

Conference Paper

Analyzing the Impact of Fashion Influencer on Online Impulsive Buying Behavior

Najla Prihana Gunawan and Ir. Budi Permadi Iskandar

School of Business and Management - Institut Teknologi Bandung- Indonesia

Abstract

As the internet has growth expeditiously, many people use the internet also for running their business and use one of the most powerful platforms on the internet, which is social media. To market their product, there are several ways to promote the product and to attract the customer such as by endorsing people that interested in fashion and can give influence to their followers, called Fashion Influencer. One of the main reason why people buy a product is because of the recommendation of fashion influencer on social media, people buy for something that they don't intend to buy it. And the impulse buying behavior happens. This research aims to analyze and identify the impact of fashion influencer marketing on Instagram to customer impulsive buying behavior and related to the fashion style adopted by the online consumer using a diffusion of innovation theory. This research used a qualitative approach with a semi-structured and in-depth interview, and quantitative approach through a questionnaire to validate the data by knowing the percentage of consumer based on the sample was conducted. The result of coding interpretation and questionnaire shows that 80% of participants are adopting the fashion product and influenced by a purely specific influencer that leads to impulsive buying Results indicate that macro influencer affects the impulsive purchase of fashion product to early majority stage and self-updated stage. Micro influencer affects the impulsive purchase of fashion product to early adopter fashion adaptation stage and leads to pure impulsive buying of the consumer.

Keywords: fashion influencer, fashion adaptation style, impulsive buying behavior, online shopping, diffusion of innovation

Corresponding Author:

Najla Prihana Gunawan

najla.prihana@sbm-itb.ac.id

Received: 7 February 2020

Accepted: 9 March 2020

Published: 23 March 2020

Publishing services provided by
Knowledge E

© Najla Prihana Gunawan and Ir.

Budi Permadi Iskandar. This article is distributed under the terms of the [Creative Commons](#)

[Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICE-BEES 2019 Conference Committee.

1. Introduction

Internet is one of the most important things for people's lives in this era. As the internet has growth expeditiously, Indonesian people use the internet also for running their business through social media such as Instagram. Online shopping has become an alternative way of purchasing a product or services, and online shopping develop both in terms of service, effectiveness, security, and also popularity (Laohapensang, 2009). One of the way to advertise their product is by endorsing people that interested in fashion and can give influence to their followers, also have more than a thousand of

 **OPEN ACCESS**

followers on social media or Instagram, called fashion influencer. Fashion influencer is a personality that has a large number of followers on social media, creates mainly fashion content and has the power to influence the opinion and purchase behavior of others with their recommendations (Alexander, 2018). There are two types of fashion influencer, namely micro influencer and macro influencer. Fashion influencer on social media has a big power to influence the opinion and references to people for buying a product by their recommendation. Consumer, in this case, it can easily and quickly make a purchased product by only utilizing the internet through their gadgets. And because of that, one of the main reason why people buy a product is because of the recommendation of fashion influencer on social media, and how they adapting the fashion style. When that happened, people buy for something that they don't intend to buy it. And the impulse buying behavior happens. Consumers with impulse buyer characters usually don't think to buy a particular product or brand before. They go straight make purchases because of interest in the brand or product at that time. These consumers tend to buy spontaneously.

This research will analyze the impact of micro and macro fashion influencer on customer preferences when purchasing a product, especially the impulse buying behavior of a customer and the connection between fashion adaptation that drawing ideas from diffusion of innovation theory to impulsive buying. This study will be useful to company or a brand to create a good strategy to market their products, to fashion influencer on how they communicate through their promotional activities and make them more influential to customer, and to consumers, they will discover how they adapt a fashion product by drawing ideas from theory of diffusion of innovation that leads to impulsivity.

The objective of this research is to first, to know types of fashion influencer that affects the impulse buying on online customer and second, to analyze the consumer's fashion adoption to types of online impulsive buying by drawing ideas from the theory of diffusion innovation. This research will be limited only for the customer or someone who is using Instagram and follows for the fashion industry with the age in the range of 18 to 22 years old since 39.5% majority of Instagram users in Indonesia are included in this age group compared to other productive age group. (NapoleonCat, 2019). The respondent will be dominant for female, since the fashion influencer that will be analyzed are female, and had concern and interest in fashion also purchase a fashion product through Instagram. The area of research focus in Bandung and Jakarta and will get the respondent from that area as well. This research will used qualitative approach with interview method of semi-structured interview method and in-depth interview and quantitative approach through questionnaire.

2. Literature Review

2.1. Fashion Influencer

A fashion influencer is a personality that has a large number of followers on social media creates mainly fashion content and has the power to influence the opinion and purchase behavior of others with their recommendations. (Glucksman, 2017) Influencers has the power to influence the tastes of its followers. As followers, every follower will certainly pay attention to an influencer from the start of the activity, to the way they dress. Fashion influencer on social media has a big power to influence the opinion and references to people for buying a product by their recommendation. Fashion influencer also have some criteria to finally reached out and get what the brand exactly needs and to reach the customer attention and finally make the customer decided to buy fashion products that recommended by a fashion influencer, which are credibility. An endorser's credibility is considered to be especially important when the recipient has little or no information other than the advertising message and the endorser's attributed claims can only be verified through experience (Jain and Posavac, 2001). From the type, influencer can be divided into 2 parts, micro influencer (average influencer under 100.000 followers) and macro influencer (average influencer above 100.000 followers). (Christodoulaki, 2018); Barker, 2017)

2.2. Micro influencer

Micro Influencer are ordinary people who are paid by brands to promote their products on social media. In other words, micro influencer are not always famous people like public figures or celebrities. Unlike common entertainment or popular celebrities, micro influencer can be defined as a state of being famous to a niche group of people and involves the creation of a persona that feels authentic, trustworthy and original to users (Marwick, 2013). Micro Influencer are extremely capable of triggering the desire of customers for a brand and can have a beneficial effect on the attitude and allegiance of the brand as they are able to pass their suggestions on to their wide range of followers (Lv. et al, 2013) Indeed there is no official limit on when someone on social media can be called as a micro influencer. A person can be called a micro influencer if they have followers between two thousand and 100.000 followers on social media (Barker, 2017)

2.3. Macro Influencer

Macro Influencer are person the creators marketers are most familiar with. Macro-influencer are influencer who have followers more than 100,000 followers. They have been widely-known by various group of people and also macro-influencer come from celebrities that has a number of followers more than 100,000 even 1 million. By using macro influencer, brand or company can be reached by people and get awareness of their brand for more than 1 million people (Hatton, 2018)

In sum, micro influencer and macro influencer are differ in terms of their number of followers, their content of promoting a product in social media, in this case in Instagram, and the effects that they produce on their audience, which finally can influence the audience to purchase a product that they're promote or not. In the previous study by Hwang & Jeong, assumed that micro influencer are perceived more credible than macro influencer due to people's skepticism when seeing the amount number of followers that macro influencer have.

2.4. Diffusion of Innovation

Diffusion of innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread. (Rogers, 2003). The theory of diffusion of innovation by EM Rogers was first published back in 1964. Rogers defines innovation broadly as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (Rogers, 1995), and innovativeness as "the degree to which an individual adopts a new idea. The categories of adopters are innovators, early adopters, early majority, late majority, and laggards. Diffusion manifests itself in different ways and is highly subject to the type of adopters and innovation-decision process. The criterion for the adopter categorization is innovativeness, defined as the degree to which an individual adopts a new idea. (Rogers, 2003). Influencer are mostly innovators and early adopters and generally influence the other categories' intentions. The theory of diffusion of innovation is often use in knowing how technologies are spread through populations. But in case of the research, diffusion of innovation theory will be used for analyzing the fashion adaptation of consumer to the fashion trend and the effect to impulsivity of online consumer that influenced by fashion influencer. Forsythe (1991), stated that Roger's diffusion of innovation theory can be applied to fashion adoption. For example, the innovation decision process model that introduced by Rogers in Diffusion of innovation theory (1983), shows the influence of adopter characteristic at the knowledge stage,

and each adopter's characteristics can play an important role in several stages of the decision process.

2.5. Online Impulsive Buying Behavior

Engel and Blackwell (1982), defined online impulsive buying as unplanned buying is an act of purchase made without prior planning or a decision to make a purchase while in the store. An impulse buy was first conceptualized as an unplanned purchase, and occurs when consumers decide to purchase something spontaneously and immediately without any reflection (Rook, 1987)

Based on previous research, impulse buying can be classified into four types: planned impulse buying, reminder impulse buying, suggestion impulse buying, and pure impulse buying (Stern 1962; quoted in Hodge, 2004):

2.5.1. Pure Impulse Buying

A purchase the impulse method is carried out because of the emotional overflow of the consumer so that the product is purchased outside of its buying habits. Pure impulse buying considered as the most noticeable and this type of impulsive buying is truly spontaneous buy without prior considerations and buy product without thinking too much.

2.5.2. Reminder Impulse Bu3ying

A purchase that occurs because the consumer suddenly remembers to purchase the product. Thus consumers have made previous purchases or have seen the product in advertisements.

2.5.3. Suggestion Impulse Buying

A purchase that occurs when at first the shopper has no knowledge about an item and a product that they're going to buy. A consumer sees a product, looks at the procedures for use or use, realizing a need for the product that they want to buy and decides to make a purchase. Suggestion impulse buying can be included as rational or functional purchase, contrast to pure impulse buying.. The characteristic of suggestion

impulsive buying also when consumer made a purchase because it is influenced by the surroundings or their friends.

2.5.4. Planned Impulse Buying

A purchase that occurs when consumers buy products based on special prices and certain products. This types of impulse buying have some criteria such as when the customer has specific items to purchase in their mind but still considering several things such as they will purchase a product depending on price discounts. Thus, planned impulse buying is a purchase that is carried out without planning and is not in need of it immediately.

3. Methodology

This research will be using qualitative and quantitative approach in order to reach all of the objective and purpose of this research. Qualitative research is multimethod research that uses an interpretive, naturalistic approach to its subject matter. Qualitative research emphasizes qualities of entities— the processes and meanings that occur naturally (Denzin & Lincoln, 1994). Quantitative research defined as systematic to investigate a phenomena by gathering data and performing mathematical or statistical technique, and the data collected through online survey or questionnaire (Babbie, 2010). As mentioned, this study concerned to analyze whether is there any impact of fashion influencer and fashion adaptation of online consumer and drawing ideas from theory diffusion of innovation to impulse buying behavior of online customer on Instagram, when they purchase something, with the fashion influencer that promoting a product, and it can be analyzed by interviewing the respondents. Thus, this method is found suitable for discovering insights through the respondents towards the impact of fashion influencer and fashion adaptation of consumer that leads to customer impulsive buying behavior. This research used non-probability sampling method which is purposive sampling to determine the sampling method. Purposive sampling is a source sampling technique data with certain considerations, for example the person is considered know best about what to be expected. In this research, the respondent participants would be those who are completed the following criteria: 1. Female with age around 18-22 (Early Adults), domiciled in Bandung or Jakarta. 2. Respondents have experienced purchasing a fashion product through online and influenced by fashion influencer 3. Respondents are using Instagram as their social media. A quantitative method were conducted to gain the

validity and percentage data of participants about fashion influencer that participants follow on Instagram and fashion adaptation of participants that leads to impulsive buying. Quantitative is the most suitable approach to gather the data and knowing the percentage for each findings. For calculating the quantitative data, this research will use Slovin Method. Slovin Method is used when the population's behavior is unknown. Slovin Method is kind of a random sampling method to estimate the sampling size (Ellen, 2018). The sample size can be obtained by using the calculation as follows:

$$n = \frac{N}{1 + Ne^2}$$

Slovin Method Equation

n = number of sample

N = number of population

e = error

Where in this research, $N = 11.000.000$, which is the population of female Indonesian Instagram active users with the range age around 18-25 years old, 19,8% of 100% Indonesian Instagram active users from 55.660.000 people. (NapoleonCat, 2019)

With using the number of population of 11.000.000 and error of 0.1, at last, 99.99 participants, and rounded to 100 as the result number for the sampling size for this questionnaire. To analyze the data, the research uses manual coding to analyze the data derived from the interview. The data validation for this study and had been finished to be coded is verified by Triangulation. The researcher uses a method of Triangulation to validate the result of the interview. As in this research, triangulation would be collected from checking through the interview and gathers data from respondent participants in regards to the research and seek justifications of the research through the literature review, also validating the data by distribute questionnaire to online customer that ever purchase fashion product impulsively that influenced by fashion influencer.

4. Findings and Arguments

4.1. Micro and Macro Influencer to Fashion Adaptation and Impulsive Buying

Influencer are divided into two types based on the number of followers namely Micro influencer and Macro Influencer. Based on the semi-structured interview, participants stated that they're following and see micro influencer as their references for adapting

fashion and purchasing a product. When micro influencer promoting a product, participants tend to trust more Micro Influencer rather than seeing a million followers of influencer because they said that the micro influencer are more honest when reviewing products. Actually, Micro Influencer have a higher level of involvement because they are more accessible and authentic. And one important thing is that the cost of working with micro-influencer is also much smaller than macro influencer with larger followers, this one also makes the startup business seller prefer to cooperate with micro influencer.

Meanwhile, Macro-Influencer with higher reach play a good role in increasing brand awareness to reach maximum numbers. Participants said that they know about new trend or fashion mostly by seeing the influencer with large followers, even it is quite mainstream for a trend. The cost of working with these macro-influencer will be greater than for micro-influencer. This because most macro-influencer and celebrity level influencer use agents or third parties and that is also a problem because it makes them more difficult to reach when they want to work together. The impact is that the period of negotiation and content creation can be far longer than when using micro influencer without intermediaries. Then, the typical brand or product that use macro influencer as their platform to promoting their product is mostly a brand with a big name that willing to taking a risk in paying more than using micro influencer. However, to increase brand awareness they can still be relied on. This statement is emerges frequently based on the overall answer such as *“I prefer to look at Tasya Kissty, Dhianty Aprilia, Adiva Selsa (which are micro influencer) for my preferences in purchasing online, I look for influencer that have same style as me so I can follow their style and apply it to myself. She is also trusted for me because I often purchase things that she promoted and I love how they promote a fashion products”*. There are 3 scheme for the affect of micro and macro influencer to fashion adaptation of consumer that leads to impulsive buying.

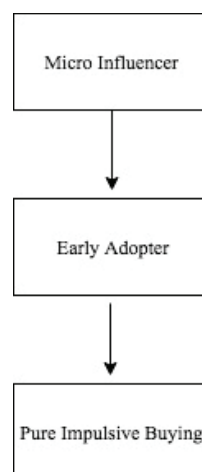


Figure 1: Influencer to Early Adopter Impulsive Buying (Gunawan, 2019).

From the data obtained, Micro Influencer influence the respondent's early adopter fashion adaptation stage. Because they feel that influencer with followers below 100,000 can help them to be the first one in adapting to the latest fashion products. This statement is emerges frequently based on the overall answer like *"I usually like to be inspired by influencer called Caroline Robianto (@sergeantkero) (which are micro influencer). For me, influencer with not-much followers give me insight and I like to follow her because they're not mainstream enough. So I can be the first one in my circle to wore something that not too famous, but still chic."*

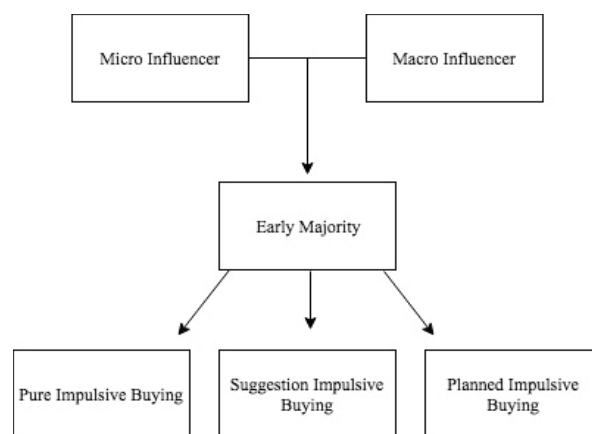


Figure 2: Influencer to Early Majority Impulsive Buying (Gunawan, 2019).

Besides that, Micro Influencer also influence the fashion adaptation of respondents with early majority stage. For participants with the fashion adaptation of early majority stage, they actually look at both influencer, micro and macro influencer. Because when purchasing the product, mostly they need a reference and inspiration for them to dress and based on the results of the interview, the two types of influencer can give them inspiration. Participants with early majority stage fashion adaptation felt affected by both types of influencer, and 3 types of impulsive purchases, namely pure impulsive buying because there were those who did buy spontaneously and immediately to fashion products that were promoted by macros and micro influencer, suggestion impulsive buying because they buy after influencer and their surrounding friends influence to purchase the product, and also planned impulsive buying because they wait for promotions and discounts, especially those given by micro influencer. This statement is emerges frequently based on the overall answer such as *"I prefer to follow the trend and take a look for what's " in" before I make a decision to purchasing a fashion product. Honestly I don't like if I have to wear a product that 1000 other person wear it too, that's why I prefer to buy clothes in online shop. But, I am not prioritizing whether I have to be the first one to wear it or not."*

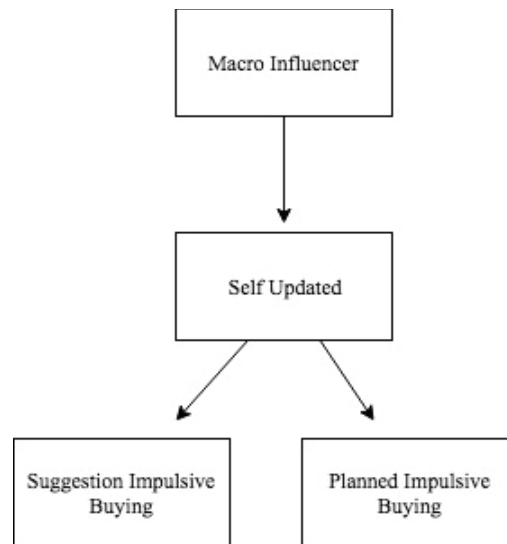


Figure 3: Macro Influencer to Self Updated Impulsive Buying (Gunawan, 2019).

Unlike the fashion adaptation that was previously taken from the theory of diffusion of innovation, the next type of fashion adaptation was found in this research. A self-updated stage for fashion adaptation is when consumer purchase the product just based on their style and they're not thinking about the trend. Self-updated stage consumer has some consideration even they purchase the product impulsively that influenced by macro influencer, which are the product fits their style, price, and discount. And their purchase decision also influenced by their surroundings and fashion influencer also. This type of impulsive buying can be classified as suggestion impulsive behavior and planned impulsive behavior. This statement is emerges frequently based on the overall answer such as *“I think when I adapting a fashion product, I don't mind if it is not in a trend. I just buy fashion product that suits to my style, based on my mood, maybe seek for references by influencers that most people know I think and for me I don't want to take a risk by using the trendy product because I don't want to look strange in my surroundings.”*

To know the numerical percentage and convince the results of the previous interview, quantitative research with online survey was conducted using questionnaire that distributed through google form. From the questionnaire, numerical percentage about each of the categories was discovered. From 80% of respondent that purely influenced by only micro influencer or macro influencer, 44% of the respondent are in early majority fashion adaptation stage and purchase the product impulsively that influenced by macro influencer. This means that participant with early majority stage are dominant among all. 6% of early majority stage respondent are influenced by micro influencer. Meanwhile 34% of respondent are in early adopter fashion adaptation stage

and influenced by micro influencer when purchasing fashion product. Micro influencers that affect early adopter fashion adoption stage are the second most dominant result among all. Respondent choose to purchase the product impulsively and influenced by micro influencers because they want to be the first one that wear the fashion product among all of their surroundings, and they immediately buy the product after seeing fashion products promoted by Fashion Influencer. 16% of self updated fashion adaptation stage respondent are influenced by macro influencer. Self-updated fashion adaptation stage respondent have more consideration rather than other stage, most of them are choose the product that suits to their style, followed by consider the price, discount, and quality of the product.

5. Conclusions

The purpose of this research is to know types of fashion influencer and fashion adaptation that affects the impulse buying on online customer and to analyze the fashion adoption of online impulsive buying by drawing ideas from the theory of diffusion of innovation. Researcher has analyzed the impact of micro and macro influencer to fashion adaptation and online impulsive buying behavior. The data was collected by qualitative and quantitative method, which is a semi-structured interview and online questionnaire distributed to respondent with such criteria.

In the end, this research comes up with more than just analyzing the impact of micro and macro influencer and fashion adaptation to online customer impulse buying behavior, but also providing the suitable influencer for each fashion adaptation that leads to purchase decision of customer and knowing the stages of fashion adaptation called Self Updated. Based on the research, found that both micro and macro influencer are influencing the consumer to their purchasing product and leads to impulsive buying. But, found from interviewing respondent and questionnaire that distributed, Micro Influencer are playing a bigger role in persuading the consumer to become more impulsive in purchasing a fashion product online. When Micro Influencer reach the early adopter stage of fashion adaptation of consumer, early adopter stage become more impulsive when influenced by micro influencer. They wanted to be the first one in adapting to the latest fashion products and don't want others to overtake them. Micro influencer are promoting a fashion product on Instagram, and early adopter fashion adaptation stage consumer sees the promotion, most of them are directly and spontaneously bought the product that promoted by micro influencer just because they don't want to others wear the same products as they are. And the result type of impulsive buying

also comes to pure impulsive buying, where pure impulsive buying is a purchase that is truly spontaneous and without thinking. Founded in this research that customer's fashion adaptation really affects the impulsive buying among Jakarta and Bandung women early adults. Each stage of fashion adaptations reflects their impulsivity and with different impulsive types.

Seen from early adopters, namely those who really want to be first, or can be regarded as a trendsetter of a fashion product in their surroundings, they tend to be more impulsive and feel obliged to own an item quickly and without thinking, can be classified as pure impulsive buying. Early majority, some of them also become impulsive because of the influence of their fashion adaptations that do follow the existing fashion trends and want to adopt a fashion product, and their type of impulsivity can lead to pure impulsive buying, planned impulsive buying and suggestion impulsive buying, because they follow the influence of the fashion influencer, their surroundings, and most of them also purchase the products when its on promotion and discounts are given by the fashion influencer itself.

For the fashion adaptation stage that was found in this research, which is self-updated, they tend to do the type of impulsive buying that is indeed planned and their purchase decision on fashion product mostly affected by influencer that fit their own style. Therefore, for self-updated fashion adaptation stage, impulsive purchases continue to occur even though they are not as intense as the early majority stage and early adopter stage. Also known from 102 respondents who filled the questionnaire, it is found that 80% of them are adapting the fashion product and influenced by specific influencer purely and leads to impulsive buying.

References

- [1] Laohapensang, O. (2009). *Factors influencing internet shopping behaviour: a survey of consumers in Thailand*. Journal of Fashion Marketing and Management: An International Journal
- [2] Alexander, E. (2018, September). *Harper's Bazaar*. Retrieved from Harper's Bazaar: <https://www.harpersbazaar.com/uk/fashion/fashion-news/news/a41898/fashion-influencer-fashion-blogger-definition/>
- [3] Napoleon Cat. (2019, April). *Instagram users in Indonesia – March 2017*. Retrieved May, 2018 from Napoleon Cat: <https://napoleoncat.com/stats/instagram-users-in-indonesia/2019/04>

- [4] Glucksman, M. (2017). *The Rise of Social Media Influencer Marketing on Lifestyle Branding: A Case Study of Lucie Fink*. Retrieved from https://www.elon.edu/u/academics/communications/journal/wp-content/uploads/sites/153/2017/12/08_Lifestyle_Branding_Glucksman.pdf
- [5] Jain, S. and Posavac, S. (2001) *Pre-purchase attribute verifiability, source credibility and persuasion*. Journal of Consumer Psychology, Vol. 11 No. 3, pp. 169-180
- [6] Christodoulaki, A. (2018). *The effects of micro vs macro influencers on brand awareness, brand attitude, and purchase intention, and the moderating role of advertising appeals*.
- [7] Barker, S. (2017) *Using micro-influencer to successfully promote your brand*. Forbes. Retrieved from: <https://www.forbes.com/sites/forbescoachescouncil/2017/09/29/using-micro-influencer-to-successfully-promote-your-brand/#2444eb8b1763>
- [8] Marwick, A. E. (2013). *Status update: Celebrity, publicity, & branding in the social media age*. New Haven, CT: Yale University Press.
- [9] Lv, H., Yu, G., & Wu, G. (2015). *Celebrity Endorsement Problem on Social Media: Formulation, Analysis and Recommendation Algorithm*. International Journal Of U-And E-Service, Science And Technology, 8(1), 357-370. Retrieved from: <http://dx.doi.org/10.14257/ijunesst.2015.8.1.32>
- [10] Hatton, G. (2018, February 13). *Micro influencer vs macro influencer*. Social Media Today. Retrieved from: <https://www.socialmediatoday.com/news/micro-influencer-vs-macro-influencer/516896/>
- [11] Hwang, Yoori & Jeong, Se-Hoon. (2016). "This is a sponsored blog post, but all opinions are my own": *The effects of sponsorship disclosure on responses to sponsored blog posts*. Computers in Human Behavior.
- [12] Rogers, Everett (2003). *Diffusion of Innovations*, 5th Edition. Simon and Schuster.
- [13] Rogers, E. M. (1995). *Diffusion of innovations*. New York: Free Press.
- [14] Forsythe, S., Butler, S., & Mi Sook Kim. (1991). *Fashion Adoption: Theory and Pragmatics*. *Clothing and Textiles Research Journal*, 9(4), 8–15. doi:10.1177/0887302x9100900402
- [15] Engel, J. F., and Blackwell, R. D. (1982). *Consumer Behavior*, 4th ed., CBS College Publishing.
- [16] Rook, D. W. (1987). *The Buying Impulse*. Journal of Consumer Research. Retrieved From: <https://doi.org/10.1086/209105>
- [17] Stern, H. (1962). *The Significance of Impulse Buying*. Journal of Marketing, 26(2), 59-62

- [18] Hodge, Rebecca (2004). *Factors Influencing Impulse Buying During an Online Purchase Transaction*. UWSpace.<http://hdl.handle.net/10012/912>
- [19] Denzin, N. K., & Lincoln, Y. S. (1994). *Introduction: The discipline and practice of qualitative research*.
- [20] Babbie, Earl R. (2010) *The Practice of Social Research. Doing Quantitative Research in Education with SPSS*. 2nd edition. London: SAGE Publications, 2010.
- [21] Ellen, Stephanie. (2018) *Slovin's formula sampling technique*. Sciencing Publisher. Retrieved from: <https://sciencing.com/slovins-formula-sampling-techniques-5475547.html>