, Weinstein A. Compulsive buying. Am J Drug Alcohol Abuse. 2010;36(5):248-253. doi:10.3109/00952990.2010.493590

36. Ninan PT, Rothbaum BO, Marsteller FA, Knight BT, Eccard MB. A placebo-controlled trial of cognitive-behavioral therapy and clomipramine in trichotillomania. *J Clin Psychiatry*. 2000;61(1):47–50. doi:10.4088/JCP.v61n0111

- 37. Sirgy MJ, Lee D-J, Grace BY, Gurel-Atay E, Tidwell J, Ekici A. Self-expressiveness in shopping. *J Retailing Consum Serv.* 2016;30:292–299. doi:10.1016/j.iretconser.2016.02.008
- 38. Yurchisin J, Johnson KK. Compulsive buying behavior and its relationship to perceived social status associated with buying, materialism, self-esteem, and apparel-product involvement. Fam Consum Sci Res J. 2004;32(3):291–314. doi:10.1177/1077727X03261178
- 39. Koran LM, Faber RJ, Aboujaoude E, Large MD, Serpe RT. Estimated prevalence of compulsive buying behavior in the United States. *Am J Psychiatry*. 2006;163(10):1806–1812. doi:10.1176/ajp.2006.163.10.1806
- 40. Qadeer M. Pakistan-Social and Cultural Transformations in a Muslim Nation. Routledge; 2006.
- 41. Kampmeier C, Simon B. Individuality and group formation: the role of independence and differentiation. *J Pers Soc Psychol.* 2001;81(3):448. doi:10.1037/0022-3514.81.3.448
- 42. Ajzen I. The theory of planned behavior. Organ Behav Hum Decis Process. 1991;50(2):179-211. doi:10.1016/0749-5978(91)90020-T
- 43. Li C, Murad M, Shahzad F, Khan MAS, Ashraf SF, Dogbe CSK. Entrepreneurial passion to entrepreneurial behavior: role of entrepreneurial alertness, entrepreneurial self-efficacy and proactive personality. *Front Psychol.* 2020;11:1611. doi:10.3389/fpsyg.2020.01611
- 44. Madden TJ, Ellen PS, Ajzen I. A comparison of the theory of planned behavior and the theory of reasoned action. *Pers Soc Psychol Bull*. 1992;18(1):3–9. doi:10.1177/0146167292181001
- 45. Zhao J, Butt RS, Murad M, Mirza F, Saleh Al-Faryan MA. Untying the influence of advertisements on consumers buying behavior and brand loyalty through brand awareness: the moderating role of perceived quality. *Front Psychol.* 2022;12:6280. doi:10.3389/fpsyg.2021.803348
- 46. Kaur H, Hundal BS. Impact of advertising strategies on the cognitive and behavioral component of attitude of women consumers. *J Asia Bus Stud.* 2017;11(4):413–433. doi:10.1108/JABS-08-2015-0147
- 47. Alalwan AA. Investigating the impact of social media advertising features on customer purchase intention. *Int J Inf Manage*. 2018;42:65–77. doi:10.1016/j.ijinfomgt.2018.06.001
- 48. Ayanwale AB, Alimi T, Ayanbimipe MA. The influence of advertising on consumer brand preference. J Soc Sci. 2005;10(1):9–16. doi:10.1080/09718923.2005.11892453
- 49. Chetioui Y, Butt I, Lebdaoui H. Facebook advertising, eWOM and consumer purchase intention-evidence from a collectivistic emerging market. *J Global Mark*. 2021;34(3):220–237. doi:10.1080/08911762.2021.1891359
- 50. Cham T-H, Cheah J-H, Memon MA, Fam K-S, László J. Digitalization and its impact on contemporary marketing strategies and practices. *J Mark Anal.* 2022;10(2):103–105. doi:10.1057/s41270-022-00167-6
- 51. Hsu L, Chen Y-J. Neuromarketing, subliminal advertising, and hotel selection: an EEG study. *Australas Mark J.* 2020;28(4):200–208. doi:10.1016/j.ausmj.2020.04.009
- 52. Oparaugo B, Dogo Daji L, Kawoh S. Advertising as a tool for marketing and persuasive communication. Sosp J Engin. 2020;3(2):1.
- 53. Zhang X, Jeong E, Olson ED, Evans G. Investigating the effect of message framing on event attendees' engagement with advertisement promoting food waste reduction practices. *Int J Hospitality Manage*. 2020;89:102589. doi:10.1016/j.ijhm.2020.102589
- 54. Dangelico RM, Nonino F, Pompei A. Which are the determinants of green purchase behaviour? A study of Italian consumers. *Bus Strat Environ*. 2021;30(5):2600–2620. doi:10.1002/bse.2766
- 55. Išoraitė M, Gulevičiūtė G. Outdoor advertising effectiveness evaluation from customers' view. *Entrep Sustain*. 2023;10:10–21. doi:10.9770/iesi.2023.10.3(1)
- Moes A, Fransen M, Verhagen T, Fennis B. A good reason to buy: justification drives the effect of advertising frames on impulsive socially responsible buying. *Psychol Mark*. 2022;39(12):2260–2272. doi:10.1002/mar.21733
- 57. Masui K, Okada G, Tsumura N. Measurement of advertisement effect based on multimodal emotional responses considering personality. *ITE Trans Media Technol Appl.* 2020;8(1):49–59. doi:10.3169/mta.8.49
- 58. Li X, Dahana WD, Ye Q, Peng L, Zhou J. How does shopping duration evolve and influence buying behavior? The role of marketing and shopping environment. *J Retailing Consum Serv.* 2021;62:102607. doi:10.1016/j.jretconser.2021.102607
- 59. Wang Y. Social stratification, materialism, post-materialism and consumption values: an empirical study of a Chinese sample. *Asia Pacific J Mark Logist.* 2016;28(4):580–593. doi:10.1108/APJML-10-2015-0149
- 60. Chan K, Prendergast G. Materialism and social comparison among adolescents. Soc Behav Pers. 2007;35(2):213-228. doi:10.2224/sbp.2007.35.2.213
- 61. Richins M. Special session summary the positive and negative consequences of materialism: what are they and when do they occur? *ACR North Am Advan.* 2004;2004:1.
- 62. Fitzmaurice J. Splurge purchases and materialism. J Consum Mark. 2008;25(6):332-338. doi:10.1108/07363760810902468
- Belk RW. Three scales to measure constructs related to materialism: reliability, validity, and relationships to measures of happiness. ACR North Am Advan. 1984; 11:291–97.
- 64. Schroeder JE, Dugal SS. Psychological correlates of the materialism construct. Soc Behav Pers. 1995;10(1):243.
- Heaney J-G, Goldsmith RE, Jusoh WJW. Status consumption among Malaysian consumers: exploring its relationships with materialism and attention-to-social-comparison-information. J Int Consum Mark. 2005;17(4):83–98. doi:10.1300/J046v17n04\_05
- Nga JK, Yong LH, Sellappan R. The influence of image consciousness, materialism and compulsive spending on credit card usage intentions among youth. Young Consum. 2011;12:243–253. doi:10.1108/17473611111163296
- O'cass A. Fashion clothing consumption: antecedents and consequences of fashion clothing involvement. Eur J Market. 2004;38(7):869–882. doi:10.1108/03090560410539294
- Sharda N, Bhat AK. Austerity to materialism and brand consciousness: luxury consumption in India. J Fash Mark Manag Int J. 2018;22:223–239. doi:10.1108/JFMM-03-2017-0025
- Podoshen JS, Andrzejewski SA. An examination of the relationships between materialism, conspicuous consumption, impulse buying, and brand loyalty. J Mark Theory Pract. 2012;20(3):319–334. doi:10.2753/MTP1069-6679200306
- Dittmar H. Compulsive buying–a growing concern? An examination of gender, age, and endorsement of materialistic values as predictors. Br J Psychol. 2005;96(4):467–491. doi:10.1348/000712605X53533

 Derbyshire KL, Chamberlain SR, Odlaug BL, Schreiber L, Grant JE. Neurocognitive functioning in compulsive buying disorder. Ann Clin Psychiatry. 2014;26(1):57–63.

- 72. Leite PL, Pereira VM, Nardi AE, Silva AC. Psychotherapy for compulsive buying disorder: a systematic review. *Psychiatry Res.* 2014;219 (3):411–419. doi:10.1016/j.psychres.2014.05.037
- 73. Kukar-Kinney M, Ridgway NM, Monroe KB. The relationship between consumers' tendencies to buy compulsively and their motivations to shop and buy on the internet. *J Retailing*. 2009;85(3):298–307. doi:10.1016/j.jretai.2009.05.002
- 74. Harnish RJ, Bridges KR. Compulsive buying: the role of irrational beliefs, materialism, and narcissism. *J Ration Emot Cogn Behav Ther*. 2015;33:1–16. doi:10.1007/s10942-014-0197-0
- Nataraajan R, Goff BG. Manifestations of compulsiveness in the consumer-marketplace domain. Psychol Mark. 1992;9(1):31–44. doi:10.1002/mar.4220090105
- 76. Edwards EA. Development of a new scale for measuring compulsive buying behavior. Financial Couns Plan. 1993;4(1):67-84.
- 77. Mikołajczak-Degrauwe K, Brengman M. The influence of advertising on compulsive buying—the role of persuasion knowledge. *J Behav Addict*. 2014;3(1):65–73. doi:10.1556/JBA.2.2013.018
- 78. Alwitt LF, Prabhaker PR. Functional and belief dimensions of attitudes to television advertising: implications for copytesting. *J Advert Res.* 1992; 32(5):30–42.
- 79. Mittal B. Public assessment of TV advertising: faint praise and harsh criticism. J Advert Res. 1994;34(1):35-54.
- 80. MacKenzie SB, Lutz RJ. An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *J Mark.* 1989;53(2):48–65. doi:10.1177/002224298905300204
- 81. Kirmani A. The effect of perceived advertising costs on brand perceptions. J Consum Res. 1990;17(2):160-171. doi:10.1086/208546
- 82. Haan MA, Moraga-González JL. Advertising for attention in a consumer search model. *Econ J.* 2011;121(552):552–579. doi:10.1111/j.1468-0297.2011.02423.x
- 83. Joshi A, Hanssens DM. The direct and indirect effects of advertising spending on firm value. *J Mark.* 2010;74(1):20–33. doi:10.1509/jmkg.74.1.20
- 84. Biehal G, Stephens D, Curio E. Attitude toward the ad and brand choice. J Advert . 1992;21(3):19-36. doi:10.1080/00913367.1992.10673373
- 85. Brown SP, Stayman DM. Antecedents and consequences of attitude toward the ad: a meta-analysis. *J Consum Res.* 1992;19(1):34–51. doi:10.1086/209284
- 86. Yüksel CA, Eroğlu F. The effects of personal factors and attitudes towards advertising on compulsive buying tendency. *Pazarlama ve Pazarlama Arastirmalari Dergisi*. 2015;16:43–70.
- 87. Kwak H, Zinkhan GM, DeLorme DE. Effects of compulsive buying tendencies on attitudes toward advertising: the moderating role of exposure to TV commercials and TV shows. J Curr Issues Res Advert. 2002;24(2):17–32. doi:10.1080/10641734.2002.10505132
- 88. Festinger L. A theory of social comparison processes. Human Relat. 1954;7(2):117-140. doi:10.1177/001872675400700202
- Lee SH, Lennon SJ, Rudd NA. Compulsive consumption tendencies among television shoppers. Fam Consum Sci Res J. 2000;28(4):463–488. doi:10.1177/1077727X00284003
- 90. Tarka P. Influence of materialism on compulsive buying behavior: general similarities and differences related to studies on young adult consumers in Poland and US. *J Int Consum Mark*. 2020;32(3):243–267. doi:10.1080/08961530.2019.1695240
- 91. Tarka P, Babaev J. Methodological insights on measurement and evaluation of compulsive buying behavior among young consumers in Poland: the case of compulsive-and non-compulsive buyers. *Qual Quantity*. 2021;55:1581–1611. doi:10.1007/s11135-020-01069-4
- 92. Grougiou V, Moschis G, Kapoutsis I. Compulsive buying: the role of earlier-in-life events and experiences. *J Consum Mark*. 2015;32:278–289. doi:10.1108/JCM-01-2015-1283
- 93. Zheng Y, Yang X, Zhou R, Niu G, Liu Q, Zhou Z. Upward social comparison and state anxiety as mediators between passive social network site usage and online compulsive buying among women. *Addict Behav.* 2020;111:106569. doi:10.1016/j.addbeh.2020.106569
- 94. Mrad M, Cui CC. Comorbidity of compulsive buying and brand addiction: an examination of two types of addictive consumption. *J Bus Res*. 2020;113:399–408. doi:10.1016/j.jbusres.2019.09.023
- 95. Moschis GP. Consumer Behavior Over the Life Course Research Frontiers and New Directions. Springer; 2019.
- 96. Maccarrone-Eaglen A, Schofield P. Compulsive buying among young adults: a behavioural segmentation. *Young Consum.* 2020;21(1):57–76. doi:10.1108/YC-02-2019-0958
- 97. Granero R, Fernández-Aranda F, Steward T, et al. Compulsive buying behavior: characteristics of comorbidity with gambling disorder. *Front Psychol.* 2016;7:625. doi:10.3389/fpsyg.2016.00625
- 98. Den Ouden L, Tiego J, Lee RS, et al. The role of experiential avoidance in transdiagnostic compulsive behavior: a structural model analysis. *Addict Behav.* 2020;108:106464. doi:10.1016/j.addbeh.2020.106464
- 99. Johan A, Prayoga R, Putra AP, Fauzi IR, Pangestu D. Heavy social media use and hedonic lifestyle, dan hedonic shopping terhadap online compulsive buying. *Resmilitaris*. 2023;13(1):2783–2797.
- 100. She L, Rasiah R, Waheed H, Pahlevan Sharif S. Excessive use of social networking sites and financial well-being among young adults: the mediating role of online compulsive buying. *Young Consum*. 2021;22(2):272–289. doi:10.1108/YC-11-2020-1252
- 101. She L, Ma L, Voon ML, Lim ASS. Excessive use of social networking sites and financial well-being among working millennials: a parallel-serial mediation model. *Int J Bank Mark*. 2023;41(1):158–178. doi:10.1108/IJBM-04-2022-0172
- 102. She L, Sharif SP, Nia HS. Psychometric evaluation of the Chinese version of the modified online compulsive buying scale among Chinese young consumers. *Asia Pac Bus Rev.* 2021;22(2):121–133. doi:10.1080/10599231.2021.1905493
- Pahlevan Sharif S, She L, Yeoh KK, Naghavi N. Heavy social networking and online compulsive buying: the mediating role of financial social comparison and materialism. J Mark Theory Pract. 2022;30(2):213–225. doi:10.1080/10696679.2021.1909425
- 104. Müller A, Arikian A, De Zwaan M, Mitchell J. Cognitive-behavioural group therapy versus guided self-help for compulsive buying disorder: a preliminary study. *Clin Psychol Psychother*. 2013;20(1):28–35. doi:10.1002/cpp.773
- 105. Pellegrino A, Abe M, Shannon R. The dark side of social media: content effects on the relationship between materialism and consumption behaviors. Front Psychol. 2022;13:870614. doi:10.3389/fpsyg.2022.870614
- 106. Park S, Lee D. An empirical study on consumer online shopping channel choice behavior in omni-channel environment. *Telematic Informatic*. 2017;34(8):1398–1407. doi:10.1016/j.tele.2017.06.003

107. Brand M, Wegmann E, Stark R, et al. The Interaction of Person-Affect-Cognition-Execution (I-PACE) model for addictive behaviors: update, generalization to addictive behaviors beyond internet-use disorders, and specification of the process character of addictive behaviors. *Neurosci Biobehav Rev.* 2019;104:1–10. doi:10.1016/j.neubiorev.2019.06.032

- 108. Richins ML. The material values scale: measurement properties and development of a short form. J Consum Res. 2004;31(1):209–219. doi:10.1086/383436
- 109. Ding Q, Kong L, Zhang Y, Zhou Z. Parental materialism and college students' online compulsive buying: a serial mediating effect analysis. *Psycholog Develop Educ*. 2019;35(5):549–556.
- Rose P. Mediators of the association between narcissism and compulsive buying: the roles of materialism and impulse control. *Psychol Addict Behav.* 2007;21(4):576. doi:10.1037/0893-164X.21.4.576
- 111. Moschis GP. Research frontiers on the dark side of consumer behaviour: the case of materialism and compulsive buying. *J Mark Manage*. 2017;33(15–16):1384–1401. doi:10.1080/0267257X.2017.1347341
- 112. Weaver ST, Moschis GP, Davis T. Antecedents of materialism and compulsive buying: a life course study in Australia. *Australas Mark J.* 2011;19(4):247–256. doi:10.1016/j.ausmj.2011.04.007
- 113. Manchanda R. A comparative study of compulsive buying behaviour between working and non-working women. Pragyaan. 2010;27(28):1.
- 114. Moschis GP, Moore RL. A longitudinal study of television advertising effects. J Consum Res. 1982;9(3):279-286. doi:10.1086/208923
- 115. Valence G, d'Astous A, Fortier L. Compulsive buying: concept and measurement. *J Consum Policy*. 1988;11(4):419–433. doi:10.1007/BF00411854
- 116. Zhang H, Lu Y, Gupta S, Zhao L. What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences. *Inf Manage*. 2014;51(8):1017–1030. doi:10.1016/j.im.2014.07.005
- 117. Pinto MB, Parente DH, Palmer TS. Materialism and credit card use by college students. *Psychol Rep.* 2000;86(2):643–652. doi:10.2466/pr0.2000.86.2.643
- 118. Harman HH, Harman HH. Modern Factor Analysis. University of Chicago press; 1976.
- 119. Anderson J, Gerbing D. Structural equation modelling in practice: a review and recommended two-step approach. *Psychol Bull.* 1988;103 (3):411–423. doi:10.1037/0033-2909.103.3.411
- 120. Shaffer JA, DeGeest D, Li A. Tackling the problem of construct proliferation: a guide to assessing the discriminant validity of conceptually related constructs. *Organ Res Methods*. 2016;19(1):80–110. doi:10.1177/1094428115598239
- 121. Kline RB. Principles and Practice of Structural Equation Modeling. Guilford publications; 2015.
- 122. Test KW. Statistics and research methods paper CODE-PSY4101 [CREDITS-4].
- 123. Bagozzi RP, Yi Y, Phillips LW. Assessing construct validity in organizational research. Adm Sci Q. 1991;36:421–458. doi:10.2307/2393203
- 124. Baron RM, Kenny DA. The moderator–mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *J Pers Soc Psychol.* 1986;51(6):1173. doi:10.1037/0022-3514.51.6.1173
- 125. Evrard Y, Boff LH. Materialism and attitudes toward marketing. ACR North Am Adv. 1998;25:196-202.
- 126. Chan K. Development of materialistic values among children and adolescents. Young Consum. 2013;14:244-257. doi:10.1108/YC-01-2013-00339
- 127. Greenfield PM. Social change, cultural evolution, and human development. Curr Opin Psychol. 2016;8:84–92. doi:10.1016/j.copsyc.2015.10.012
- 128. Inglehart R, Baker WE. Modernization, cultural change, and the persistence of traditional values. *Am Sociological Rev.* 2000;65:19–51. doi:10.1177/000312240006500103
- 129. Sheldon KM, Ryan RM, Deci EL, Kasser T. The independent effects of goal contents and motives on well-being: it's both what you pursue and why you pursue it. *Pers Soc Psychol Bull*. 2004;30(4):475–486. doi:10.1177/0146167203261883
- Lee NC, Jolles J, Krabbendam L. Social information influences trust behaviour in adolescents. J Adolesc. 2016;46:66–75. doi:10.1016/j. adolescence.2015.10.021
- 131. Pahlevan Sharif S, Yeoh KK. Excessive social networking sites use and online compulsive buying in young adults: the mediating role of money attitude. *Young Consum*. 2018;19(3):310–327. doi:10.1108/YC-10-2017-00743
- 132. Israelashvili M, Kim T, Bukobza G. Adolescents' over-use of the cyber world–internet addiction or identity exploration? *J Adolesc*. 2012;35 (2):417–424. doi:10.1016/j.adolescence.2011.07.015
- 133. Chan K, Prendergast GP. Social comparison, imitation of celebrity models and materialism among Chinese youth. *Int J Advert.* 2008;27 (5):799–826. doi:10.2501/S026504870808030X
- 134. Chan K, Fang W. Use of the internet and traditional media among young people. Young Consum. 2007;8:244-256. doi:10.1108/17473610710838608

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