



The Mediation of Economic Literacy on the Effect of Self Control on Impulsive Buying Behaviour Moderated by Peers

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ABSTRACT

Impulsive buying is a trait that tends to be found in every individual, especially in the era of industrial revolution 4.0. The term impulsive purchase is a person's behavior in shopping in a spontaneous, reflective, sudden and automatic manner without knowing the item is needed or not for himself. The purpose of this study was to determine the effect of self-control on impulsive purchases mediated by economic literacy and moderated by peers. The methodology of this research is quantitative research involving respondents as many as 191 students taken by proportional random sampling technique. Data multiple linear regression by using SPSS Version 20 is used to analyze the data. The research results show that; (1) Self-control gives a negative and significant influence on impulsive buying, (2) Economic literacy mediate the influence of the relationship of self-control to impulsive buying, and (3) Peers moderate the mediation of economic literacy of self-control on impulsive buying.

Keywords: Economic Literacy, Self-Control, Impulsive Buying, Peers

JEL Classifications: M21, M31, M38, M51

1. INTRODUCTION

The impulsive buying is describe as consumer purchasing behavior which out of their planned (Loudan and Bitta 1993). The impulsive buying activities shows the consumers feel a sudden urge to buy when they are near product and the cash register (Amos et al., 2014). The manufacturers or retailers know that buyers or consumers often make impulsive purchases. Hence they attract to the impulsive interest from buyers or consumers (Clover, 1950; Puri, 1996; Pentecost and Andrews, 2010; Kacen et al 2012). The studies show that impulsive purchase is found that consumer makes unplanned purchases reaching up to 60% (Inman and Winer, 1998; Matilla and Wirtz, 2008) and that impulsive purchases can reach 40% to 80% of purchases anywhere depending in the product category (West, 1951; Hausman, 2000; Kacen et al., 2012; NEFE, 2012). In addition, other researches that the millennial generation is 52% more likely to make impulsive purchases than any other generation (Tuttle, 2012).

The manufacturers or retailers whose main purpose in conducting retail activities is to increase the impulse temptation to increase sellers who will increase profits or income from producers or retailers (Puri, 1996; Beatty and Ferrell, 1998; Kacen et al, 2012). Here those who are interested in impulsive purchases are not only producers and retailers, but researchers are also interested in impulsive buying behavior that has resulted in a lot of research in the last few decades. Consumer organizations such as the National Consumer League and the American Association of Retired Persons have exerted efforts to inform consumers about the willingness of marketers to facilitate behavior (National Consumer League, 2011; Yeager, 2012;). With the high interest from producers, retailers, consumer groups, peers and researchers, impulsive buying is still considered a construct without a clear theory. Impulsive purchase definitions have evolved over time and have little effort to combine findings related to the antecedents of impulsive purchases such as site factors, positioning, and socio-demography ranging from social influences, to consumer traits, to the effects of gender and age (Amos et al., 2014).

Impulsive purchase is when a consumer responds quickly and without reflection and impulsive purchases are more often identified to describe individual traits (Dholakia, 2000; Kacen et al., 2012; Jones et al., 2003; Puri, 1996; Rook and Fisher, 1995; Zhang et al., 2010). Impulsiveness results from self-regulation failure where self-will defeats any ability to control that desire (Hoch and Loewenstein, 1991; Beatty and Ferrell, 1998; Vohs and Faber, 2007; Roberts and Manolis, 2012). So self-control in an inclusive purchase is very important to reduce or eliminate the temptation to impulsive purchases.

Previous research also found that peers have a large influence on human consumptive behavior (Soh et al., 2018). The influence of peers as a person has a big desire to be accepted and accepted among pesky groups (Chang and Nguyen, 2018). Given that each individual wants to adjust to their peers, they are also sensitive to the influence of their friends. Peers are reported to be more influential than parents in influencing a person's behavior (Debarun, 2003), watching television shows and antisocial video games (Nathanson, 2001; Dalessandro and Chory-Assad, 2006). When the occurrence of deviant behavior such as theft, vandalism, violent behavior, use of alcohol, or the use of drugs, that behavior is played more by the role of peers than parents (Aseltine, 1995; Cheung, 1997; Patterson et al., 2000). So here that the role of peers plays an important role in self-control of the behavior of each individual or consumer good or bad. However, to our knowledge, there has been no attempt to conduct research specifically and integrate quantitatively and empirically to analyze the effect of self-control on impulsive purchases mediated by economic literacy and moderated by peers.

Based on several theories previously stated that self-control, economic literacy, and peers are closely related to impulsive buying behavior. With this basis, this study aims to find out how much influence the variables contained in the study. So that the results of this study are able to explain the phenomenon, theory and empirical findings on the effect of self-control on impulsive buying behavior mediated by economic literacy and moderated by peers

2. LITERATURE REVIEW

2.1. Impulsive Buying

Impulsive buying of the tendency of parties from consumers to buy and own spontaneously, reflex, suddenly, and automatically impulsive purchases are something of a natural nature and are a fast reaction possessed by each consumer (Rook and Fisher, 1995). Impulsive purchases occur when consumers' actions in buying are not consciously recognized as a result of a consideration or intention to buy formed before entering the store (Mowen and Minor, 2000). Impulsive purchases are defined as sudden and complex hedonic buying behavior where impulsive purchase speed precludes any wise and intentional consideration of alternative implications or future implications (Sharma et al., 2010). That unplanned purchases can occur only consumers have a need for the product but fail to place items on a structured shopping list. So that unplanned purchases may not be accompanied by strong encouragement or strong positive feelings that are usually associated with impulsive purchases (Amos et al., 2014).

Impulsive buying behavior has the following characteristics; (1). Spontaneity, (2) Strength, (3) compulsion, (4) intensity (5) Excitement (6) Stimulus (7). Indifference will result (Rook, 1987).

Impulsive buying are influenced by various factors as follows; (1) Product characteristics (2) Marketing Characteristics, and (3) Consumer Characteristics (Loudan and Bitta 1993). While other opinions impulsive purchases are influenced by factors such as; (1) Spontaneous, (2) Power and compulsion, (3) excitement, (4) Synchronicity, (5) products (6) hedonic, (7) Conflict, (8). Disregard for consequences, (Cahyorini and Rusfian, 2012).

2.1. Self Control

Self-control is a process that individuals use to align themselves with relevant and relevant goals (Fenton-O'Creevy et al., 2018). the ability of individuals to hold back or direct themselves towards the better when faced with temptations is also called self control (Baumeister 2002). Self-control occurs when a person or organization tries to change how the individual should think, feel, or behave (Muraven and Baumeister, 2000). Self-control is a simple psychological variable because it includes three different concepts about self-control abilities, namely (1) Individual ability to modify behavior, (2) Individual's ability to manage unwanted information by interpreting, (3) The ability of individuals to choose an action based on what they believe (Averill, 1973). Whereas control in financial management is an activity that encourages someone to make savings by reducing impulsive purchases (Otto et al., 2007).

Self-control is influenced by three basic factors, namely; (1) Hurry to choose, (2) Choose between two conflicting behaviors, (3) Manipulating stimuli with the aim of making a behavior impossible and the other behavior more likely (Calhoun and Acocella, 1990). While another opinion is that self-control is more influenced by Emotional (Baumeister, 2002). Other studies say self-control is strongly influenced by emotional factors, impulsive buying is often used to improve emotions and tastes (Fenton-O'Creevy et al., 2018; Xio and Nicholson, 2013) Self-control has two aspects, namely Cognitive Self Control and Behavior self-control (Nęcka, 2015).

2.3. Economic Literacy

Economic literacy is the ability to use economic concepts to make decisions about income generation, expenditure, and allocating money (Pandey and Bhattacharya, 2012). Economic literacy is a term used to describe the ability of individuals to be able to recognize or use the concept and ways of thinking economically in order to improve welfare (Mathews, 1999). According to Jappelli (2010) literacy is a tool to achieve goals, except that in reality not all of these individuals have high economic literacy which understates welfare opportunities. There fore, economic literacy is the knowledge needed to solve problems related to economics such as money, business, and others (Kotte and Witt, 1995).

So it can be concluded that economic literacy is the ability to use economic concepts and critical ways of thinking in economic decision making. Literacy in a person can make the individual smart to manage economic resources to achieve welfare or goals

to be achieved and economic literacy plays a very important role in opening knowledge about the costs or benefits of an item in the economic activities that are being experienced. Literacy is influenced by various indicators such as; (1) Scarcity, (2) productive resources, (3) economic system, (4) Swapping, (5) Economic Incentives, (6) Markets, (7) Economic Management (Kotte and Witt, 1995).

2.4 Peers

Peers are a group of individuals who interact with one another over a certain period of time and share common needs or goals (Mowen and Minor, 2000). Every individual or person who has the same level of maturity or age is called a peer (Mahrunnisya et al., 2018). Santrock (2003) states that peers are people who gather at the same age and maturity. Through peers each individual can provide information and comparison with each other around the world around him.

The influence of peers in general is defined as the extent to which individuals' attitudes, beliefs, and actions are influenced by peers (Sheu et al., 2017; Wang et al., 2016; Makgosa and Mohube, 2007; Asubonteng et al., 1996; Armistead, 1985) Every individual is influenced by others, but they also try to influence others (Scully and Moital, 2016). Supporting Scully and Moital's opinion reveals that conformity refers to the act of changing a person's behavior so that in accordance with the response of others, based on the desire to form realistic interpretations that are accurate and behave correctly, and based on the goal of obtaining social recognition from others (Cialdini and Goldestein 2004).

The influence of peers in adolescents or individuals cannot be ignored, peer groups can influence one's attitude and image. Based on the explanation of peer conformity, namely attitudes or behaviors that are followed by each person to adjust to peers in a group with the aim of being accepted and recognized by their peers. Indicators that affect peers are stated by (Sears et al., 1985; Mahrunnisya et al., 2018) as follows; (1) Solidarity, (2) Agreement, (3) Obedience. According to Havighurst (1953) the influence of peer group development is; (1). Positive influence from peer groups, (2). Negative influence from peer groups. Whereas

according to Mowen and Minor (2000) there are five factors that influence consumption behavior and buying behavior, among others; (1) Through the influence of norms, expressive values, and information, (2) Role factors in groups, (3) Demands to agree with the group, (4) Social comparison process. (5) Group polarization

3. RESEARCH FRAMEWORK AND HYPOTHESIS

Research framework is organized by the effect of self-control on impulsive purchases mediated by economic literacy and peer-moderated (Figure 1). In this research model we will explain the theoretical background for the relationship between variables contained in this study.

3.1. Relationship between Self-Control and impulsive Buying

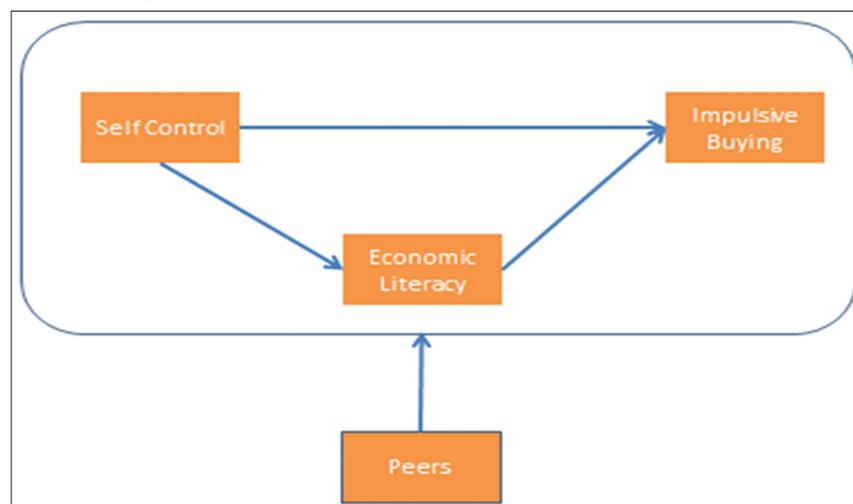
The role of self-control behavior in every impulsive purchase is very important (Fenton-O'Creedy et al., 2018). Rook and Fisher (1995) define impulsive purchases as consumers' tendency to buy spontaneously, not reflective, and immediately; consider it to be a relatively stable behavior, although it is subject to situational influences. Impulsive buyers tell when making impulsive purchases, have feelings of enthusiasm, enthusiasm, and happiness (Verplanken and Herabadi, 2001). Consumers in making impulsive purchases often use good moods and can reduce existing anxiety in life (Atalay and Meloy, 2011; Williams, 2014). Good self-control can facilitate one's success in life in many fields in the future (Baumeister et al., 2007).

H₁: Self-control has a negative and significant influence on impulsive purchases.

3.2. Relationship Mediation Economic Literacy between Self-control and Impulsive Buying

Consumer behavior is determined by the level of knowledge of each individual about the economy. Literacy in the economy becomes very important, where one is able to choose products that can increase the country's economy. Smart economic decisions

Figure 1: Research framework: A mediation and moderated model



will be seen from the ability to determine resources to create benefits. So that literacy becomes increasingly important for making decisions, namely how to invest well, how much to borrow money and spend money and understand the consequences in the future (Jappelli, 2010). This is in line with the opinion (Pandey and Bhattacharya, 2012) that economic literacy is the ability to use economic concepts to make decisions about income saving, spending, and allocating money. The results of previous studies found that economic literacy has a direct and significant negative effect, this means that the lower a person's economic literacy the higher the consumptive behavior (Septiana, 2015).

H₂: Economic literacy is able to strengthen the negative and significant influence of self-control on impulsive purchases.

3.3. Moderated Peers on the Self-Control on Impulsive Buying Behaviour

Peer groups are a group of individuals who have the same age and position that interact with each other, with various purposes (Mowen and Minor, 2000, Santrock 2003; Mahrunnisa et al., 2018).

Peer groups have a strong influence and cause certain behaviors to emerge, changes in behavior are carried out to avoid rejection from peer groups and because they don't want to be different from their peers. This opinion is in harmony that peer groups have a positive influence and negative influence on a person. (Sears et al., 1985; Mahrunnisa et al., 2018) Havighurst 1953; Mowen and Minor 2000).

H₃: Peers Moderate the effect of Economic Literacy on the relationship of self-control to impulsive purchases.

4. METHODOLOGY

4.1. Sampling and Procedures

Population data in this study were Yogyakarta State University Economics Faculty S1 students, totaling 456 people, consisting of five study programs namely Office Administration education, Accounting education, Economic Education, Management, and Accounting.

In determining the number of samples of this study using the Nomogram Harry King. Determination of the sample based on Harry King's Nomogram is the maximum population size of 2000 with the error rate varying, ranging from 0.3% to 15% and multiplying factors adjusted for the specified level of error (King, 1978). With a population of 456 drawn through the error level of 5% found a point with number 35, for a 5% error means 95% confidence so that the multiplier factor is 1.195. Then the number of samples taken is $0.35 \times 456 \times 1.195 = 191$ people. Then each sample was determined using the Proportionate Random sampling technique, which is by providing equal opportunities for each element (member) of the population to be chosen as members of the sample (Kothari, 2004).

Based on the Harry King Nomogram, a total of 191 people were produced, then the number of samples representing the students of the Faculty of Economics according to Proportionate Random Sampling was as follows listed in Table 1.

4.2. Item and Construct Validation

The validation of Item (Table 2) and construct (Table 3) shown some of item are delated from the loading <35. Whereas the correlation among variable shown the correlation value <85. They are show that the valid items and construct. The cronbach alpha value (Table 3) shows the variables are reliable.

5. FINDINGS

The table below is the result of regression data in the study

Based on the Table 4, it shows that:

5.1. The Relationship between Self-Control and Impulsive Buying

The direct relationship between self-control and impulsive purchases received a Standardized coefficient Beta value of -0.688 with a significance value of 0.000. Based on these data, the direct

Table 1. Distribution of research samples

Studi program	Population	Sample
ADP Education	83	$83/456 \times 191 = 35$
Accounting Education	104	$104/456 \times 191 = 43$
Economic Education	76	$76/456 \times 191 = 32$
Management	90	$90/456 \times 191 = 38$
Accounting	103	$103/456 \times 191 = 43$
Total	456	191

Table 2: Loading factors of construct

Item	Self-control	Peer	Impulse buying
P1		0.642	
P2		0.609	
P3		0.542	
P5		0.471	
P6		0.423	
P7		0.488	
P8		0.405	
P12		0.434	
P13		0.423	
P15		0.427	
P16		0.394	
SC1	0.475		
SC2	0.506		
SC4	0.553		
SC6	0.443		
SC8	0.719		
SC9	0.519		
SC10	0.474		
SC11	0.692		
SC12	0.520		
SC13	0.386		
SC14	0.728		
IB1			0.488
IB3			0.389
IB10			0.434
IB12			0.388
IB13			0.479
IB14			0.361
IB15			0.607
IB16			0.606
IB18			0.376
IB20			0.407

Table 3: Correlation, mean, standard deviation, reliability (cronbach alpha)

Variable	Mean±SD	1	2	3	4
1 Self-Control (SC)	2.9453±0.43015	0.830			
2 Impulse Buying	1.9607±0.38876	-0.389**	0.781		
3 Economic Literacy	61.20±15.496	0.079	-0.103	-	
4 Peers	2.4936±0.39111	-0.008	0.325**	0.011	0.790

Cronbach alpha value on bold, SC: Self-control

Table 4: Regression data analysis

Variable	Step 1	Step 2	Step 3	Step 4
Self-control (SC)	-0.389***	-0.384***	-0.614***	-0.688***
Economic literacy (EcoLit)		-0.073	-0.080	0.052
P*SC			0.388***	0.516
P*EcoLit				-0.172
R ²	0.152***	0.157	0.254***	0.255
ΔR ²	0.152***	0.005	0.102***	0.103

Source: primary data processed, SC: Self-Control, EcoLit: Economic literacy

influence of self-control has a negative and significant influence on impulsive purchases. So that the conclusion is drawn that any control that occurs can reduce impulsive purchases. While the value of sig <0.05, the first hypothesis (H1) is accepted that there is a negative and significant effect of self-control on impulsive purchases.

5.2 The Mediation of Economic literacy on the Self-Control and Impulsive Buying Relationship

The mediating effect of economic literacy the relationship between Self-control and Impulsive Buying received the change of a Standardized coefficient Beta value from -0.389*** to 0.384***. Hence the economic literacy mediates the negative effect of Self-control on Impulsive Buying. So that the conclusion is that mediation of economic literacy can reduce effect of Self-Control on impulsive purchases. Hence the second hypothesis (H2) is accepted, that the mediation of economic literacy has a negative influence on the relationship of self-control to impulsive purchases.

5.3 The Moderation of Peers on the Mediation of Economic literacy on the Self-Control and Impulsive Buying relationship

Peers' moderate the the mediating effect of economic literacy the relationship between Self-Control and Impulsive Buying. The Regression of Peers*Self-Control and Peers* economic literacy shows the value of beta 0.516 and -0.172. Based on these data that Peers moderate the influence on the relationship of self-control to impulsive purchases significantly, and moderate the mediation of economic literacy on impulsive purchases. Thus, the third hypothesis <H3> is accepted that peers moderate the model of mediating economic literacy on the effect of Self-Control on impulsive buying.

6. DISCUSSION

6.1. The Relationship between Self-Control and Impulsive Buying

Self-control has a negative and significant influence on impulsive purchases, so the conclusion is that good self-control will reduce

one's consumptive behavior. The results of this study support that self-control is a very important role in all activities, especially consumptive behavior. (Baumeister et al.2007, Lian, 2017; Fenton-O'Creevy et al., 2018).

Previous research shows that good and consistent self-control can have an impact on reducing consumptive behavior (Janseen et al., 2016). while low control causes a person to tend to impulsive buying behavior (Fenton-O'Creevy et al., 2018). Consumer interest is also determined by a product that makes consumer behavior (Fernandes and Panda, 2018).

6.2. The Mediation of Economic Literacy on the Self-control and Impulsive Buying Relationship

The economic literacy found as a mediation in the relationship of self-control to impulsive purchases has a negative and significant impact. It means that economic literacy as mediation can reduce the effect of self-control on impulsive purchases. The literacy is a tool for self-control of consumer behavior (Mathews, 1999). Previous research shows that economic literacy has a negative effect on consumer behavior, which means that economic literacy reduces consumptive behavior (Kanserina et al., 2015). Similar things are found Economic literacy helps reduce consumer behavior and reduce dependence on debt (Brown, et al. 2016). The finding that economic literacy plays a mediation effect as other variables (Ottaviani and Vandone, 2018). The economic literacy that was found to have a direct and significant effect on self-control towards consumptive behavior (Septiana, 2015). Whereas different findings show that economic literacy has a stronger relationship than self-control towards consumptive behavior (Fernandes et al., 2014).

6.3. The Moderation of Peers on the Mediation of Economic Literacy on the Self-control and Impulsive Buying Relationship

Based on the results of the study it can be concluded that the different Peers behaviors shows different effect of self-control on impulsive purchases. This shows that the Peers plays an important role in consumption behavior, because the amount of time spent and interaction with peers makes teenage friends or students more affected by the peers group.

Based on the results of research that showed in line with the opinion of Havighurst (1953) that peers can have a various influence. Thus, Peers have an important influence in one's consumption behavior (Sears et al., 1985; Mahrannisya et al., 2018; Mowen and Minor (2000). The social influences that occur affect purchase intentions (Hsieh, and Tseng 2018). Previous research also shows that peers have an influence on consumer behavior (Chang and Nguyen, 2018). Peers also show the significance of the effect on consumer behavior (Mahrannisya et al., 2018). Different results showed that younger women were more susceptible to peer group influence than older and male peers (Fernandes and Panda, 2018). Different also found other studies that peers are not greater in influencing consumptive behavior than the influence of parents (Baker et al., 2016; Soh et al., 2018).

7. CONCLUSION

Based on the findings found in the study, it can be concluded that Self-control gives a negative and significant influence on impulsive purchases of students with, Economic literacy mediate self-control to impulsive purchases, and Peers clarify why the relationship of self-control to impulsive purchases of students. With the limitations of this study can provide advice for future research.

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