# **Compulsive Online Shopping in Malaysia**

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#### Abstract

The proliferation of e-commerce has induced the online shopping transactions around the world. The increase trend of online shopping illustrates that there is a dramatic increase in compulsive behavior on online shopping. Shopping online could give an illusion to the consumers that they are not really spending money and become compulsive for many consumers. By adapting the questionnaires outlined, this study validates the compulsive online shopping scale to measure the compulsive online shopping behaviour in Malaysia context. A survey was conducted with a sample of 221 respondents based on convenience-sampling method in the Klang Valley. The factor analysis showed high reliable test of Cronbach alpha for the scales underlying the compulsive online shopping behavior.

**Keywords:** Compulsive online shopping, Measurement scale

### Introduction

The proliferation of e-commerce has induced the online shopping transactions around the world. The increase trend of online shopping illustrates that there is a dramatic increase in compulsive behavior on online shopping. Shopping online could give an illusion to the consumers that they are not really spending money and become compulsive for many consumers (Zhao & Xin, 2017).

Oniomania is a technical term for compulsive desire to shop. Coined over a century ago it gains traction in the last decade. With the rise of e-commerce, flash sales and deals of the day, auction online sites and readily available credit line online shopping could be a compulsive and dangerous habit for many. Compulsive buying can be tied to psychological issues because the behavior is inwardly motivated to avoid or relieve internal anxiety feelings. The adverse consequences include running into financial difficulties, anxiety and strains in family relationships and marriages. Thus, compulsive buying can be categorized as an obsessive-compulsive disorder which referred as an addiction (Black, 2007).

With growing internet access whether at home or at work, the implication is a tendency for online shopping and an increase in compulsive behavior associated with internet shopping. According to the Internet Users Survey Report 2017 by Malaysian Communication and Multimedia Commission (MCMC), online buying has become an important online activity for internet users in Malaysia. 48.8% Malaysian make online shopping as one of their main online

activity. With mobile shopping apps easily downloadable onto smartphones, online shopping is on the rise and becoming additive. The percentage of smart phone users who used their phones for internet access rose by 26% from 68.8% (in 2012) to 84.8% (in 2017). About 3 out of 10 smartphone users (28.4%) do online buying from their smartphone, making the smartphone as Malaysian primary shopping companion.

According to Rose and Dhandayudham (2014), compulsive online shopping may have negative impact on individuals' daily life, social life and economic condition. As online shopping among Malaysian increased from 24.5% to 48% for 2011 to 2017, it is inevitable that Malaysian online shoppers would be seen as compulsive buyers too. Thus, this study validates the compulsive online scale needed in measuring compulsive online shopping behavior among the Malaysian.

### Literature review

Shopping addition was recognized as far back as early nineteenth century and was cited as a psychiatric disorder in the twentieth century. Shopping addition can be an impulsive or compulsive behavior. Unlike impulsive shopping which happens at the spur of the moment, compulsive shopping is more a pre-planned means of escaping from negative feelings.

Andreassen et al. (2015) developed a new scale the 7– item Bergen Addition Scale (BSAS) to assess shopping addiction. In addition to the core addiction criteria, BSAS approached problematic shopping behavior facilitated by new internet technologies elements of accessibility, affordability, anonymity, convenience and disinhibition, both online and offline.

Zhao et al. (2017) developed and validated a scale to measure online shopping addiction by adopting the six-factor component model by Brown (1993) and Griffiths (1996). The six-factor components are salience, mood modification, tolerance, withdrawal, conflict, and relapse. Salience refers as prominent behavior that preoccupying their thoughts, dictating their desire and demonstrating an extreme occurrence. Mood modification means subjective experience of carry out behavior with feeling such as exciting, agitation, released, apathetic or depressed after fulfillment. Tolerance indicates an increase of the activities so as to reach the desired of excitement. Withdrawal indicates the unpleasant feeling and/or physiological response when attempting to restrict the compulsive behavior. Conflict means the interpersonal contradiction between individuals and others and also the intrapsychic conflict of individuals. Relapse refers to the inclination of returning to original behavioral pattern after withdrawing an addictive behavior (Brown, 1993; Griffiths, 1996, 2005; Zhao et al., 2017).

Manchiraju et al. (2017) developed the Compulsive Online Shopping Scale (COSS) where the BSAS were modified to reflect compulsive online shopping. The original items and contents merely included the word "online" to each existing items. They found validity of the scale support behavioral addiction as defined by the American Psychiatric Association (2013).

Gunuc and Keskin (2016) investigated reasons underlying preference for online shopping and described the hedonic nature of online shopping addiction. By applying mixed modes of

qualitative and quantitative open-ended question methods, 105 Turkish respondents based on snowball sampling method were surveyed. Among the reasons for frequently performed online shopping activities include cost and economic factors, ease, time convenience and variety of products. There are negative and positive emotional effects of online shopping. Negative feelings include regret, stress and worry, while positive feelings include excitement and relaxation.

Further study by Keskin and Gunuc (2017) using the path analysis on a sample of 105 respondents in Turkey revealed that stress, depression, ease of use and usefulness were factors influencing hedonic shopping addiction.

A cross-sectional study of 200 Parisian students by Duroy et al. (2014) confirmed that online compulsive buyers spent significantly more money and more time in online shopping. The conclusion was online compulsive buying is a distinctive behavioral disorder with specific factors of loss of control and motivations, and overall financial and time-consuming impacts.

### Methodology

The sampling method was executed by using non-probability sampling based on convenience sampling. The research instrument is a self-administrated questionnaire in which all questions were collected anonymously from the respondents in Klang Valley area as it has the highest percentage distribution of internet users in Malaysia (MCMC, 2017).

The compulsive online shopping scale by Manchiraju et al. (2017) was adapted to assess and validate the compulsive online shopping scale (COSS) among the online shoppers in Malaysia. This scale supported Diagnostic and Statistical Manual of Mental Disorders (DSM–5) by American Psychiatric Association (2013) by considering the additional behavioral addition criteria which is compulsive buying in the DSM-5. The questionnaire consists of two main sections: A) Respondents' Demographic data and B) the Compulsive Online Shopping Scale that contains 7-subscales with a total of 28 questions, each rated on five-point Likert scale (1=strongly disagree, 2=disagree, 3=neither disagree or agree, 4=agree, and 5=strongly agree). The 7-subscales to measure the compulsive online behavior are salience, mood modification, conflict, tolerance, relapse, withdrawal, and problems.

Factor Analysis is applied in the study to validate the compulsive online shopping scale. Factor analysis is used to identify a relatively small set of factors which can be used to symbolized relationships among variables. Factor analysis presents a geometrical illustration that allocates a visual description of behavior relationships (Raven, 2004).

#### **Findings and Discussion**

#### **Descriptive Analysis**

#### Background of Respondents.

There were total of 221 sample respondents in the study with 21.7% of male and 78.3% of female. 70% of the respondents was below 29 years old, 19% was aged 30 to 44, and 10.4% was 45-59 years old and only 0.5% above 60 years old. Two-thirds (66.1%) were married and 34% were single or widowed. Education level ranged from secondary school (5.9), to Diploma (29.4%), Bachelor Degree (46.65) and those above master degree (18.1%). For monthly income level, 44.8% of the respondents' income less than RM3000, 24% between RM3000 and RM4999, 16.3% income between RM5000 and RM9999 and for those monthly incomes above RM10000 were 14.9%. In terms of occupational status, 60% of the respondents worked full-time (38% executive level and 21.7% mom-executive level), 38% was students and 2.3% not working. The study's demographic characteristics follow Malaysian classification of the income group of T20, M40, and B40, and most of the respondents are millennial that actively involved in online shopping. Table 1 shows the descriptive statistics for the demographic of respondents.

Table 1: Demographic Analysis of Respondents						
Respondent Profile	Frequency (n=221)	Percentage (%)				
Gender:						
Male	48	21.7				
Female	173	78.3				
Age:						
below 29 years old	155	70.1				
30-44 years old	42	19.0				
45-59 years old	23	10.4				
Above 50 years old	1	0.5				
Marital Status:						
Married	70	31.7				
Single	146	66.1				
Widowed	4	1.8				
Divorced	1	0.5				
Race:						
Malay	74	78.7				
Chinese	33	14.9				
Indian	6	2.7				
Others	8	3.6				
Education Level:						
SPM and below	13	5.9				
Diploma/ STPM	65	29.4				
Bachelor's Degree	103	46.6				
Above MasterDegree	40	18.1				
Household Income:						
Less than RM3000	99	44.8				
RM3000 - RM4999	53	24				
RM5000 - RM9999	36	16.3				
Above RM10000	33	14.9				
Occupational Status:						
Employed Executive level	84	38.0				
Employed Non-Executive Level	48	21.7				
Unemployed	2	0.9				
Student	84	38				
Retired	2	0.9				
Housewife	1	0.5				

Table 1: Demographic Analysis of Respondents

## Factor Analysis

	Table 2: Rotated Component Matrix Component							
Items	М	SD	1	2	3	4	5	6
Relapse			•	-	0	•	U	0
I have been told by others to reduce online shopping/buying.	2.50	1.222	0.753					
I have managed to limit online shopping/buying for periods, and then experienced relapse.	2.63	1.165	0.729					
I shop/buy online so much that it has caused economic problems.	2.37	1.150	0.723					
I shop/buy online so much that is has impaired my well-being.	2.37	1.150	0.702					
I have decided to shop/buy less online, but have not been able to do so.	2.42	1.097	0.654					
I have tried to cut down on online shopping/buying without success.	2.40	1.018	0.632					
Salience								
I think about online shopping/buying things all the time.	2.63	1.163		0.849				
Online shopping/buying is the most important thing in my life.	2.86	1.037		0.814				
Thoughts about online shopping/buying keep popping in my mind.	2.78	1.179		0.793				
I spend a lot of time thinking of or planning online shopping/buying.	3.00	1.179		0.771				
Conflict								
I give less priority to hobbies, leisure activities, job/studies, or exercise because of online shopping/buying.	1.88	0.887			0.808			
I have neglect my love partner, family, and friends because of online shopping/buying.	1.74	0.968			0.786			
I often end up in arguments with others because of online shopping/buying.	1.89	0.952			0.710			
I have worried so much about my online shopping problems that sometimes it made me sleepless.	1.96	0.943			0.655			
I have been bothered with poor conscience because of my online shopping/buying.	2.05	0.952			0.563			
I shop/buy online so much that it negatively affects my daily obligations (e.g., school and work).	2.07	0.931			0.533			
<u>Tolerance</u> I shop/buy online much more than I had intended/planned.	2.68	1.098				0.758		
I feel I have to shop/buy more and more online to obtain the same satisfactions as before.	2.38	1.022				0.712		
I feel an increasing inclination to shop/buy things online.	2.67	1.067				0.647		
I spend more and more time shopping/buying online.	2.37	1.123				0.505		
Withdrawal								
I feel bad if for some reasons I am prevented from shopping/buying things online.	2.39	1.115					0.773	
I become sour/grumpy if for some reasons I cannot shop/buy things online when I feel like it.	2.40	1.152					0.767	
I become stressed if obstructed from shopping/buying things online.	2.32	1.034					0.550	
If it has been a while since I last shopped online, I feel a strong urge to shop/buy things.	2.59	1.241					0.523	

2.50	2.938						0.798
2.76	1.191						0.738
2.97	1.272						0.695
2.32	1.136						0.680
		43.793	10.315	5.568	4.010	3.834	3.674
		12.626	2.888	1.559	1.123	1.073	1.029
		0.896	0.889	0.866	0.798	0.859	0.748
	2.76 2.97	2.76 1.191   2.97 1.272	2.76   1.191     2.97   1.272     2.32   1.136     43.793 12.626	2.76   1.191     2.97   1.272     2.32   1.136     43.793     12.626   2.888	2.76   1.191     2.97   1.272     2.32   1.136     43.793     10.315   5.568     12.626   2.888     1.559	2.76   1.191     2.97   1.272     2.32   1.136     43.793     12.626   2.888     1.559   1.123	2.76   1.191     2.97   1.272     2.32   1.136     43.793     12.626   2.888     1.559   1.123     1.073

The 28 items of the COSS questions on 221 participants were conducted using principal component analysis (PCA) with a Varimax (orthogonal) rotation. An examination of the Kaiser-Meyer-Oklin measure of sampling adequacy (KMO = 0.921) and the Barlett's Test of Sphericity is significant indicated that the sample was factorable of the correlation matrix.

The results of an orthogonal rotation are shown in Table 2. The analysis yielded a six-factor matrix with a simple structure for factor loadings more than 0.50 as suggested by Hair et al. (2010).

PCA revealed the presence of six components with eigenvalues exceeding 1. Factor 1, Relapse, was comprised of 6 items that explained 43.8% of the variance with factor loadings from 0.753 to 0.632 and eigenvalue of 12.626. Factor 1 was comprised of 6 items that explained 43.8% of the variance with factor loadings from 0.753 to 0.632. There were 4 items in factor 2, Salience, in which it explained 10.315% of the variance and eigenvalue of 2.888 with factor loadings from 0.847 to 0.771. For Factor 3, Conflict, was contained of 6 items that explained 5.568% and eigenvalue of 1.559 with factor loadings from 0.808 to 0.533. All 4 items in factor 4, Tolerance with factor loadings from 0.758 to 0.505 were comprised of 4.010% of variance with eigenvalue of 1.123. Factor 5 represent Withdrawal was comprised of 4 items that explained 3.834% of the variance with factor loadings from 0.773 to 0.523 and eigenvalue of 1.073. All 4 Items for Factor 7 identified the mood modification of compulsive online shopping behavior that explained 3.674% of variance and eigenvalue of 1.029 with factors loading from 0.798 to 0.680.

The values of Cronbach Alpha for the 6 factors that have been identified were 0.896, 0.889, 0.866, 0.798, 0.859 and 0.748.

All items in the Compulsive Online Shopping Scale developed by Manchiraju et al. (2017) were validated reliable and valid for Malaysian online shopping behavior. There are seven components in the scale. However, only six components had been loaded by this study and they were in line with Online Shopping Addiction Scale developed by Zhao et al. (2017). The six components are Relapse, Salience, Conflict, Withdrawal and Mood Modification. These six components are essential for operational characterization of addictive behaviors (Zhao et al., 2017).

Tolerance Component/ Factor of Problems in the COOS were dropped from the factor in which 2 of this factor items were comprised in Factor 1 (Relapse) and the other 2 items in Factor 3 (Conflict). Items allocated to Factor 1 (Relapse) are "I shop/buy online so much that it has

caused economic problems" and "I shop/buy online so much that is has impaired my well-being". These two items implies the effects of relapse behavior on online shopping which become problems after returning to the original behavior.

While items Problems in Factor 3 (Conflict) are "I have worried so much about my online shopping problems that sometimes it made me sleepless" and "I have been bothered with poor conscience because of my online shopping/buying". These two items implies the problems of intrapsychic conflict that cause the anxiety of consumers increase with their compulsive online shopping behavior.

#### Conclusions

This study validates the reliability of the COOS scale in Malaysia. The results of CPA indicated that the six-factor structure underlay the scale by substantive theory. In term of reliability and validity, the cronbach's alpha advocated the scale was highly reliable. The factor analysis results showed that the scale comprises six-factor component model which are salience, tolerance, mood modification, withdraw, relapse and conflict, in line with the six- factor components in Online Shopping Addiction Scale developed by Zhao et al. (2017). Thus, the 28-item scale is a valid theory-based instrument to empirically measure compulsive online shopping behavior in Malaysia.

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