

## **Can Allowance, Personal Budgeting and Self Control as Mediating Role Manage Compulsive Buying Behavior Among College Students?**

Alce Mariani Labito<sup>1</sup> & Supramono<sup>2</sup>

<sup>1,2</sup>Department of Management, Faculty of Economics and Business, Satya Wacana Christian University, Salatiga, Indonesia

Correspondence: Supramono, Satya Wacana Christian University, Salatiga, Indonesia.

Email: supramono@staff.uksw.edu

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**Abstract:** Compulsive Buying Behavior seemed to be increasing, especially among college students. The aim of this study was to explain some factors that influence compulsive buying behavior. This study involved 189 undergraduate students and data collected by distributing questionnaires. The result showed that allowance, personal budgeting, were related to compulsive buying behavior. The other results indicated that self-control was able to weaken the influence of allowance on compulsive buying behavior. Also, the outcome empirically showed that college students are knowledgeable with some alternative methods for overcoming compulsive buying behavior.

**Keywords:** Compulsive Buying Behavior, Personal Finance, Allowance, Budgeting, Self-control

**JEL Classification:** D14

### **1. Introduction**

Buying is a habitual activity in our daily life and normally, people buy goods or services to meet their basic needs. However, people inevitably often make purchase goods or services that they do not really need impulsively and excessively. This kind of behavior is defined as possibly addictive (Davenport, Houston & Griffiths, 2012), leading to excessive buying which is called Compulsive Buying Behavior (CBB). CBB is typically described as an extreme uncontrollable desire of a person to buy or shop repeatedly (Workan & Paper, 2010; Leite et al., 2013). Lo and Harvey (2014) mentioned that compulsive buyers are obsessive in acquiring certain particular items. They buy their most favorite things frequently than their peers do. According to Kellet & Bolton (2009) this behavior is guided by emotional responses such as depression, tension or boredom that lead to temporary relief and pleasure while shopping then is followed by feelings of remorse, guilt, and shame. Müller (2013) also added that the purchased items of CBB are being forgotten after a long time, hidden, or given away to someone else because the utility of the items is actually unnecessarily needed. In Indonesia, one of the possible reasons that drive CBB is the existence of e-commerce that has been lately increasing. Based on the results of the online shopping survey conducted by MasterCard in April 2012, the total transaction

value of online trade in Indonesia in 2010 amounted to 3.4 billion USD, and the end of 2012 is expected to increase to 4.2 billion USD (“kompasiana,” 2017). In the same line, a study conducted by La Rose, telecom experts from the Department of Telecommunication Michigan State University, USA, noted that the simplicity offered by e-commerce increased the risk of online shopping suffering Compulsive Buying compared with traditional shoppers.

Lo and Harvey (2014) added that over a longer period of time, this behavior leads to financial harm. A survey of Indonesia household spending patterns held in 2013 by Kadence Indonesia showed that the average Indonesian family spent more than 70% of their income on household expenses and most of it was household spending such as food and beverages (“kemandirianfinansial,” 2017). The average of spending was too high and made household budget become unbalanced. In the same line, consumer spending had been augmented thoroughly from 2012 - 2015 like being shown in the following chart:



Figure 1: Indonesia Consumer Spending  
source: [www.tradingeconomics.com](http://www.tradingeconomics.com)

Consumers spending increased to 1,201,200 IDR billion in July of 2015. The average spending was 544130 IDR billion from 2012 until 2015. The uplift had been increasing for the past two years (July 2013 – 2015). With the phenomenon of CBB, undoubtedly, the average spending is rising up continuously in the near future and it may become a problem when consumers cannot cut their coat according to their cloth by purchasing a lot of unnecessary things more than they earn. In the midst of CBB issues, it cannot be denied that this kind of circumstances also happened to college students. A study in Jogjakarta found that 7 respondents out of 8 college students are willing to make any efforts to purchase the latest complete featured of smartphones (Ukisinawati, 2014). As a result, some negative impacts of CBB occurred such as monthly budgeting was not enough, less money for eating, and payment for renting was late (Hidayati, 2013). Faced with such situation, it does not rule out the possibility that they end up in financial debt or borrowing habit (Norvilitis & Santa Maria, 2002; Kidwell et al, 2003; Moore & Carpenter, 2009; Palmer et al., 2010; Robb & Pinto, 2010). Because of the negative impacts of CBB, a better understanding of personal finance is really needed among college students.

A number of online sites spread giving a complete guide covering all aspects of personal financial management. The field has been numerous also discussed in textbooks, publication articles from the popular press to academic journals, for instance, gender, race, allowance, education, occupation, age and marital status (Anderson et al., 2000; Kemp et. al., 2004). Those discussions merely analyzed the intersections of real life-course domains. Yet, as college students, they need to know how to manage their money practically to obtain the greatest benefit from the money they earn or get from their parents. College students are quite susceptible (Lee & Workman, 2015). Amongst college students, the ranges of CBB was growing from time to time (Roberts, 1998; Magee, 1994; Hassay & Smith, 1996). Mostly, compulsive buyers buy items such as apparel, shoes, electronic devices, accessories, beauty haul, household things (Miltenberger et al., 2003). Living as college students who get full supported from parents financially, allowance has become the main concern in managing personal finance. With CBB issues among college students, the amount of allowance is sometimes arguable. Guo and Cai (2011) said that people with higher allowance have more tendency to do CBB. Then, how about those with a limited amount of allowance? Are they still more likely to do CBB? By the word “limited”, are they being able to maintain CBB? Unfortunately, it is still not adequately evaluated in some previous studies.

Beside allowance, financial planners suggest a way to discourage overspending like CBB. It is a well-known called budgeting. The use of a budget is to control the flow of money. According to Chieffe and Rakes (1999), budgetary is enlightening to track expenses for a month and the compare actual expenditures to planned expenditures. Researches and articles on budgeting have been conducted over the years (Horvath & Sauter, 2004; Goode & Malik, 2011 Lorain et. al, 2014). All those discussed the integration of budgeting system in the point of view of company’s strategies in general. For example, Lorain et al (2014) suggest that the budgeting process still require more attention for the sake of the organizations, and in changing the environment, it provides a set of source information that can serve as a stable framework. Meanwhile, as a framework, the use of personal budgeting is still questionable, as some believe that budgeting help people in controlling their spending (Antonides et al., 2011; Reka et al., 2014). Nevertheless, there is still a remarkable lack of empirical research on the benefits that people who budget their money actually gain from doing so. Is budgeting really helping one’s in planning and control resources especially related to CBB issues?

Last but not least, self-control which is linked to CBB has been actually discussed in some prior studies (Billieux et al., 2008; Gupta, 2013; Achziger et al., 2015). For instance, Billieux et al. (2008) mentioned that three aspects (urgency, perseverance lackness, and premeditation lackness) that correlated with compulsive buying. Some studies followed by looking from a marketing perspective (Gupta, 2013) or the causes of CBB due impulses or lacks self-control (Zuraigat, 2012). Yet, a limited-resources of self-control as financial control domain related to CBB is lacking. In this study, self-control is linked to CBB to see the influence of excessive buying decision making as financial control. The purpose of this study is to identify the effects of allowance, personal budgeting, and self-control as mediating role on CBB. This study hopefully will give a significant facilitation for college students in giving suggestions to prevent CBB by being aware of the importance of allowance, personal budgeting, and self-control.

## 2. Research Methodology

The target sample in this research was undergraduate students in Faculty of Business and Economics, Satya Wacana Christian University, Indonesia. FEB students were eligible for being the sample in this research since they were equipped with knowledge and cognitive skills (financial literacy) to take competent and rational action related to personal financial management. The total population of this research was 1946 students. Meanwhile, the sample consisted of 189 students. Those sample size had met the minimum requirement. In multivariate techniques like multiple regression analysis, the sample size should be at least five times larger than the number of parameters variables to be analyzed (Hair et al, 2007). This study used 34 parameters, therefore the minimum sample size required was 170 observations. The questionnaires were distributed based on purposive sampling in which the data was taken using certain criteria such as the respondents were supposed to have an allowance and live apart from their parents. The questionnaire was divided into two sections. The first section referred to demographic features and some open-ended questions included to reflect the respondent's viewpoint. The second section was formed talked about CBB, and the other variables; allowance, personal budgeting, and self-control. For CBB, there were 14 statements adopted from Li et al. (2014), allowance was measured by the amount of money earned by the students from their parents every particular time, and the amount was divided into five categories, personal budgeting consisted of 7 statements adopted from Miotto and Parente (2015), and the last, self-control were 13 statements adopted from Haws et al. (2011). Respondents were asked to respond to each statement with one of the following options, based on a Likert-type scale: 'strongly disagree', 'disagree', 'neutral', 'agree', and 'strongly agree'. The responses to each statement were assigned a value from 1 to 5, with higher scores corresponding to higher levels of each statement.

Before going into the discussion, the instrument was examined in advance. The approach being used was the validity of each variable by analyzing the correlation between the respective score of question from all the studied variables to the total score of each variable. The demanded significant result was at  $p \leq 0,05$ . The outcome showed that all the items on CBB and personal budgeting was significant at  $r_{table} \geq 0,14$ , but item 1, 5, 13, 14, 16 on self-control were insignificant. Hence, all invalid items are omitted in the analysis to improve the data quality. After re-running the test, the result showed all the items were valid. Thus, the total items for self-control were 21 after leaving out 5 items. The instrument reliability test on CBB represents the magnitude  $r_{11} = 0,857 > r_{table} = 0,66$ , then the variable CBB is declared reliable. Meanwhile, the instrument reliability test on personal budgeting represents the magnitude  $r_{11} = 0,826 > r_{table} = 0,66$ , so the variable personal budgeting is reliable. For self-control, the magnitude  $r_{11} = 0,767 > r_{table} = 0,66$ , hence the self-control is stated reliable. This research applies primary data in the form of a questionnaire. The location of data collection was in some classrooms with permission of the lecturer and lecturer's assistant before handing the questionnaires in class, all respondents were informed the purpose of the study which was to examine the influence of allowance, personal budgeting, and self-control toward CBB. The date of distribution started on July, 15<sup>th</sup>, 2016. It took about two weeks to distribute the questionnaires. The allocation time answering the questionnaire in the classroom was about 15 – 20 minutes. It was 219 questionnaires being distributed but due to some errors in answering the questions by the respondents, the final sample consisted of 189 respondents. Based on the demographic profile, 68% of the respondents was female. Since the required respondents were college

students, the age range attained between the age group pf 17-23 years old. For the data point of personal finance resources, 92% respondents were full supported financially by their parents. It also mentioned that 74% of respondents received their money on a monthly basis. In managing money, in fact, 62% respondents did not make a personal budgeting as financial control. The statistic method being used is multiple regression analysis. Beforehand, the analysis is first carried out by conducting some tests of normality, heteroscedasticity and multicollinearity. The result of normality test show that the value of the Kolmogorov-Smirnov Z's of each variable, respectively 0,412, 0,055, 0,151; the values are greater than 0,05, thus data normality is not met. Furthermore, the test on heteroscedasticity values shows that the three variables have no symptoms of heteroscedasticity since the sig of allowance, personal budgeting, and self-control were 0,153, 0,128, 0,171 above 0,05. The value of tolerance values of those three variables was, 0,981, 0,975, 0,993 greater than 0.10 and VIF value are smaller than 10,00. So, it could be concluded that no problem of multicollinearity.

### 3. Results

Table 1 presents summary information of the mean and standard deviation of allowance, personal budgeting, self-control, and CBB. Allowance of respondents has a mean value of 3,35 which indicates the amount of allowance is average (compare to median 3) and the standard deviation is 0,696 shows the variations of respondents' answers are pretty various. Mean value of personal budgeting is 23,24 shows the personal budgeting is passable (compare to median 23) with standard deviation 4,671 which points to a low level of the respondents' response on personal budgeting. Self-control has 28,28 of mean value that unveils drivable (compare to median 28) and 5,519 of standard deviation which shows the low point on responding. CBB is decent with a mean value of 38, 97 and standard deviation 8,076 which indicates very low response on CBB. Besides, table 1 presents the correlation between self-control variable and CBB is -0,328. It shows negative correlation and that means a person low in self-control reported a high level of CBB, while a person better self-control reported a lower level of CBB. For allowance and CBB, it yields the number 0, 243. This number means that both variables have a strong correlation because it is above 0,1. It also happens between allowance and self-control. The correlation value produces 0, 121. As for the correlation between allowance and personal budgeting, it generates the number -0, 019. The two variables have a very weak correlation because it is below 0,1. It is showing the opposite relationship, if allowance is high then personal budgeting is low, and vice versa.

Table 1: Descriptive Statistics

Variables	Mean	SD	Kurtosis	Skewness	1	2	3	4
1. Allowance	3,35	0,696	0,688	-0,213		-	0,121	0,243**
2. Personal budgeting	23,24	4,671	0,424	-0,230		0,019		-0,121
3. Self-control	28,28	5,519	0,046	0,006				-
4. CBB	38,97	8,076	-0,071	0,211				0,328**

Note: \* sig at 5%  
 \*\* sig at 1%

Model 1, the result presents that the age of respondents has a negative correlation with CBB. It indicates that young students are less influence on CBB since they are still new in the environment and hesitated to spend money carelessly. For gender issue, the respondents show positive outcome toward CBB since the majority respondent in this study is female. Those who live around Salatiga, have a negative correlation with CBB. It means they are not affected with CBB. On the other hand, those who live outside Java, have a positive correlation with CBB. Last, self-control variable shows positive significant on CBB. In Model 2, the outcome contains independent variables (allowance and personal budgeting). First, allowance shows significant positive influence on CBB. the higher allowance, the greater tendency to do CBB. Meanwhile, personal budgeting exposes negative result. It means personal budgeting has a negative influence toward CBB. Latest, model 3 examines moderation variable (self-control) between dependent and independent variable. Allowance through self-control influences CBB positively. And, personal budgeting also positively influenced CBB through moderating variable. Based on adjusted R<sup>2</sup> results, 42,3% CBB variable is being influenced by allowance and self-control. Self-control can reduce the influence of allowance to CBB.

Tables 2: Model Analysis

Variables	Model 1		Model 2		Model 3		Adjusted R <sup>2</sup>
	$\beta$	p	$\beta$	p	$\beta$	p	
<i>Control Variables</i>							
Age	-0,23	0,753					-0,005
Gender	0,071	0,331					0,000
Around Salatiga	-0,056	0,601					-0,008
Outside Salatiga	0,011	0,913					-0,010
Self-control	-	0,000					0,288
<i>Independent variables</i>							
Allowance			2,827***	0,001			
Personal budgeting			-0,210*	0,096			
<i>Moderator variables</i>							
Allowance Self-control					0,101	0,413	0,423

Note: \* sig at 10%  
 \*\* sig at 5%  
 \*\*\* sig at 1%

#### **4. Discussion**

The test result that the amount of allowance was a significant predictor of CBB. The outcome of this study confirmed that compulsive buyers come up from all level of allowance. No matter what, the chance of one will buy compulsively is still higher, even though they only get some little money left after the consumption for necessities is fulfilled (Guo & Cai, 2011). As Omar et al. (2015) stated that young people who are getting allowances from their parents, hence they have control of spending the money and make a purchase decision. It appeared to influence their spending behavior because it seemed that they felt more secure in using the money by looking at the sources of the money. The findings also indicated that for college students, personal budgeting gave effect to control CBB. They do make personal budgeting consider it as the main element in managing their finance. The respondents made budgeting for tracking expenses for certain time of period in order to achieve their financial goals. Personal budgeting on CBB did really give much help when unexpected things occurred. Respondents also use other possible alternatives to control their finance such as bring the little amount of money, save the money in the bank, try spending little on a certain category of items, and spend less time going out with friends.

For self-control, the outcome indicates that, allowance comes with self-control gives no significant results towards CBB. The previous study mentioned that one with better self-control could generate positive outcomes such as goal achievement (Tangney et al., 2004). The respondents with good self-control determined fewer problems on allowance towards CBB. They could hold themselves from the heavily desire to buy that suddenly come, when they have less or not enough money. Black (2007) uttered that when self-control failure, compulsive buyers tend to be more compulsive in purchasing.

#### **5. Concluding Remarks**

This study attempts to find out the relationship among allowance, personal budgeting by considering self-control as moderating role as well as a consequence of compulsive buying behavior. The findings reveal that, allowance and personal budgeting are significant predictors of compulsive buying behavior. Furthermore, self-control is found to give a positive influence on allowance towards compulsive buying behavior. This connection can be enlightened by a condition when a person with good self-control is possible to handle compulsive buying behavior on the allowance as the way of managing his or her finance.

Many researchers have addressed this issue from time to time (Kwak et al., 2002; Williams & Grisham, 2012; Lo & Harvey, 2014). This research along with the issue about compulsive buying behavior tried to see some factors that usually influence CBB from personal financial management especially college students. Compulsive buying behavior in college students has been leading them into poor financial management since they have to ask for extra money to their parents. In managing their finance, college students have a tendency to link their allowance, budgeting, and self-control in an attempt to endure compulsive buying behavior. This study also provided general psychological resources related to the

concept of self-control in financial management, personal budgeting, and allowance that were combined to control CBB. It would be useful for people in general who were struggling in managing their finance alone.

The present study has practical implications. As this study used college students for data collection, the results will be a good resource for them in managing their personal finance for controlling their compulsive buying behavior. In this study, especially college students could increase their financial knowledge (concepts, financial instruments, economic situations) and some alternatives, college students acknowledged to control their finance such as bring along enough money, have saving in the bank, spend little money on certain things, and spend less time going shopping with friends. This current study provides discussion on an allowance and personal budgeting with self-control as moderating role toward compulsive buying behavior. Future research may merge the model by adding the impact of compulsive buying behavior to see any related cause-effect among variables. In this case, future research can observe borrowing habit tendency as the after effect of compulsive buying behavior.

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