



# Vanity as a Mediator in Relationship between Personality Traits and Compulsive Buying: An Empirical Investigation

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## Abstract

*This research paper aims to provide empirical investigation on relationship between Big Five personality traits and compulsive buying; examines mediating role of consumer vanity in their relationship; and draws pragmatic implications for marketers and researchers. Structural Equation Modeling (SEM) is used to test hypothesis on data set of 222 respondents recruited from randomly selected public and private universities. Contrary to the existing role of personality in shaping compulsive buying, we suggest that vanity permeates this influence. We elucidate that vanity is reshaping the purchase patterns and choice of global consumer. Findings of this research advance earlier studies that associate extraversion, conscientiousness, neuroticism, openness and agreeableness with compulsive buying. We find that physical vanity and achievement vanity are key constituents of new commercial lifestyle.*

**Keywords:** Compulsive buying, personality, Big Five factors, vanity.

## Introduction

Survival of a business firm depends on an ongoing effort to understand and respond to customer needs and desires. Customers select, purchase, consume and dispose of products and services to satisfy their needs and wants<sup>1</sup>. Mahatoo<sup>2</sup> suggested that consumer needs stem in cognitive, physical, emotional and social aspects of human genome that direct purchase motives and consumer behavior. As a result of globalization and swift socio-political-economic changes, consumers have developed taste for truly concomitant lifestyle and identity. Given rise in consumerism, underlying motives and consuming patterns of consumers have transformed and are constantly changing. Studies confirm connecting primitive human needs to branded merchandise including designer apparel, cosmetics, gym memberships, cosmetic surgeries, breast augmentation, face uplifting, massages etc. This represents an attractive business opportunity for marketers in both developed and developing countries of the world tempting consumers to express themselves through materialism.

According to social behavior theory family, friends and media play important role in defining our thoughts and very fabric our social reality. Mainstream media along with social media is fostering materialism, ego, vanity and hedonism<sup>3</sup>. Buyers look for purpose and meaning in values such as conspicuous consumption, status obsession, materialism and addiction to physical appearance and vanity. While this represents a remarkable market and business opportunity, such ostentatious consumption behavior is of serious concern for consumer advocates and psychologists. It is for this reason experts delve

into understanding psychological forces that propel this changed consumer behavior. Albeit rampant studies on personality traits and theories, this study extends knowledge on how five personality traits associate with compulsive buying mediated by vanity. We know the importance of personality traits in determining magnitude of compulsive buying however questions concerning how this association is affected by other behaviors such as vanity remains to be answered. We therefore embark on to test hypotheses regarding this relationship.

We present our research as follows. First, we organize variables and their theoretical underpinnings. Then, we present our conceptual framework and hypothesis. Finally, we analyze collected data to present our findings and contribution to academia.

**Consumer Vanity:** Humans quest for praise, pride, exclusivity and grandeur has been documented in annals of history. This underlying legacy has contributed to the development of concept known as vanity or consumer vanity in marketing literature. Vanity is a relative term that can be defined in several contexts. Netemeyer et al.<sup>4</sup> Bloch and Richins<sup>5</sup>, Cash and Brown<sup>6</sup>, Lasch<sup>7</sup>, and Solomon<sup>8</sup> has documented its roots in philosophy, sociology, psychology, consumer psychology, marketing, and other behavioral studies. Within psychoanalytic framework, Battistelli<sup>9</sup> sketched its origin in sexual struggle and vying for superiority and exclusivity in tribe, subculture or society.

Literal meaning of vanity is excessive pride or admiration of one's own appearance or achievements. Webster<sup>10</sup> defined

vanity as gratuitous pride and obsession in one's physical appearance and public image. The conceptual definition of vanity illustrates exhibitionism, superiority and fulfillment of self-goals. Sztulman<sup>11</sup> expounded vanity as latent manifestation of personality and emotions in unconscious minds. Dunning<sup>12</sup> proposed that people engage to reinforce their self-concept, appearance perception and achievement perception by changing social perceptions, buying decisions and consumer choices. Mason<sup>13</sup> argued that vanity is a psychogenic attribute of an individual which is largely swayed by existing financial, cultural and social preferences.

Self-identity and personal image of modern global consumer largely depends on materialistic achievements and appearance perception. Campbell<sup>14</sup> argued that constant bombardment of marketing messages and advertisements portraying physical beauty, erotic imagery and material achievement have led foundations for consumerist society and vain behavior. Marketers and advertisers have hatched consumerist culture where buyers and shoppers indulge in buying products and services that serve their sensorial and symbolic motives instead of functional and utilitarian motives<sup>15,16</sup>. Therefore van being<sup>1</sup> is susceptible to buying which promises dominance, individuality, stylishness, fantasy, supremacy and achievement. Provided the substantial benefits, numerous products and services are consumed on the promise of guaranteeing adornment and physical fitness. This is more evident in purchase categories such as apparel, beauty, beverages, cosmetics, surgical treatments, electronic gadgets, entertainment and sports.

Physical appearance, exhibitionism and achievement is a coupon of delight for individuals in developed as well as less developed countries (LDCs). Consumers in LDCs embark on voyage to identify with western lifestyle and consumer culture; a phenomenon referred as demonstration effect. Correlational evidence attributes this phenomenon to evolution and development in global marketing campaigns, mass media, movies, internet and social media. Van beings are on a constant look for latest products and services endorsed by celebrities that serve their need for self-perfection and attention. As per statistics from American Society of Plastic Surgeons<sup>17</sup> number of cases who underwent cosmetic plastic procedures excluding reconstructive procedures reached almost 15 million displaying surge of 5 percent as compared to previous year. Female consumers aged 13 years and above, consumed 91 percent of cosmetic procedures; top five since 2006 are: breast augmentation, nose reshaping, eyelid surgery, liposuction and facelift. Conversely notable purchases amongst 9 percent of male consumers are: male breast reduction (gynecomastia), hair transplantation and upper arm lift. Irrespective of their culture and ethnicity, females across their age bracket from 10 to 79 years are more conscious about body appearance and uniqueness than their male counterparts<sup>18</sup>. Given their desire for perfection and attractiveness vanity beings publicize premium and prestigious products to friends and partners. Besides, they have colorful personality and live the life of a party<sup>19</sup>. Dunning<sup>20</sup>

argued that vanity seekers are conceited, shallow and showy; and in pursuit of social triumph they forget to reap the intrinsic benefits of purchases.

Netemeyer et al.,<sup>21</sup> operationalized vanity into 21-item inventory covering four distinct constructs: (a). Concern for physical appearance, (b). Inflated positive view of physical appearance, (c). Concern for personal achievement and (d). Inflated positive view of personal achievement. First two constructs constitute physical vanity and last two constructs constitute achievement vanity. Validity and soundness of all four dimensions is established in psychometric literature verified across different cultural studies<sup>22</sup>. Excessive concern for physical appearance dimension is composed of five items measuring ones concern for having striking physical appearance than others. Inflated positive view of physical appearance dimension is composed of six items gaging others view of ones alluring appearance. The excessive concern for physical achievement is composed of five items measuring ones obsession of physical achievements; and the inflated view of ones physical achievements is composed of five items gaging others view of ones successful achievements.

**Compulsive Buying:** Compulsive buying (CB) historically known as "Oniomania" is a maladaptive consumer behavior marked by "repetitive buying and lack of impulse control over buying"<sup>23</sup>. Faber et al.,<sup>24</sup>; Valence et al.,<sup>25</sup>; d'Astous and Tremblay,<sup>26</sup>; O'Guinn and Faber,<sup>27</sup>; incorporated concept of compulsive buying in consumer behavior literature as proclivity of consumers to indulge in irresistible repetitive buying to mitigate stress, anxiety, internal psychological turmoil and negative feelings<sup>28</sup>. Contrary, Compulsive buyers are satiated to spend, shop and seek pleasure from binge buying. Some compulsive buyers shop to sustain positivity of self-belief, few shop to fill void in their life and feel valued, and for some binge buying represents quest for vanity, superiority and exhibitionism.

The view that CB is a mood regulating mechanism and antidote to negative mood is established in much of consumer behavior literature. In a controlled experiment, Faber and Christenson<sup>29</sup> reasoned that compulsive buyers report more positive and less negative disposition after purchases. According to escape theory of Faber<sup>30</sup> CB relieves compulsive buyers from negative feelings and painful self-awareness. Faber and O'Guinn<sup>31</sup> theorize that in order to relinquish pain of self-awareness compulsive buyers engage in bouts of immediate purchases. Escape theory bears analogy to "compensatory buying" model proposed by Scherhorn et al.<sup>32</sup> which advocates that compulsive buyers crave for material products to compensate negative feelings and low self-worth. CB leads to severe psychological, financial and family problems including compulsive buying disorder (CBD), despondency, bankruptcy and break up in relationships.

According to a research study in Stanford School of Medicine, 6 percent of US population is found to have CBD symptoms<sup>33</sup>.

The percentage increases when items in financial consequences construct are excluded. Interestingly widespread opinion that more women are compulsive buyers than men is proven wrong in same study at Stanford. It is argued that CB is the result of contemporary western culture that inspires ostentatious values such as materialism and avariciousness<sup>34</sup>. Yurchisin and Johnson<sup>35</sup> found strong correlation between compulsive buying and materialistic values. It is reasoned that binge buyers are addicted to buying that communicates symbolic and sensual values. Purchase decision of compulsive buyers is not governed by utilitarian but psychological motives.

Past studies confirm binge buyers impulse for premium apparel, foot ware, cosmetic surgery, personal grooming and other related products to galvanize social image and standing. Based on magnitude of involvement in compulsive buying, Natarajan and Golf<sup>36</sup> categorized compulsive buying into five levels: (a) non compulsive, (b) re-creational, (c) borderline, (d) compulsive and (e) addicted. As proposed by Edwards<sup>37</sup> non compulsive buyers plan for purchases. Recreational buyers indulge in impulsive buying and see it as recreational activity to improve their temperament. Like their recreational counterparts, borderline buyers show strong affinity for purchases to avoid negative sentiments and feelings. Compulsive buyers are senselessly obsessed with buying which earns them temporary joy and pleasure followed by adverse financial and psychological consequences. Addictive buyers are voracious compulsive buyers showing uncontrolled desire for purchases and often sacrifice other needs and priorities to quench their bouts of gluttonous buying. Compulsive and addictive cluster of buyers exhibit chronic buying and lose control over purchases.

McElroy et al.,<sup>38</sup> confirmed that CB results in emotional distress, remorse, psychological disorder and transmuted consumer behavior. The impact of internal state and personality traits on CB is evident in consumer psychology. It is interesting to note that most of the models and theoretical frameworks in consumer literature such as decision making, utilitarian theory, behavioral perspective and purchase behavior are elucidated by combination of the frameworks<sup>39</sup>. Holbrook and Hirschman<sup>40</sup>; Hoyer and Macinnis,<sup>41</sup> suggested that CB does not conform to above mentioned perspective; instead is associated with psychological motives and personality traits.

**Personality:** Research on personality is as primitive as human beings and so far remains paradox for academicians and practitioners. Scientific research contemplates that human behavior is alluded through cluster of thoughts and personality traits. According to Psychology Today “personality refers to individual differences in characteristic patterns of thinking, feeling and behaving”. Twenge and Campbell<sup>42</sup> proposed that personality is the sum total of psychological preferences and individual characteristics dictating response to environmental stimuli. Marketers and psychologists theorize personality as key factor in consumer behavior affecting purchase decisions.

Customers show interest in brands that match their persona and personality<sup>43</sup>. Consumer’s interest and choice in purchases such as apparel, cosmetics, jewelry, appliances, automobiles and housing reflect their personality. Significant body of literature postulates that five key factors are remarkably universal and biological to describe personality<sup>44</sup>. This belief stems in earlier inquiries by D. W. Fiske<sup>45</sup> followed by extensive work of Smith<sup>46</sup>, Norman<sup>47</sup> and Goldberg<sup>48</sup>. Finally McCrae and Costa<sup>49</sup> operationalized the concept into five broad categories popularly known as Big Five Model (B5M) or Five Factor Model (FFM). Empirically validated in more than fifty comparative studies across nations, cultures, age groups and gender; B5M represents characteristics that sketch person’s psychological and social map. The B5M dimensions are: (a). Extraversion vs. Introversion (b). Agreeableness vs. Antagonism (c). Conscientiousness vs. Lack of Direction (d). Neuroticism vs. Emotional stability and (e). Openness vs. Closeness to Experience.

Each of the dimension holds sub factors or traits that bucket together. Extraversion vs. Introversion dimension features characteristics such as sociable, assertive, talkative, active and not shy. Agreeableness vs. Antagonism dimension consists of attributes such as sympathetic, generous, cooperative, trusting and not aggressive. ). Conscientiousness vs. Lack of Direction dimension include traits such as thoughtfulness, diligence, responsibility and mindfulness. Neuroticism vs. Emotional stability dimensions consists of attributes such as emotional stability, anxiety, confidence, sadness and moodiness. Openness vs. Closeness to Experience dimension features traits such as originality, imagination, insight and playfulness<sup>50</sup>. Above taxonomy reveals important distinction in consumer research. Operationally, constructs represent attributes that influence compulsive buying and consumer vanity.

**Conceptual Frame Work:** Theoretical foundations of personality scale<sup>51</sup>, vanity scale<sup>52</sup> and compulsive buying scale<sup>53</sup> are used to frame propositions and explore expected relationship between personality, vanity and compulsive buying.

Mowen and Spears<sup>54</sup>, for the first time in maladaptive consumer studies, investigated association between personality traits and compulsive buying. Their research revealed low conscientiousness, high neuroticism and high agreeableness as significant predictors of compulsive buying behavior. A year later, Mowen<sup>55</sup> empirically established agreeableness and neuroticism direct predictors of compulsive buying behavior. Balabanis<sup>56</sup> tested B5M to predict compulsive buying tendencies. His findings revealed that extraversion positively influences compulsive buying and conscientiousness negatively influences compulsive buying behavior. Contrary to findings by Mowen and Spears<sup>57</sup>, Balbins<sup>58</sup> found negative impact of agreeableness on compulsive buying. Wang and Yang<sup>59</sup> proposed positive correlation between *neuroticism* and compulsive buying. In a very recent study, Mikolajczak-Degrauwe et al.<sup>60</sup> concluded that compulsive buyers score high

on personality traits of extroversion, agreeableness, neuroticism and low on conscientiousness. Past studies revealed inconsistent findings between personality traits and compulsive buying except neuroticism. Mikolajczak-Degrauwe et al.<sup>60</sup> reasoned these inconsistencies to variance in use of measurement scales, research context and different sample sizes. Saulsman and Page<sup>61</sup> advocated that consistent position of neuroticism highlights a personality problem common in all compulsive buyers. Our research study elects B5M, having strong theoretical foundation to link compulsive buying table-1.

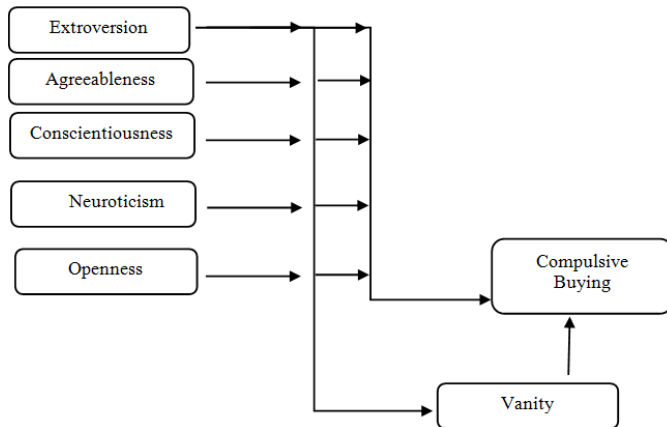


Figure-1  
Conceptual Model

We therefore hypothesize: H1a There is significant positive impact of extroversion on compulsive buying. H1b There is significant positive impact of agreeableness on compulsive buying. H1c There is significant positive impact of conscientiousness on compulsive buying. H1d There is significant positive impact of neuroticism on compulsive buying. H1e There is significant positive impact of openness on compulsive buying.

Although extensive research insights into outcomes of personality traits as key predictors in consumer behavior; marketers ability to decipher consumer mind and corresponding multifaceted attributes in terms of vanity is very low. Meaningful appraisal of these concepts necessitates following hypotheses.

H2a Vanity mediates relationship between extraversion and compulsive buying. H2b Vanity mediates relationship between agreeableness and compulsive buying. H2c Vanity mediates relationship between conscientiousness and compulsive buying. H2d Vanity mediates relationship between neuroticism and compulsive buying. H2e Vanity mediates relationship between extraversion and compulsive buying.

Wang and Waller<sup>62</sup> explained that western perspective on self-concept and entwined personality outcomes, promotes more physical attractiveness, personal contentment and achievement than eastern perspective. Campbell,<sup>63</sup> and McCracken<sup>64</sup> found

that consumers, in particular extroverts, avidly desire products that serve their sensory and symbolic gratification. Contrary, Introverts are asocial, shy and insensitive to other person's feelings therefore exhibitionism, view of physical appearance and achievement, might not be rewarding for them<sup>65</sup>. According to Strack<sup>65</sup>, agreeable people are cooperative and concerned about feelings of other people in society and therefore express themselves accordingly. Conscientious people are diligent, organized and submissive to authority and do score low on vanity measure which results in financial and emotional stress. Emotionally stable people are self-confident and in charge of things under their control. Earlier researches and theory fail to establish a significant association between this trait of neuroticism and vanity. Open people are original, curious, respectful and perfectionists and show submissive tendency for vanity behavior. Emphasizing the role of personality traits in permeating purchase propensities, in particular that of B5M, we use this concept as theoretical lens to inspect diffusion of vanity in this regard and how it cascades to extensive purchases.

## Methodology

This is an explanatory research study that utilizes quantitative methods to analyze collected data. Our findings are grounded on pretested, structured questionnaire answered by two hundred and seventy five respondents (mix of undergraduates and graduates) of private and public universities. Twenty one observations were dropped due to incomplete responses and integrity of the data. *Mahalanobis* distance measure was employed to identify and therefore remove outliers. This resulted in two hundred and twenty two respondents to test our predictions. Therefore response rate is almost 81% with 114 females and 108 males. Universities were randomly selected from list of private and public institutions. Because vanity measure included items regarding professional accomplishments and recognition by peers, we chose those respondents who are employed or have their own businesses. Participants ranged in age from 21 to 47 (Mean Age = 26.35, S.D = 3.68). On average they have worked for 0.52 years (S.D= 4.59 years).

**Measures:** Five item personality inventory<sup>66</sup> is used to succinctly measure five personality constructs of extraversion, agreeableness, conscientiousness, neuroticism and openness to experience. According to Gosling et al.,<sup>67</sup>, 21 items in five constructs demonstrate psychometric properties and usefulness in assessing personality. Each item carries two associated descriptors and their explanation. Content and convergent validity was optimized by comparison and use of 44 Big Five Inventory (BFI) developed by John and Sriveastava<sup>68</sup>. Convergence between the dimensions was found to be: extraversion, 0.80; agreeableness, 0.58; conscientiousness, 0.65; neuroticism 0.69; and openness to experience, 0.48. Gosling et al.,<sup>69</sup> revealed that this framework had mean test – retest reliability of 0.68 and shows adequate discriminant, convergent, and construct validity; test retest reliability; and convergence between observer ratings and self-ratings. We use 5 point likert

scale to measure response where 1= strongly disagree and 5= strongly agree.

Vanity aspects of respondents were captured utilizing vanity construct delineated by Netemeyer, Burton and Lichtension<sup>70</sup>. All dimensions including concern for physical appearance, concern for achievement and view of achievement are composed of 5 items each excluding view of physical appearance that is composed of 6 items. In four studies ( $n=227$ ,  $n=145$ ,  $n=186$ ,  $n=264$ ), internal consistency fluctuated between 0.80 and 0.92 across all dimensions. Netemeyer et al.<sup>71</sup> offered several checks for content, construct and nomological validity. All items are scored on five point scale. (1= strongly disagree, 5= strongly agree).

To measure compulsive buying behavior we incorporate an expanded measure of compulsive buying index proposed by Ridgway, Kukar-Kinney, and Monroe.<sup>72</sup> The construct represents six item consisting two dimensions, all measured on five point likert scale ranging from 1=strongly disagree to 5=strongly agree. Across three studies, correlation among two dimensions was found to be 0.77, 0.62, and 0.72. For three item impulsive buying coefficient alpha was 0.80, 0.78, and 0.84. Coefficient alpha for compulsive buying dimension was 0.75, 0.77, and 0.78. Scale strongly predicted construct validity, convergent validity and test retest reliability. However, scale showed social desirability bias ( $r = -0.21$ ).

## Results and Discussions

All dimensions in the current study represent composite scales. Summary of mean values, standard deviations and correlations as well as significance among measures is displayed in table 2. All correlation coefficients excluding conscientiousness are significant ( $p<0.05$ ). Correlation coefficient of conscientiousness only shows significance with agreeableness ( $r=.052$ ) and obsessive buying ( $r=-.177$ ) (Table 2).

To test hypothesis, structural Equation Modeling (SEM) was employed using Amos 7 software package. As data are normally distributed, maximum likelihood method of estimation was used. Graphical representation of SEM model is presented in figure-1 illustrating direct path between personality traits and compulsive buying and indirect path through vanity measure. Hu and Bentler,<sup>73</sup> Mac-Callum, Browne, and Sugawara,<sup>74</sup> Yu<sup>75</sup> recommended Comparative Fit Index (CFI), Tucker-Lewis Index (TLI) and Root-mean-square error of approximation (RMSEA) as popular test indices for mediation analysis. According to Hu and Bentler<sup>76</sup> cut off levels for determining a fitting and parsimonious model for continuous data marks: CFI > 0.95, TLI > 0.95 and RMSEA < 0.06. Table 3 describes all models follow directions i.e. for all models, CFI ranges from .978 - .994, TLI ranges from .962 - .990 and RMSEA indices are less than .06 (table 2). Moreover, ratio of  $\chi^2$  to  $df < 2$  or 3 is good representation of the model fitness<sup>77</sup>. Post hoc modification was not conducted due to parsimonious data.

**Mediation Evaluation:** Statistical investigation on mediation analysis has produced conflicting opinion based on significance of relationship between independent variable(X) and dependent variable(Y). It is therefore pertinent to understand mediation protocols for hypothesis testing. Baron and Kenny<sup>78</sup> recommended three steps prior to mediation analysis. First step is testing significant  $X \rightarrow Y$  relationship (total effect), second step is to introduce a mediator (M) and test significant  $X \rightarrow M$  relationship (indirect effect). Third step is testing significant  $X \rightarrow Y$  relationship incorporating mediator effect<sup>78</sup>.

Arguing this belief, Hayes<sup>79</sup>; MacKinnon, Krull, and Lockwood,<sup>80</sup>; MacKinnon et al.,<sup>81</sup>; Shrout and Bolger,<sup>82</sup>; Zhao, Lynch, and Chen,<sup>83</sup> propounded that mediation is not constrained by significant  $X \rightarrow Y$  relationship. Preacher, et al.,<sup>84</sup> rejected overemphasized  $X \rightarrow Y$  relationship in mediation analysis. According to Rucker et al.,<sup>85</sup> appropriate requirement for mediation analysis is significance and magnitude of indirect effect.

**Indirect Effect:** Based on models in figure 2 we test our hypothesis ( $H2a-H2e$ ). Dashed path in all models illustrate mediating effect of vanity between personality traits and compulsive buying. Model 1 (Extraversion  $\rightarrow$  Vanity  $\rightarrow$  Compulsive Buying) is significant ( $p<0.05$ ) with standardized indirect coefficient of .163. Model 2 (Conscientiousness  $\rightarrow$  Vanity  $\rightarrow$  Compulsive Buying) represents insignificant relationship with standardized indirect coefficient of .0569 ( $p>0.05$ ).

Model 3 (Neuroticism  $\rightarrow$  Vanity  $\rightarrow$  Compulsive Buying) depicts significant relationship with standard indirect coefficient of .179. Model 4 (Agreeableness  $\rightarrow$  Vanity  $\rightarrow$  Compulsive Buying) shows significant relationship with standardized coefficient of .195. Model 5 (Openness  $\rightarrow$  Vanity  $\rightarrow$  Compulsive Buying) depicts significant relationship with standardized coefficient of .239 [table 4]

**Direct Effect:** Relationships between independent and dependent variable incorporating mediator ( $X_M \rightarrow Y$ ) is depicted in blue line in all models in Figure 1. All models are statistically significant ( $p<0.05$ ) excluding model 5. Standardized regression weights for model 1, model 2, model 3 and model 4 are .261, -.274, .285, and .307 respectively. However, direct path in model 5 is statistically non-significant ( $p>0.05$ ) with standardized regression weight of .091.

**Total Effect:** H1a-H1e depict significant positive impact of personality traits (X1, X2, X3, X4 and X5) on compulsive buying (Y). SEM results confirm total effects in all models are statistically significant ( $p<0.05$ ) at 95% confidence interval (table 4).

Based on SEM results, vanity partially mediates the relationship between extraversion, neuroticism, agreeableness (X1, X3 and X4) and compulsive buying (Y). For X1 :(Total effect=.424,

Indirect effect=.163 and Direct effect =.261), X3: (Total effect=.464, Indirect effect=.179 and Direct effect =.285) and X4: (Total effect=.502, Indirect effect=.195 and Direct effect =.307)]. It is found that vanity does not mediate relationship between conscientiousness (X2) and compulsive buying

(Indirect effect=.056,  $p>0.05$ ). Interestingly vanity fully mediates between openness (X5) and compulsive buying (Total effect=.331, Indirect effect=.239 and Direct effect =.091) [See table 4]

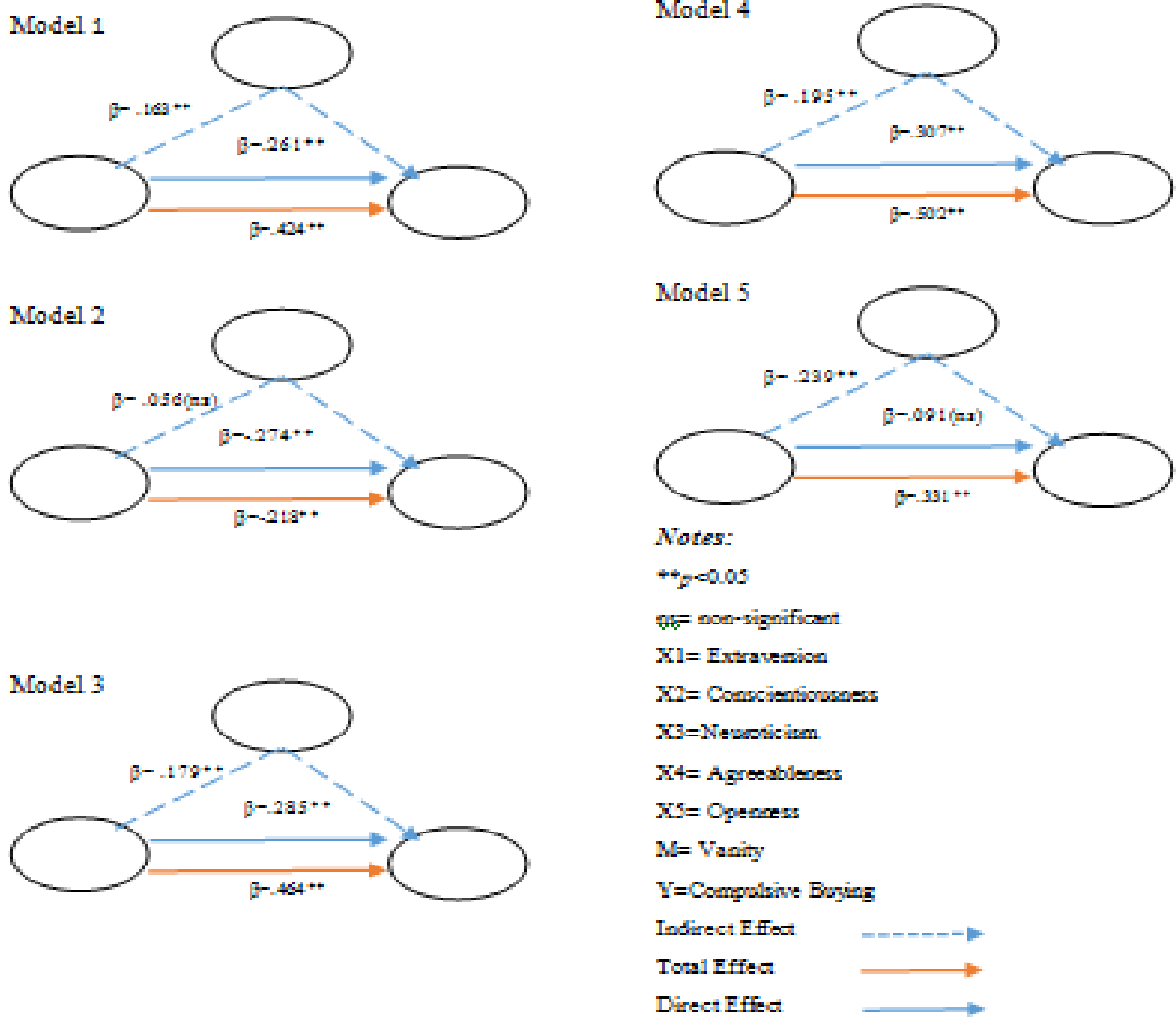


Figure-2  
 Summary of Direct, Indirect and total paths through Structural Equation Modeling

Table-1  
 Relationship between compulsive buying and B5M dimensions

Research Study	Extroversion	Conscientiousness	Agreeableness	Openness	Neuroticism
Mowen and Spears (1999)	ns	-ve	+ve	ns	+ve
Mowen (2000)	ns	ns	+ve	ns	+ve
Balabanis (2001)	+ve	ns	-ve	-ve	ns
Wang and Yang (2008)	ns	ns	ns	ns	+ve
Mikoiajczak-Degrauwe et al., (2012)	+ve	ns	+ve	-ve	+ve

[ns. = not significant]

**Table-2**  
**Mean, Standard Deviation and Inter item correlation**

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
Openness	3.96	.836	.89										
Extroversion	3.97	.826	.699**	.85									
Neuroticism	3.87	.885	.494**	.502**	.77								
Conscientiousness	2.95	1.113	-0.31	-0.085	-0.102	.84							
Agreeableness	3.58	.922	.488**	.505**	.492**	.052**	.75						
Appearance Concern	3.33	1.036	.399**	.282**	.319**	0.084	.325**	.82					
Appearance View	3.49	.911	.329**	.231**	.259**	-0.018	.327**	.476**	.84				
Achievement Concern	3.53	.865	.399**	.283**	.321**	0.114	.346**	.579**	.440**	.85			
Achievement View	3.48	.822	.259**	.209**	.291**	0.083	.390**	.474**	.429**	.465**	.95		
Obsessive Buying	3.75	.840	.179**	.230**	.290**	-	.295**	.247**	.293**	.240**	.276**	.91	
Impulsive Buying	3.77	.823	.229**	.275**	.262**	-0.056	.299**	0.123	0.124	.225**	.266**	.340**	.86

Note: \*\*  $p < .05$ , Diagonal represents scale reliabilities. SD=

**Table-3**  
**Model Fit**

Models	$\chi^2$	df	RMSEA	CMIN/DF	CFI	TLI
Model 1	16.882	12	.043	1.407	.985	.974
Model 2	16.664	12	.042	1.389	.984	.973
Model 3	13.882	12	.027	1.157	.994	.990
Model 4	16.811	12	.043	1.401	.986	.976
Model 5	19.402	12	.053	1.617	.978	.962

Note: n = 222; Bootstrapping = 5000 times

**Table-4**  
**Results from Structural Equation Modeling**

	$\beta$	BCa 95% Confidence Interval		p
		CI (Lower)	CI (Upper)	
<b>Indirect Effect</b>				
Extroversion†	.163	0.063	0.32	0.001
Conscientiousness†	.056	-0.025	0.158	0.165
Neuroticism†	.179	0.075	0.335	0.001
Agreeableness†	.195	0.075	0.371	0.002
Openness†	.239	0.092	0.441	0.002
<b>Direct Effect</b>				
Extroversion†	.261	0.035	0.475	0.021
Conscientiousness†	-.274	-0.458	-0.111	0.001
Neuroticism†	.285	0.064	0.51	0.013
Agreeableness†	.307	0.076	0.522	0.01
Openness†	.091	-0.14	0.333	0.469
<b>Total Effect</b>				
Extroversion†	.424	0.234	0.602	0.001
Conscientiousness†	-.218	-0.41	-0.061	0.001
Neuroticism†	.464	0.275	0.652	0.001
Agreeableness†	.502	0.326	0.681	0.001
Openness†	.331	0.117	0.491	0.004

Note: † = Predictor, DV = CBI and M= Vanity; n = 222; Bootstrapping = 5000 times

**Table 5**  
**Summary of Mediation effect**

Model	1	2	3	4	5
Mediation	Partial	No	Partial	Partial	Full

**Conclusion**

Our analysis surfaces association of various personality traits with compulsive buying. We recognize that all personality traits are broad, multifaceted dimensions that reinforce peoples concern for physical appearance and achievement. Not surprisingly, personality traits such as extroversion, openness, neuroticism and agreeableness spills over into presentation of self-importance and physical appearance that translates into compulsive buying. Of all personality traits, conscientiousness does not permeates physical appearance and compulsive buying. We suggest that concern for physical appearance and view of physical appearance are strong motivators in creating appetite for undue shopping. Moreover university students who are open, sociable, curious and imaginative display achievement behavior and compulsive behavior. Theoretically, these findings are interesting as they establish association between personality traits and compulsive buying mediated by emerging phenomenon of vanity in consumer behavior. These relationships are logical and useful and demand further investigation by academicians and practitioners.

**Implications and Contributions:** This research study proposes a new perspective on impact of Big Five personality traits on consumer vanity and compulsive buying behavior of consumers. Our research suggests that vanity offers new meaning and purpose to guide buying behavior. Consumers are more fickle today and their vanity behavior is constantly changing phenomenon. From managerial perspective, marketers can use this information to design segmentation, positioning and promotional strategies. The findings of this study are limited to university students in metropolitan Karachi, future research should focus on respondents from all segments of society and representative areas of country. Vanity related measures should be incorporated to ascertain the influence of vanity measures and subsequent prediction of concurrent validity.

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